

Electric Railway Journal

Consolidation of *Street Railway Journal* and *Electric Railway Review*

HARRY L. BROWN, Western Editor N. A. BOWERS, Pacific Coast Editor H. S. KNOWLTON, New England Editor C. W. SQUIER, Associate Editor C. W. STOCKS, Associate Editor
DONALD F. HINE, Editorial Representative A. D. KNOX, Editorial Representative GEORGE BUSHFIELD, Editorial Representative
G. J. MACMURRAY, News Editor

Volume 57

New York, Saturday, April 23, 1921

Number 17

Electric Railway Day on May 4

IT WAS a happy idea to have an "Electric Railway Day." The time is short in which to prepare for any extended celebration, but impromptu affairs are often the most successful and no elaborate program is necessary to do something. It does not take long to resurrect one of the early cars and put it in charge of an old crew for operation on May 4. From this step to advertising for some of the first passengers, getting together some facts about the kind of service furnished, length of ride and fares charged in the early days, and following some of the other suggestions made by President Gadsden, is not a difficult one. If the idea of "Electric Railway Day" works out well on the smaller scale which only is possible this year, a more elaborate plan can be arranged for next year. The advertising department of the association is co-operating to the full extent of its ability by making suggestions of what to do, and it is hoped that as many companies as possible will try out the idea.

In Union Is Strength, Especially in the Freight Business

THE handling of freight and express matter is a legitimate function of electric railways and when it is properly done it proves to be profitable. George M. Graham, vice-president Pierce-Arrow Motor Car Company, threw down the gauntlet before the electric railway industry last October when at the Atlantic City convention he said: "Except in isolated cases the suburban trolley is barred from developing any considerable volume of freight haulage." This disqualification, Mr. Graham thinks, results from the confinement of the trolley car to a fixed route. His challenge must be met, not with words but with profits. The companies which are transporting goods, as well as people, must show with the aid of accurate accounting that they are making money in this department, or that they can do so if given adequate facilities.

Interurban railways have been engaged in handling l.c.l. and carload freight traffic for many years. Their experience has not led them to consider abandoning this business. The recent motor-truck competition has stimulated their interest rather than discouraged it. The truck has one outstanding virtue, ability to pick up, transport and deliver goods in one handling. Lack of this ability is admittedly a handicap to the trolley, but this does not outweigh its many inherent and unique qualities. The possession of a well-graded steel runway, of highly efficient propulsion equipment, of durable wheel tires and motive-power equipment, of almost unlimited speed capacity, of ability to operate with small labor cost per ton-mile of freight movement, of skill in transportation management, of an effective maintenance organization, etc., is surely going to count for something.

But the electric railways must pull together to get the best results in this line. They must go after their legitimate share of the business with vim and with skill. The up-to-date spirit in this matter was voiced at the recent New York City meeting of the New York Electric Railway Association, at which, encouraging facts were marshaled. One feature was a brief account of the co-operative movement in Rochester, visualized in the new freight terminal. Elsewhere in this issue is an illustrated account of the new terminal with some detail of the business which centers in it. Three strong interurbans are co-operating at Rochester. They are getting results. Their experiences will be interesting, stimulating and otherwise helpful to other roads which now handle freight or expect to do so.

The American Association Is Being Reborn

CERTAINLY railway men who read the report of the meeting of the executive committee of the American Electric Railway Association, printed on another page of this issue, will consider that the association is to be congratulated, and duly thankful, that it is under the leadership it now has. If any one had any doubts as to the correct answer to Mr. Wehle's question of a few weeks ago as to whether the industry would appreciate and follow the leadership of its president, Mr. Gadsden, such doubts must now be disappearing or dispelled.

In the unpleasant situation which recently arose at the headquarters of the association, it would have been easy to let events control, merely to pull through and continue on the old plan as efficiently as possible. But what has been done is that President Gadsden has taken control of events, has seized upon this as a psychological moment, when all eyes are focused on, and attention easy to get for, association activities, to give the association a new lease of life; perhaps it would be more nearly to the point to say to give new birth to the association that it may have added life and virility the more effectively to perform not only its past functions but new ones which far-sighted leadership can see are waiting and desirable, yes, even necessary, for it to assume.

The executive committee is behind this program to a man. The special committee which President Gadsden has appointed to make a study of the association's activities and to make recommendations it deems desirable should have the hearty co-operation and advice of the entire membership. Certainly there is assurance that under Mr. Gadsden's leadership it will be a working committee and it should bring in constructive suggestions of value to the association.

There is every indication that the association will thus capitalize its present misfortune and emerge a stronger, more useful force both in the industry and in national affairs.

"Value of Service" as a Valuation Criterion

THE basis of the valuation of the Public Service Railway of New Jersey, as outlined in the letter of transmittal of the engineers, Ford, Bacon & Davis, is one which must appeal to engineers, economists and men in public affairs as being eminently sound and just. This letter was quoted at length in last week's issue of the ELECTRIC RAILWAY JOURNAL. The details of how the various elements or indices of value were arrived at are presented this week. The article shows the figures upon which the engineers have based their judgment; the letter last week gives the theory which has guided the engineers in reaching their conclusion, in balancing the various indications of value in their own mind, in order to arrive at a figure which can be said to represent the value of the railway upon which rates, or condemnation proceedings or purchase might be based.

For, be it understood, two of the most important figures in this work—the operating efficiency and the final value determined—are admittedly, and necessarily, matters of judgment. It will be recalled that the New Jersey law, under which this valuation was made, provided that the valuation declared by the engineers employed by the Special Valuation Commission should be the value of the property in so far as value was an element in fixing rates. The engineers, by law, therefore had the status of a judicial or quasi-judicial body. It was remarked in these columns at the time the work was started that the engineers in charge had an opportunity, and a duty, to advance the science or art of valuation to show what the engineer, with full authority, could do in this most debatable field of engineering, law and economics.

True, some three or four days before the report was filed, the New Jersey Legislature passed an amendment to the law making this valuation subject to review on certiorari and providing that the engineers could be cross-examined on the method and figures by the use of which their final valuation was determined, and further, that the Public Service Commission could offer other evidence as to value; but it was still provided that this valuation be "presumptive evidence" as to the value of the property. However, this valuation was made under the provision of the original law, and it is now pertinent to examine the result to see what has been done by the engineers. It is necessary to consider their summary or basis of valuation separately from that part of the report which shows how the various figures were obtained, as will appear later on.

"Value of service" as the ultimate test to apply in the economics of a regulated public utility is so sound as to require no supporting argument. It is the one criterion applied by extremists of all sorts as well as by more moderate unbiased students. The trouble all comes in deciding what the "value of service" really is. The present instance is a good example of consistent and constant subjecting of each item to the test of whether it contributes to the value of service as interpreted by the engineers who have assumed, rightly, the position of deliberator as well as performing the duties which are more frequently the only ones demanded of engineers. This does not mean that one may not differ with the conclusions reached, however.

Value of service is defined by the engineers as follows:

The sum of operating expenses, including depreciation and, when necessary, allowances for obsolescence; taxes which are fixed by law, and interest as determined above

(defined as being rent of the property whose cost of reproduction has been determined), constitutes the cost of service, and when there is added to this cost profit in an amount sufficient to induce capital to flow into the industry, we have an accurate estimate of the value of the service.

The interest or "rent" becomes at once the debatable item. The object, the engineers say, is to prove the property to have a real value based on the anticipated profits from its use. These profits, in an amount equal to those obtainable in an unregulated industry, safety of investment being equal, must be allowed by any rate-making body or otherwise property would be taken without due compensation.

There can be no question, in view of all past practice and court and commission decisions, of the various items which have been set up to weigh, or consider, in arriving at the final figures. Costs of physical property, and the usual overheads, were determined in the usual way, using inventories made on previous appraisals. Intangibles, as usual, are the items which will cause debate. Of these, the ones which present interesting features are "going value" and "consolidation value." "Power lease," while given a definite value, is discussed with these. They are said to "be represented by the company's income, the market for the securities, etc." It is more than probable that the engineers under the new law will be called upon to substantiate the figures under these three heads.

Going value is a figure increasingly admitted where the development of the business has resulted in early losses or lack of return in early years uncompensated in later years. That the history of most public utilities shows such an item is well known. In this case, the engineers could find no documentary evidence either positive or negative. But they are apparently on firm ground in making a reasonable allowance for this.

Consolidation value is, it is believed, open to more careful examination. If this valuation is carried to higher courts, and this question can be singled out, a decision upon the inclusion of such an item as an independent element of value will be most important to the electric railway industry. Consolidation value is defined in the report as

that element of value which attaches to a strong unified system as contrasted with the uneconomical condition under which smaller companies, often with diverse interests, operate in the same or adjacent territory.

This element of value is arrived at by capitalizing the estimated savings of the consolidated system as compared with a number of independent companies. Another indication of this figure is obtained by considering the price paid for the component parts of the present property, their physical values and their earning power. There is no doubt that expenditures which have been perfectly legitimate and necessary in the public interest were made to effect consolidations in electric railway systems. It is a question, however, whether it would not be more sound to amortize such expenditures rather than to capitalize them permanently.

This view is strengthened by comparing this treatment of this question with the statement of the engineers that, in their desire to base this value of service on the cost to produce a theoretical modern plant, they use the existing plant of the company, for they say:

We are of the opinion that it would be impossible to produce a theoretical modern plant at materially less cost than the cost of producing the existing plant of the Public Service Railway.

The power lease, to which the engineers have given a present value of \$19,149,000 and a pre-war value of

\$11,194,000, is listed among the items which they have considered and weighed in their determination of the final figure of \$125,000,000. Its value was determined by capitalizing the savings which were effected by purchasing power from the sister company, the Public Service Electric Company, rather than making it in the plant which was leased to the electric company; to this was added the value of the power facilities turned over. The lease is of value to the railway and its patrons. The arrangement is also said to be of value to the electric company, which practically owns the plant under the New Jersey law. The question naturally arises as to what extent it may be capitalized in both places.

This valuation has been discussed at this length with a view to encouraging further discussion by valuation engineers on some of the points involved. While the ability of the New Jersey Legislature to say that any sum set up by any body created by it is the value of a public utility was questioned when the law was passed, the ideas which the engineers advance in their valuation must have an effect upon a court—such as the Supreme Court of the United States—which may have occasion to pass upon the valuation. It is certain that unusual interest attaches to this valuation and, though some particular items will probably be subject to attack before the new Public Service Commission, or in court, the engineers are to be congratulated upon the constructive work they have done in valuation practice.

Valuation by Legislation and Based on Earning Power

NEW YORK has added an element to the valuation situation which raises two interesting questions. One of these, like that in New Jersey, is to what extent a legislature may lay down any rules or regulations for making valuations. The other is the introduction of "prospective earning capacity" based on a contract rate as a consideration in determining value.

As to the first point, it seems very doubtful that any legislature can lay down any rules for valuation which will have any delimiting effect in case the question of confiscation is raised before the federal courts. If a correct interpretation has been placed on the Supreme Court's decision in the Ben Avon Borough water case (see *ELECTRIC RAILWAY JOURNAL*, Sept. 25, 1920, page 581) no intricacies of state law or procedure can militate against a utility's having federal court protection against confiscation. Thus the clause in the New York law "but such valuation shall not in any case exceed the fair reconstruction cost of the property less depreciation" is probably without weight and effect.

As to the second point, however, the New York Legislature, by formal enactment, has given recognition, and therefore weight, to the consideration of earning power as an element of value. While the Supreme Court of the United States apparently will not allow any other judicial body or any legislature to exclude any factor from consideration in determining value, it does practically invite suggestions as to other indications of value when it says, in the now famous case of *Smyth vs. Ames*, "we do not say that there may not be other matters to be regarded in estimating the value of the property."

There is, therefore, nothing out of the way in the New York Legislature's requiring the transit commission to consider the "estimated prospective earning capacity" as an element of value. It may well add to the clarification and crystallization of valuation theory and practice. The exact meaning or interpretation to

be put upon the phrase may not be so easily determined until put into practice. Governor Miller has, however, as indicated on another page of this issue, explained his philosophy upon which the statement is based.

Prospective earnings are certainly the principal basis upon which a free purchase of any business is made. That they should have some relation to the value of a property seems self-evident. And it is not so perfectly clear that such a line of argument is proceeding in a circle, either, for, when prospective earnings are estimated, it is on the basis of a rate of fare or value of business which is taken as being fixed—in this case a contracted fare. It cannot be the sole basis of a valuation, but it seems not unsound to consider it as an element or indication.

The City Fare Should Be More on the Interurban Car

PRACTICE universally favors the exclusion of local passengers from interurban cars in terminal cities. On out-bound trips this enables the long-distance passenger to become comfortably seated at the commencement of his journey and also eliminates unnecessary local stops to discharge passengers. In consequence, in-bound cars stop to discharge passengers only.

This is all right so far as it goes, but in Cleveland a further step has been taken. This is to make the fare on the interurban car definitely higher for the city run than on the local car. Such a fare is justified as regards the interurban passenger. The speed is higher, the car is more comfortable and the passenger rides the entire distance to, or from, the city zone limits and is therefore always a long-distance rider. Moreover, such a higher fare will tend to keep the local passenger off. The Cleveland plan looks logical.

Utilities Prove a Millstone to Kansas Industrial Court

THE Kansas Court of Industrial Relations, created as a result of the Kansas coal mine strike in the winter of 1919-1920, was intended primarily to deal with industrial disputes and to make a study of industrial conditions in the state. But in the interest of economy, and since it was a regulatory body as well as a court, it was given, as an "incidental" duty, the functions of the Public Utilities Commission which was abolished. Now, as related in the news columns this week, the Public Utilities Commission is re-created, and the reasons therefore are worthy of comment.

It seems that of almost 700 cases to come before the court all but thirty-five were in the "incidental" line of public utilities. Thus, said Governor Allen, the principal purpose of the court is smothered; the industrial court, which was created to build up the industry of the state and to bring about better industrial relations, is in bad odor with the public because it has had to do the unpopular thing and raise utility rates. Apparently the regulation of public utilities was found by the members of the court, who have performed their duties in a most commendable and high-purposed manner, to be more than incidental.

When the proposal was first made to separate these two functions and create a public utilities commission again, there was a justifiable disappointment that this Kansas experiment of having one body with jurisdiction over both capital and labor might not continue for a longer time. Public utilities have suffered—capital, labor and the public, too—from regulative measures

which have had relation to only one of the two factors—rates and wages. Governor Allen points out, however, that only three of the public utilities cases have involved questions of both wages and rates. But, to provide for such contingency, the Legislature empowers the court and commission to sit as one body and decide both wage and rate cases as one. Thus is the principle retained and utilities given the opportunity to have both sides heard at once. Further, with the re-creation of the commission the importance of an able supervision and regulation of public utilities is emphasized.

The London Motor Bus Myth Again

IN PAST ISSUES there has been pointed out the downright mendacity of wildecat motor-bus promoters in attempting to make out a case for their stock-selling schemes by alleged performances of the motor bus in London. So long as such statements are confined to the prospectuses of these modern Wallingfords they deceive only a small number of unthinking investors. It is a different matter, however, when so reputable a paper as the *Boston News Bureau* is deceived into giving space to misleading data, for it is, and has been, copied far and wide by newspapers which cannot be expected to check up the veracity of the items clipped from reputable exchanges.

The item in question was contributed from London by Herbert N. Casson, once a newspaper man and writer on a variety of topics in America but more lately an efficiency magazine publisher among the British. Mr. Casson says in an outburst that recalls his American period: "Last year's figures are a surprise to every one. It appears that the buses are now carrying twice as many passengers as the tubes and four times as many as the street cars."

Well, this is not only a surprise, but a grievous and dismayful shock, for in American ignorance reliance had been placed upon no other authority than that of the Advisory Committee on London Traffic, which reported to the Minister of Transport as follows:

DIVISION OF TRAFFIC AMONG THE VARIOUS TRANSPORT MEANS IN LONDON METROPOLITAN AREA IN YEAR 1919

Suburban traffic on main lines.....	468,000,000
Local railways.....	253,000,000
District Railway.....	140,000,000
Tube railways.....	266,000,000
Total of non-surface transit.....	1,127,000,000
Motor-buses.....	861,000,000
Tramways.....	1,053,000,000
Total traffic all means of transit.....	3,041,000,000

Complete figures for 1920 are not yet available. But figures so far received indicate that there is no great variation, for 1920, from the general proportions indicated in this 1919 report.

To contradict so exuberant a transportation authority as Mr. Casson is distasteful, but it is submitted that, except in the company of the Mad Hatter and the March Hare of "Alice in Wonderland," the tramway figure of 1,053,000,000 is larger than the bus figure of 861,000,000 and by all odds is not one-fourth of the bus figures. Now, as a matter of fact, Mr. Casson seems to have come to his conclusion by paying no attention to any transport undertaking outside the pale of what is popularly known as the "London Traffic Combine," namely, the group of underground, bus and tramway lines under the direction of Lord Ashfield, as distin-

guished from the municipal tramway systems. In fact, a check of the figures in Mr. Casson's original article against those of the Ashfield group alone for 1920 shows that they are identical. Without going into more detail figures, it is true that within the combine itself the motor bus is the greatest carrier, then the underground lines and finally the tramways.

Those who are really familiar with London transport matters know that the tramways of the combine, namely, the Metropolitan Electric, the London & Suburban, the London United, etc., never have been big factors in its operations, inasmuch as these are suburban systems in rather poor territory. On the other hand, they also know that the bus has always had the monopoly of surface transit in the richest areas of London for purely physical conditions that call for no elaboration here. That these tramways, plus the great system of the London County Council and smaller municipal tramways, should be carrying over a billion riders a year is more remarkable than the record of the buses. As Mr. Casson goes out of his way to cast slurs upon the municipal tramways, he must have been aware of their existence; yet he ignores them in his remarkable comparison.

The management of the London General Omnibus Company could not for a moment be assumed to countenance such incomplete statistics as these. As operators, also, of both underground railways and surface tramways, they may be presumed to know something about the relative virtues of each. It is not on record that they are eliminating the subways and tramways that they have, although they are sometimes obliged to parallel their own services part of the way with buses because the latter have the good fortune of starting from the traffic centers, and of course they could not very well stop short on coming to a tramway route. The recent introduction of forty-six-seat and fifty-four-seat buses is in itself a compliment to the seventy-eight-seat tramcar of London (not to mention the London County Council train operation) for they know that the dominant cost item in transportation is platform labor.

In any case, the purpose of this is not to take up the cudgels for the tramcar as against the bus. There is nothing in an antagonism which, in this country, is carried on more to bait the street railways than for any sound technical reason. If the experience of Great Britain means anything to this country there is going to be a great deal of bus operation where the traffic is too thin or too fluctuating to justify a trackway; and such bus operation will naturally be a part of the local street railway system. In London, the motor-bus is doing a wonderful piece of work in mass transportation, and, to a certain extent, also in Paris. But elsewhere in Europe, the bus is an auxiliary and not the whole show nor even a big factor in the total number of passengers carried. As an example, one may quote Liverpool, which is operating scores of buses for certain tie-up and through routes; but which is also planning high-speed right-of-way tramway lines as the most economical method of carrying trunk-line traffic.

In conclusion, it would be utter waste of time to judge the various forms of transit on the basis of financial results during the last hectic years. Street railways, motor buses, subway lines, elevated lines, suburban lines, interurban lines, trunk railways—each and every one of them can show failures galore, but it is not safe to draw any deductions therefrom without a prayerful study of all the factors in the case. Hadn't newspaper writers better leave this subject to those who are earnestly striving to carry the public in the most com-

fortable and economical manner regardless of whether gas or electric propulsion is used? Why rock the boat in such stormy days as these?

The Cleveland Wage Agreement Points the Way

COMMON SENSE has prevailed among the trainmen of the Cleveland Railway Company and the way has been paved for a wage scale in keeping with the downward trend of living costs. By almost unanimous vote of the unionized conductors and motormen, the company's proposition of a 20 per cent reduction in wages has been approved and working conditions will be adjusted to a more normal basis. The 20 per cent reduction means that the base rate per hour after May 1 will be 55 cents for the first three months' service, 58 cents for the balance of the first year and 60 cents per hour thereafter. This gives hope of building up the interest fund to a point where it will not be necessary to consider another advance in the rate of fare. In addition, changes made in working conditions eliminate extra pay on swing runs due to their spread and reduce the pay for extra work performed on week days from time and one-half to time and one-quarter. No change is made in conditions governing Sunday and holiday work in such cases.

Much credit is due President John J. Stanley for the manner in which he handled this situation. By taking a positive stand months before his contract with the trainmen had expired, he won the support of the people who were interested in having their fares kept as low as possible. He was ready to arbitrate the question in accordance with the terms of the agreement. The employees, sensing the public frame of mind, were not even willing to take chances with a board of arbitrators which might hold them to conditions less to their liking than those offered by the management. They also took a wage scale two cents lower than that which they might have had with an "open shop."

Cleveland has had one of the highest wage scales in the country. Its agreement is expiring earlier than that of many of the larger properties, and the effect of a voluntary acceptance of a 20 per cent reduction in wages by the men should be felt elsewhere. The modified working conditions will also have an appreciable bearing on cost of operation, and the public will get the benefit of service which can be given without the present penalties. Evidence given before the War Labor Board by several companies showed that street railway work cannot be confined to the number of hours which govern in other industries. The nature of the business, the riding habits of the people make this impossible. It should have been apparent, therefore, that it was unfair to penalize the companies for spreading their work beyond a fixed maximum.

Some companies have working conditions even more costly for the management than those prevailing in Cleveland. These should be changed, and the outcome of the Cleveland dispute will doubtless help to bring about the change. The employees had their way when the labor market was "short." Spread of unemployment and ability to get men to work on company terms have turned the scale. A period of deflation is at hand, and the wise employee will accept the offer of the prudent manager in a wage scale which need not be stingy and should not be extravagant. The coming summer should witness a general turn "back to normalcy."

Texas Five-Cent Fare Decision Should Not Be Misinterpreted

THERE are so many statements and comments still being made about the decision of the Supreme Court in the 5-cent fare case of the Public Service Company in San Antonio, Tex., that it is worth while to call attention, again, to the salient facts in the case. The full text of the decision, not available last week, is now at hand and it is apparent that while the decision, being from the Supreme Court, is of nation-wide significance, its direct application depends upon state constitution or law.

What the Supreme Court has said is that San Antonio did not have the power to execute the contract which it tried to execute, or thought it did execute, with the railway company. The company is not, therefore, bound by the terms of the agreement. In the absence of a contract, the city cannot enforce a rate which is confiscatory, as that is against the Federal Constitution. This decision, therefore, while of great significance to the industry is limited in its application to the condition where the city does not have the power to make a binding contract.

The situation where both parties have the power to make a contract was not considered in the San Antonio case but was treated in a decision which the Supreme Court rendered on the same day in the case of three Iowa electric lighting companies. There the court said, in quoting previous opinions in several cases, including electric railway cases in Detroit, Cleveland and Columbus, that where public service corporations and government agencies have power to contract as to rates and exert that power by fixing by contract rates to govern during a particular time, the enforcement of such rates is controlled by the obligation resulting from the contract and therefore the question of whether such rates are confiscatory becomes immaterial.

The San Antonio case, then, does not abrogate all franchise rates in the United States; it does not restore valuable property which a man has foolishly sold for less than its worth; but it does give one more assurance that confiscation will not be allowed.

Quotation from the Federal Electric Railways Commission Report

No. 17

THE full co-operation of labor in the street railway industry will not have been brought about alone by the recognition of the right of collective bargaining which we have just been urging. Such recognition is but a foundation for full co-operation. The actual work of insuring it must come from the employees themselves, to whom the right of collective bargaining is thus given. For that right carries with it a duty. It would seem to be the duty of the organization which bargains for the individual worker to interest itself actively and unremittently in his delivering to the company his best strength and intelligence.

This commission thinks that where the street railway worker has the right of collective bargaining the public has the right to expect that the organization or association representing him will not only procure his wage but will also continuously stimulate his wholehearted constructive co-operation with the company and his effective service to the public.



THE CENTER OF THE ELECTRIC FREIGHT BUSINESS IN ROCHESTER, N. Y.

Freight Co-operation at Rochester

Three Interurbans Are Operating a Union Freight Terminal that Was Designed to Be Simple, Inexpensive and Convenient—It Is Managed by a Board of Three Trustees Who Take the Chairmanship in Turn

BY L. R. BROWN

Office and Field Engineer New York State Railways, Rochester, N. Y.

THE New York State Railways, in conjunction with the Rochester & Syracuse Railroad and the Rochester, Lockport & Buffalo Railroad, have just completed and put into operation a union interurban freight terminal. The New York State Railways previously operated electric freight service on its interurban lines between Rochester and Sodus Point and between Rochester, Canandaigua and Geneva, N. Y. The Rochester terminal was located on Otsego Street. It was small and not easy of access and business became very congested at times. The Rochester, Lockport & Buffalo Railroad operates between the cities from which it takes its name and serves also several small cities and villages located on its line. This company had previously conducted electric freight service in conjunction with the Rochester & Syracuse Railroad, with a station located near the Erie Railroad freight station on Exchange Street, Rochester. This station was about 1 mile from the station of the New York State Railways. The Rochester & Syracuse Railroad operates between Rochester and Syracuse and many small cities and villages on its lines.

These three electric railway companies entered into a ten-year agreement whereby the first cost of the terminal was borne proportionately by each, and the yearly operating cost is assigned on the basis

of the tonnage handled by each during the year. Each company appoints a trustee to care for its interests in the terminal. The trustees meet once a month. One member is elected as manager for a year and thus each company has the managership every third year. B. E. Wilson, general passenger and express agent New York State Railways, is the present manager.

The new union electric freight station is located between Frank and Otsego Streets in Rochester. It is in the rear of the New York State Railways' State Street carhouse and offices and only one block from the Kent Street freight station of the New York Central Railroad. The electric freight cars have access to both sides of the terminal by means of spur tracks leading from the tracks of the New York State Railways in State Street. Teams and trucks have access to one side and one end of

the freight station, with entrance on both Frank and Otsego Streets. The new building, as shown on the accompanying plan, adjoins a carhouse of the New York State Railways and the wall of this was used as a wall of the new building. Five openings were cut through this wall at convenient locations to fit the doors of the various cars and two of the carhouse tracks next to the new freight house were taken over as freight tracks. The second track can only be used "loading through" cars standing on the first



RECEIVING SIDE OF THE NEW TERMINAL

track. The location of these loading doors is shown in the construction photograph. As the cars used by the three companies are of various lengths and heights, some having center doors and others having two side doors near the ends, the openings in the walls were located by the aid of car templates so that any of these cars could load or unload next to the freight house at the same time. Pits on one of the tracks provide opportunity for inspection of the cars while in the station.

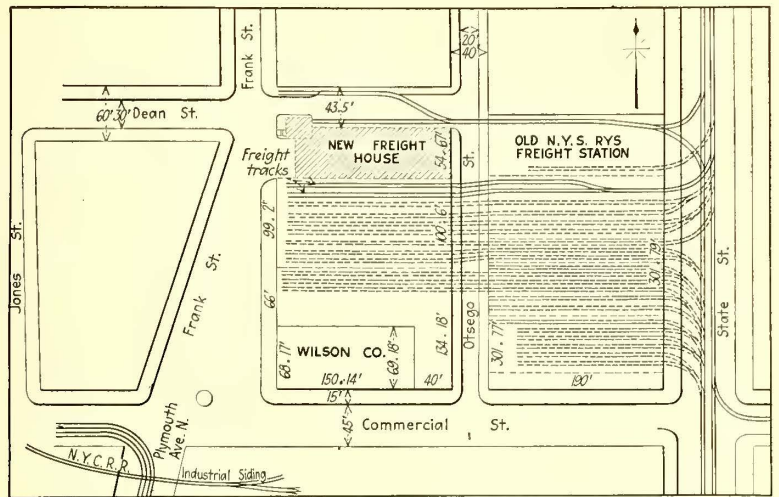
DURABILITY A FEATURE IN THE DESIGN

The building itself is 170 ft. long and 54 ft. wide. The outside walls are of brick. The building is one story high and has a Barrett specification tar gravel roof laid on 1 3/4-in. matched roof boards. The timber roof is supported by wood posts which form nine bays, the distance between posts being 18 ft. The bottoms of the posts rest on concrete piers containing cast-in dowel pins. The piers extend down to the original soil. The bottoms of the wood posts supporting the roof are protected from trucking by angle irons secured to each of the four corners. All exposed corners of brick work are protected in the same manner.

The floor of the freight house is of concrete, 6 in. thick, the surface being protected from trucking by the use of Ironite, a mechanical hardener. The entire floor was laid on a freshly made fill about 3 1/2 ft. deep. This was done to bring the floor up to the level of cars and trucks. The fill was compacted by the puddle method. Each load of earth was spread and thoroughly soaked with water from a fire hose. The fill was made slowly while the rest of the work was going on, and the teams driving over the surface helped compact the fill. The concrete floor was the last part of the construction to be done. It was built in alternate blocks after the outside doors were hung. No expansion joints were used.

A two-story brick residence, left standing on the property, was incorporated into the freight terminal for use as an office and warmroom. This was one of nine residences which stood on the property. The others were removed to provide space for the freight terminal. The basement of the residence provides room for the heating plant and quarters for the freight handlers. The ground floor is occupied by the cashier's office and the warmroom, as well as a washroom and toilets for the men. The second floor has rooms for the billing clerks and bookkeepers and a restroom for the women clerks. A dummy waiter between the cashier's office and the billing clerk upstairs saves many steps.

The main freight room is divided into two parts by a strong slat fence. This separates the inbound from the outbound freight. Each village or city which has considerable freight traffic is allotted a portion of the



FREIGHT TERMINAL IS LOCATED CONTIGUOUS TO NEW YORK STATE RAILWAYS CARHOUSES

floor which is properly designated by signs. Portable desks are provided near the doors so that clerks can check off goods received in or sent out of the terminal. Two sets of automatic scales are provided of five tons capacity each. These are both located in the outbound end of the terminal. The foundations of these scales can be seen in the construction photograph.

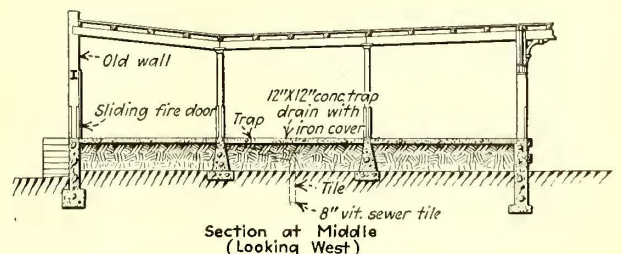
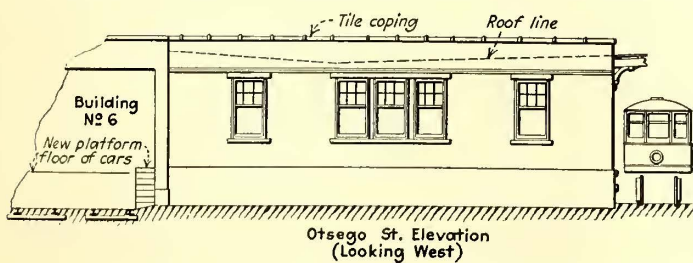
Light is admitted to the building by windows in the east end and by windows over the doors extending the full length of the north and west sides. Skylights, the use of which was contemplated in the original design, were omitted on account of expense. The building as designed was intended to be the cheapest possible, taking into consideration the appearance and use.

SOME OTHER STRUCTURAL FEATURES

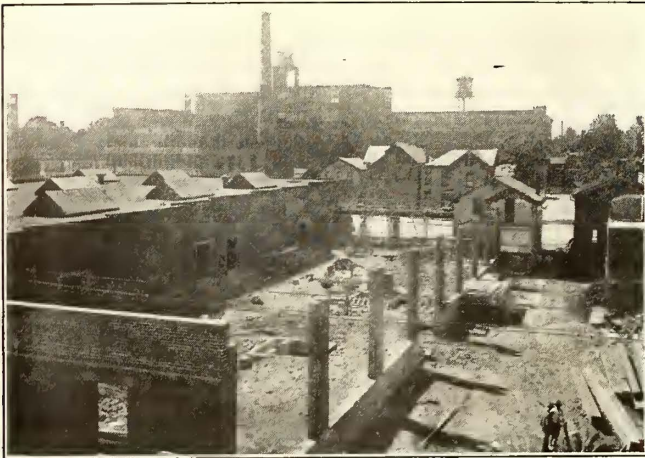
For fire protection a sprinkler system has been installed to protect the freight-house offices and cars from fire. The openings between the buildings are protected by tin-clad sliding fire doors. The outside doors, which occupy the full length of the north and west sides, are of the sliding folding type, being made of parallel cypress. The stiles are two inches thick. Gas pipe guards have been erected to protect the doors from trucking when they are folded back into the open position. The doors are very easily and quickly operated.

The new union freight station is located just across Otsego Street from the old New York State Railways freight station. Electric freight cars pass through the old station to reach the new terminal, thus making it very convenient to utilize the old station as an overflow for the new station should occasion require. A photograph is shown of the old station and another of the new one taken from the roof of the old station.

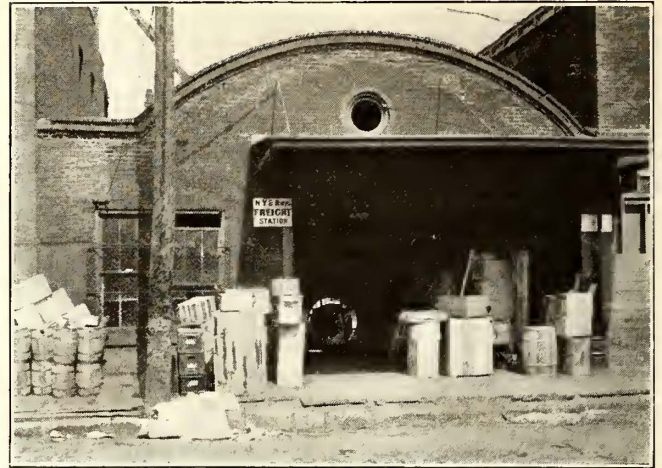
An important feature of the terminal is the large



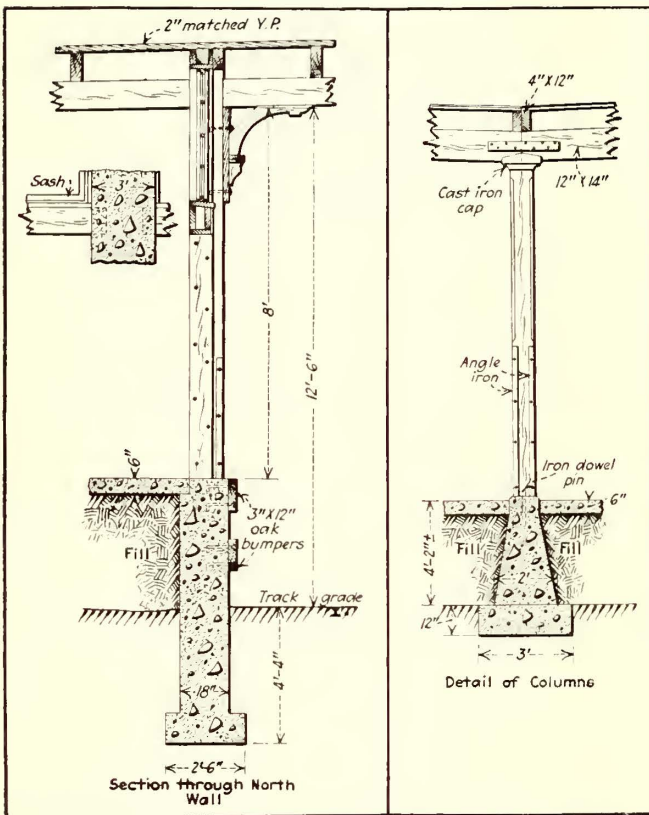
ELEVATION AND CROSS-SECTION OF TERMINAL REPRODUCED TO SUGGEST STRUCTURAL DETAIL



A CONSTRUCTION VIEW, STATE RAILWAYS CARHOUSE IN BACKGROUND



OLD ELECTRIC FREIGHT STATION REPLACED BY NEW TERMINAL



SOME CONSTRUCTION DETAILS OF THE ROCHESTER ELECTRIC FREIGHT TERMINAL

paved area provided for the use of teams and trucks. The entire yard is paved with concrete, thus eliminating the muddy conditions which existed at the other terminals at certain times of the year. This paved area provides a space about 40 ft. wide in front of all the doors, as well as a passage between Otsego and Frank Streets. The west end of the station is set back 20 ft. from the street line, so that trucks backed up to the station will not block the sidewalk on Frank Street.

“USE FACTOR” OF BUILDING IS HIGH

The terminal is operated on a twenty-four-hour basis, openings on the north side of building being used for teams and trucks in the daytime and for cars at night. Including the team track along the north side of the property, eleven cars can be loaded or unloaded in the terminal at the same time. This does not include the old station space between State and Otsego Streets, which will hold seven other cars. In the daytime, when there are no freight cars loading on the north side, twenty teams or trucks can back up to the doors and load or unload at the same time.

The arrangement of tracks provides for the transfer of freight with minimum amount of handling. The location of the two tracks side by side makes it possible to transfer freight direct from one car to another. The tracks on the north side of the freight house facilitate loading direct from truck to car or vice versa. The track on the extreme north side of the property provides for the “setting in” of a box car or trailer which



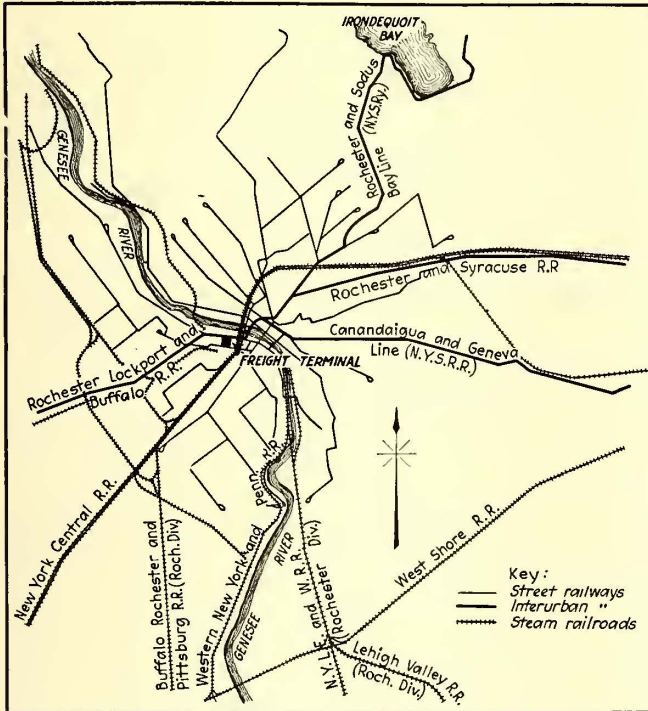
THIS FREIGHT HAS BEEN WEIGHED AND AWAITS SHIPMENT



TYPICAL FREIGHT SHIPMENTS READY FOR LOCAL DELIVERY

may require more than one day to load or unload. The location of tracks on both sides of the building eliminates much truckway, as freight brought in on cars at night can often be left near the doors, whence it will be taken away by trucks in the morning.

This union electric freight terminal furnishes the needed link properly to provide western New York with electric freight service. Through rates are now established between all places on these lines between Syracuse and Buffalo. Trailers can be used for less-than-carload lots or transfer can be easily made, as explained, at the new terminal. It is expected that the union



INTERURBAN LINES WHICH CONVERGE AT NEW ROCHESTER FREIGHT TERMINAL

station will effect a reduction in the terminal costs of the companies and increase the general freight business of each of the roads concerned.

The plans for the terminal were prepared by the writer.

Greatest Living Engineers

AN INVESTIGATION recently conducted by the American Association of Engineers as to the relative standing of prominent engineers discloses among others the following results: Among electrical engineers C. P. Steinmetz heads the list, while Elihu Thomson, Thomas A. Edison and Alexander Graham Bell form a group following closely thereafter. B. G. Lamme, Frank J. Sprague and Bion J. Arnold are also well up on the list. First and second respectively on the civil engineers' list are General G. W. Goethals and Prof. George F. Swain, while the corresponding ratings are given to John A. Brashear* and Orville Wright for the mechanical engineers, Herbert C. Hoover and John H. Hammond for the mining engineers, and Leo H. Baekeland and W. R. Whitney for the chemical engineers.

The above ratings were made by the deans of a number of engineering and scientific schools.

*Dr. Brashear died after the making of the canvass. Ambrose Swazey was tied with Mr. Wright for second place.

Detroit's Motor Bus System

Twenty-eight Motor Buses Being Operated on Two Routes, Having a Maximum Possible Haul of 13 Miles for a Flat 10-Cent Fare—Policy of the Company Is of a Constructive Character

DETROIT'S population of 1,000,000 was carried two and one-half times by an average of twenty-one buses during the first seven months of operation of the motor bus system established there in June, 1920. The report of the Detroit Motorbus Company for the period ended Dec. 31, 1920, shows gross earnings of \$253,599 and net earnings of \$20,051 after setting aside \$24,310 as a reserve for depreciation of equipment and \$5,688 as a reserve for injury and damage claims.

Service was started on June 11, 1920, between Grand Circus Park and the Detroit water-works, via Woodward and Jefferson Avenues, a 5-mile run, with eight buses on an eight-minute headway. At the present time twenty-eight motor buses are operating on a six-minute headway over 13 miles of street. The Jefferson Avenue route has been extended east to the Continental Motor factory (1.5 miles) and north on Cass Avenue to Amsterdam Avenue (2.5 miles). An additional service is operated via John R. Street, Piquette and Amsterdam Avenues and Second Boulevard, from the City Hall to Boston Boulevard (5 miles). This route connects with and transfers to the Cass and Jefferson Avenue route at the Amsterdam Avenue terminal.

Operation is authorized by the city of Detroit under a general motor bus ordinance approved by the City Council Dec. 26, 1917, and amended May 26, 1919, licensing the operation of motor buses on all the streets

DETROIT MOTOR-BUS COMPANY
INCOME STATEMENT—JUNE 11 TO DEC. 31, 1921

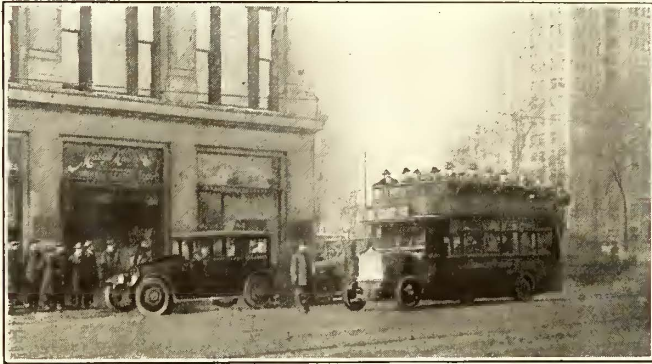
	Actual	Per Bus-Mile, Cents	Per Cent of Total Revenue	Per Cent of Total Operating Expenses
Operating revenues:				
Passenger fares.....	\$250,280	40.15	98.70	.....
Omnibus hire.....	455	0.07	0.17	.....
Advertising.....	2,864	0.46	1.13	.....
Total.....	\$253,599	40.68	100.00	.....
Operating expenses:				
Maintenance of plant and equipment.....	\$16,865	2.71	6.65	7.32
Reserve for depreciation.....	24,310	3.90	9.58	10.55
Conducting transportation.....	155,351	24.94	61.26	67.47
Traffic expense.....	2,171	0.35	0.85	0.94
General and miscellaneous.....	25,837	4.14	10.22	11.25
Reserve for injuries and damages.....	5,689	0.91	2.24	2.47
Total.....	\$230,223	36.95	90.80	100.00
Net operating revenue.....	23,376	3.73	9.20	10.13
Taxes, license fees, etc. (a).....	1,027	0.16	0.40	0.45
Income from operation.....	\$22,349	3.57	8.80	9.68
Miscellaneous income.....	160	0.03	0.06	0.07
Gross income.....	\$22,509	3.60	8.86	9.75
Deductions.....	2,458	0.39	0.97	1.07
Net income to profit and loss.....	\$20,051	3.21	7.89	8.68
Passenger traffic:				
Revenue.....	2,502,800	4.015	.....	.....
Transfer.....	236,005	0.379	.....	.....
Total rides.....	2,738,805	4.394	.....	.....
Bus-miles run.....	623,385	.....	.....	.....
Per cent of buses in daily use.....	97	.....	.....	.....

(a) Exclusive of federal income and profits taxes.

and parkways of the city except those of Belle Isle Park. The company has no franchise. The ordinance provides that any license issued thereunder shall be subject to renewal or revocation. It also provides for amendment or alteration. Under these conditions a company that was not confident of its ability to render acceptable and popular service would not be likely to undertake it.

Like any other common carrier in Michigan, the bus company is subject to commission regulation.

During the spring and summer of 1921 it is planned to increase and extend the service. The Jefferson Avenue line is likely to be extended to the city limits on the east and to have a downtown terminal at Grand Circus Park as originally. A Cass Avenue and Second Boulevard line will run from the Windsor Ferry at the foot of Woodward Avenue to Boston Boulevard. An additional service on this line starting from the ferry will diverge at the West Grand Boulevard and run west to Grand River Avenue. An additional service



DETROIT LOW-TYPE BUS WITH LEFT-HAND DRIVE

on the Jefferson Avenue line will diverge at the East Grand Boulevard and run north to the Packard factory. The John R. Street line will probably be extended straight north on John R. Street to Boston Boulevard. These extensions will be made possible through the receipt of forty additional buses of the Detroit low type, which can operate safely with passengers on the upper deck under the viaduct of the Michigan Central Railroad, which has vertical clearances over the streets it crosses of but 12.5 feet.

DESIGN OF BUSES

The Detroit bus was developed by the New York Transportation Company (which owns the Fifth Avenue Coach Company of New York and controls the sale of the vehicles it manufactures) for service on streets where the overhead clearances precluded the use of the standard Fifth Avenue type. With the exception of the height, the bus is similar in appearance to the standard Fifth Avenue bus, but has a left-hand drive.

So successfully does the Detroit bus meet the special problems of low overhead clearances that the tallest man sitting on an upper-deck seat will have at least 6 in. clearance above the top of his hat while passing under the railroad viaducts. The same man standing on an upper deck could not possibly reach a railroad trolley wire at its standard height.

The bus occupies less than 3.75 sq.ft. of street space for each passenger carried and weighs only 223 lb. per passenger capacity. It can be turned completely around in a 60-ft. street without backing. The stepless platform is 14 in. above the pavement and 8 in. above the sidewalk. Route numbers are carried on roller curtain destination signs on the front of the bus and also at the right of the entrance. In winter the lower deck is heated by the exhaust from the engine and the heat is regulated by a hand valve.

On the lower deck ten stationary cross seats, with rattan coverings, provide places for twenty passengers facing forward. A bulkhead seat allows space for two additional passengers riding backward. A bright and

cheerful interior is obtained by the use of 100 sq.ft. of glass and white enameled ceiling. The windows are of the drop sash type and practically convert the lower deck into an open car when it is desired in warm weather.

On the exposed upper deck, which has a capacity of twenty-six passengers, wooden slat seats, each seating two, arranged seven on the right side and six on the left, are used, due to the impracticability of obtaining a weatherproof, self-draining spring seat. Each seat on both decks is equipped with a push-button signal for the convenience of the passenger in signaling the driver at alighting points.

FARES AND TRAFFIC

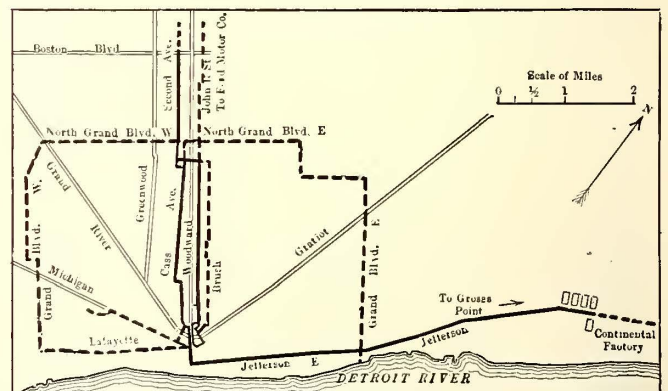
Operation is conducted under the flat fare system, with the base rate 10 cents. Free transfers are issued to connecting routes for travel in the same general direction. Every passenger is provided with a seat, and no standing in the aisles or on the platform is permitted. Smoking is allowed only on the upper deck of the bus.

Transfer regulations provide that transfers are good only to the person to whom issued, and no other, for a continuous trip on the first bus on which there is a vacant seat upon either deck under the usual conditions of time and direction.

The system of fare collection follows the "collect within" principle and utilizes the Rooke automatic register.

The traffic that has been developed by the buses is surprising. During the less than seven months of 1920 they carried 2,502,800 cash passengers and 236,005 transfer passengers or a total of 2,738,805, or at the rate of 591 cash passengers per day per bus, or 215,715 cash passengers per bus per annum. The bus mileage that was made during this period was 623,385.1. The percentage of buses owned that were in operation daily throughout the period was 97 per cent. The table gives a detailed analysis of operations and the cost of service on a bus-mile basis.

The general policy of the company has been con-



BUS ROUTINGS IN DETROIT, FULL LINES SHOW PRESENT ROUTES—DOTTED LINES SHOW PROPOSED EXTENSIONS

structive in character, aiming to supplement the street railway service rather than compete with it, and as far as possible to supply service on the thoroughfares not served by any street railway line.

In more than five million safety-car miles in Terre Haute, Ind., the railway company has had only six cases of motor trouble—four armatures and two fields.

Method Used in New Jersey Valuation

An Analysis Showing How the Reproduction Costs on Two Price Bases Were Determined and Used in Reaching the Value of \$125,000,000 for Rate-Making Purposes—Property as a Whole Found Well Maintained — Operating Efficiency of the Physical Property and Organization Is Set at 86 per Cent

IN DETERMINING \$125,000,000 to be the value of the operative physical property and business, exclusive of franchise value, for rate-making purposes of the Public Service Railway of New Jersey, Ford, Bacon & Davis, engineers employed by the New Jersey State Valuation Commission, prepared two separate reproduction-cost appraisals on different price bases. They also considered the historical cost or investment in the property since its inception. Using average pre-war prices ruling from the period between 1910 and 1915, the value determined was \$88,815,887 with accrued depreciation amounting to \$14,382,789, as against \$189,489,560 with accrued depreciation of \$32,784,505 if prices as of Sept. 1, 1920, had been used. The historical cost as found amounted to \$119,150,263.

The unamortized cost of superseded property amounted to \$4,701,943, while the reproduction cost of non-operative property was \$502,713 at pre-war prices and \$645,593 when Sept. 1, 1920, prices were used.

The outstanding securities of the railway amount to \$165,066,556, divided as follows: Common stock, \$83,038,000; preferred stock, \$1,166,500; bonds, \$79,235,016, and equipment notes, \$1,627,000.

An inspection of the physical property indicated 80 per cent condition. In the judgment of the engineers the operating efficiency of the property and organization was placed at 86 per cent.

In determining the reproduction values the detailed

physical inventory prepared by Dean M. E. Cooley as of Dec. 31, 1915, which had been previously checked in many details by the New Jersey Public Utilities Commission engineers, was used as a basis. Additions since that time, which were principally for rolling-stock, were taken from the company's records.

The reproduction cost new valuation made by Cooley was based upon average unit prices extending over the five-year period from 1911 to 1915 inclusive. With additions to capital from Dec. 31, 1915, to Jan. 31, 1920, the total value amounted to \$88,165,858.

WHAT THE VALUATION INCLUDES

The present valuation embraces the entire electric railway system of 832.92 miles of track owned or operated under leases of 900 years or more by the Public Service Railway Company; the properties of the Riverside & Fort Lee Ferry Company; the Port Richmond & Bergen Point Ferry Company; the Peoples Elevating Company; the Jersey City Wagon Elevator; the Public Service Terminal in Newark; the property installed by the Emergency Fleet Corporation in Newark, Kearney and Camden, and the value of the tracks and overhead prior to relocation in Camden which the government has agreed to restore to its old location at the expiration of the government's use of the property. None of the property of the Public Service Railway Company is included.

TABLE I—GENERAL TRACK STATISTICS

Miles of Track Operated	Girder Rail	Low T-Rail	Total
Special work.....	67.84	16.48	84.32
Straight track.....	488.58	260.02	748.60
Total.....	556.42	276.50	832.92
Equivalent rail tonnage.....	77,452	32,987	110,439

TABLE II—ROLLING STOCK OWNED

	Closed Cars			Open Cars		Total All Kinds
	Four Motor	Two Motor Trailers	Four Motor	Two Motor		
Double end, double truck...	696	171	106	31	1,004	
Single end, double truck...	(a) 585	248	257	48	1,138	
Double end, single truck...	...	79	...	121	200	
Safety-cars, double end, single truck.....	...	195	...	...	195
Trail cars, double truck.....	...	1	...	...	1
Electric locomotives.....	...	...	...	...	...
Service and work cars, all kinds.....	...	...	...	...	284
Total.....	1,281	693	363	200	2,822	

(a) Includes fifty-one single-end, double-truck, four-motor cars paid for by U. S. Shipping Board Emergency Fleet Corporation but used in the operation of the Public Service Railway and to be purchased by the company.

TABLE III—ESTIMATED COST OF REPRODUCTION NEW—NON-OPERATIVE PROPERTY

	Pre-War Prices	Sept. 1, 1920, Prices
Land.....	\$341,875	\$341,875
Buildings.....	100,552	227,556
Structural overhead costs.....	55,303	71,179
Property to revert (..)	4,983	4,983
Total.....	\$502,713	\$645,593

(a) Two buildings are on land owned by the railway company which is leased to others. The buildings will revert to the company at the end of the lease and the amount, \$4,983, shown is the present worth of an amount of money which at 8 per cent compound interest will equal the estimated value of the buildings at the end of the lease.

TABLE IV—MISCELLANEOUS INFORMATION

	Unit	Quantity
Poles:		
Wood.....	No.	25,927
Iron.....	No.	19,958
Cross-arms:		
Wood.....	No.	25,569
Iron.....	No.	3,525
Insulators.....	No.	76,058
Strain insulators.....	No.	53,938
Lightning arresters.....	No.	2,071
Span wire.....	Ft.	1,698,721
Trolley wire.....	Lb.	1,824,141
Feeder wire.....	Lb.	9,850,345
Trolley cars.....	No.	39,923
Rail bonds.....	No.	160,570
Rails:		
Girder.....	Tons	77,452
Low T.....	Tons	32,987
Ties:		
Untreated.....	No.	1,294,204
Treated.....	No.	696,827
		1,991,031
Stone ballast.....	Cu. yd.	682,369
Paving—Class A:		
Rectangular block.....	Sq. yd.	1,214,636
Belgian block.....	Sq. yd.	434,228
Brick.....	Sq. yd.	145,304
Wood block.....	Sq. yd.	119,058
Asphalt block.....	Sq. yd.	15,071
Asphalt.....	Sq. yd.	105,798
Paving—Class B:		
Macadam.....	Sq. yd.	1,076,751
Amesite.....	Sq. yd.	4,438
Tarvia.....	Sq. yd.	59,545
Telford.....	Sq. yd.	227,545
Bitulithic.....	Sq. yd.	2,244
Cobble and rubble.....	Sq. yd.	81,549
		1,452,072
Total paving.....	Sq. yd.	3,486,167
Concrete foundations.....	Sq. yd.	246,637

The power generating system, including main stations, substations and transmission lines, together with certain real estate which were leased on July 1, 1910, to the Public Service Electric Company for 999 years, was excluded, as the property in question is not used directly by the railway in its operation. Federal courts have construed that such long term leases under New Jersey laws are for all practical purposes conveyances of the property. The actual investment in power stations, however, up to the time of the lease is included in the historical cost figure.

The inventory was classified according to the State of New Jersey Board of Public Utilities Commissioners' uniform system of accounts for street railways. In certain cases the value of property that was used jointly for railway operation and other purposes, such as the Terminal Building in Newark, has been included in its entirety in the account covering operative property, it being assumed that in fixing a rate base, incidental receipts from rentals of such property would be taken into account.

Miscellaneous physical property held for rent and other property which is not anticipated will be required within any reasonable period for either maintenance or operation was included in Account 404. All construction and equipment items of a special and incidental nature which could not be properly charged to any other account are included in Account 550-B "Miscellaneous construction expenditures."

The Cooley appraisal as of Dec. 31, 1915, was used as the basis for detailed inspection and measurement after being spot checked in sufficient detail to verify accuracy. Additional charges to plant since that time were obtained from the company's construction records, and verified as to character and condition by inspection. These capital additions up to Jan. 1, 1921, amounted to \$1,514,260. One-man safety cars, trailer cars and service equipment totaled \$1,479,342 of this amount.

Two bases of prices were used to obtain an appraisal of the property in terms of pre-war money and present-day money. The pre-war prices were generally the average of prices ruling between 1910 and 1915. Present-day prices were those current Sept. 1, 1920.

All land was appraised by real estate men. Prices fixed were based on normal market values for the highest general use. Strictly special use, such as for railway purposes, was not considered or allowed for. Locality value, the value of adjoining or neighboring land, were considered. Allowance wherever justified was also made for plottage or assemblage, continuity and special adaptability, although only bare land values as of the normal grade were used. Cuts and fills were considered as improvements.

The estimated cost of plots, abstracts, notarial fees, recording deeds, etc., as well as assessments levied by public authorities, amounts payable for construction or improvement of roads, streets, etc., were added to the appraisers' bare land value.

Overhead charges were defined as expenditures made for the work as a whole and which could not be apportioned accurately among the various inventory items.

Pre-construction costs embrace the formulation of the initial plan and interesting a group of individuals sufficiently strong to bring the project to maturity; the preliminary legal and technical studies; the securing of title and franchises; the legal and technical pres-

entation of the project to secure financial interest, and the securing of options.

An examination of the company's books and records, previous experience in similar research for other properties of the same character, as well as recognition of the fact that in most cases when financial interest has been secured there is usually a reorganization or settlement involving a recognition of profit to the original projectors and developers, showed these costs to amount to 2.1 per cent of the reproduction costs based on present-day prices and 3.3 per cent of the reproduction costs under pre-war conditions.

The construction period was construed to begin when the financial interest had been secured. Before actual construction can begin, it is necessary to secure an ample and complete supply of materials and to negotiate many of the necessary contracts. Six months is taken as an estimate of the time necessary. To construct the whole property it was estimated would take from four to five and one-half years.

The administrative organization laid out to carry on this construction was divided into six parts, namely, administrative, legal, engineering, construction and purchasing. The allowance for administration and legal expenses was found to amount to 1.75 per cent of the reproduction costs exclusive of real estate based upon present-day prices and 2.5 per cent under pre-war prices. Real estate expenses were estimated at 3 per cent under current prices and 2 per cent for pre-war costs.

The engineering work was construed either to have been handled by a staff organized by the company or an established engineering firm. In either case the cost would be about the same for actual results. In addition the employment of consulting engineers would be necessary to perfect and insure the design of all parts of construction and equipment. The services of architects and local engineers would also be necessary. A weighted allowance of 3.5 per cent of the reproduction cost exclusive of real estate under present prices and 5 per cent under pre-war prices was used. Engineering and superintendence for the real estate under present-day conditions was estimated at 0.8 per cent, while for pre-war conditions 0.5 per cent was used.

Interest during construction was treated as the net interest accruing on construction expenditures before the property for which expenditures were made is placed in operation and as each portion of the road went into service the interest account was relieved of that portion. Interest was estimated at 6 per cent for pre-war prices and at 8 per cent for present-day basis. Funds, it was estimated, must be on hand for an average of a month and a half before disbursement. Two per cent per year was allowed for estimated bank balances.

In calculating taxes during construction credit was allowed for that portion of the road which would go into operation each year and the tax account relieved to that extent. The average amount of taxes was found to be 0.9 per cent of the reproduction cost for each set of prices.

Financing expenses cover services, expenses and reasonable profits thereon in connection with the wholesale and retail marketing of securities. Such expenses are estimated in per cent of the total funds required and the allowances were based on actual experiences of the Public Service Corporation, upon similar data determined for other companies and upon the judgment of

experts in this line of business. Based on the foregoing 7.5 per cent was allowed for present-day prices and for the reproduction costs under pre-war conditions 5 per cent.

PERCENTAGE ALLOWANCES FOR GENERAL OMISSIONS AND CONTINGENCIES		
Account	Way and Structures	Per Cent
504	Grading.....	2
510	Track and roadway labor.....	5
514	Elevated structures and foundations (foundations only).....	10
515	Bridges, trestles and culverts.....	3
516	Crossings, fences and signs.....	3
517	Signals and interlocking apparatus.....	3
518	Telephone and telegraph lines.....	3
519	Poles and fixtures.....	5
520	Underground conduits.....	5
521	Distribution system.....	5
524	Stations, miscellaneous buildings and structures.....	3
525	Wharves and docks.....	5
Equipment		
530	Passenger and combination cars.....	0.5
532	Service equipment.....	0.5
533	Electric equipment of cars.....	0.5
534	Locomotives.....	0.5
536	Shop equipment.....	3
538	Miscellaneous equipment.....	3

So far as they reflect quantities, unit prices, incidentals and contingencies, an allowance for omissions was included in quantities and unit prices. Except for the construction and equipment accounts, additional allowances have been made for general omissions and contingencies which were not covered in the quantities and unit prices. The percentages so allowed and listed above cover expenses corresponding to a contractor's carrying charge, charges made during the progress of construction, strikes on the work and delays affecting the delivery of materials or prosecution of work, omission in cases of scattered property difficult to inventory, collateral work on outside structures not now apparent, such as relocation of other pole lines, etc., and delays due to legal obstruction.

The inspection method was used to get the determination for accrued depreciation. Obsolescence was allowed only where replacement could be definitely foreseen. Obsolescence due to future improvements in the art was not considered.

INTANGIBLE ELEMENTS OF PROPERTY

The intangible elements of property, that is, the elements not represented by physical property, are represented by the company's income, the market for the securities, etc. Four elements as defined below were considered.

In determining "going value," four to five years was considered a reasonable time in which to build up the business and to perfect the organization. It was impossible, however, to determine from the records kept by the company the actual cost of developing the business. It became necessary therefore to make certain assumptions. These were based on the piecemeal plan of construction, variable rising wages, operations continually shifting, requiring changes in the amount of service for different districts. Actual expenditures incurred

in carrying the organization and eliminating the weak and inefficient elements therein were merged in the operating accounts. Then, too, no record was kept of the inadequate return on investment during early operation.

Weighing these points, it was found that on the basis of present-day prices for labor and material the cost of going value amounted to 8 per cent of the reproduction cost of the physical property and based upon pre-war prices it amounted to 6 per cent.

Consolidation value is defined as the element of value which attaches to a strong unified system as contrasted with the uneconomical condition under which smaller companies operate in the same or adjacent territory. The element of value due to consolidation in the existing system is estimated by comparing its operation with that of a number of smaller independent companies. Savings due to consolidation should result in more efficient routing of cars, reduction in maintenance and fixed charges on excess trackage, reduction in the cost of maintenance of equipment by passing the work through consolidated shops in larger quantities and reduction in equipment investment. Inspection of car operations can be put under a single head, as well as way and structure maintenance. A large company has more ability to secure money usually at cheaper rates of interest than smaller companies.

Savings in the larger consolidations involving 117 companies were estimated in detail and amounted to a total of 3.65 per cent of the total cost of service. In the cases of other consolidations involving only a dozen or more companies the saving was estimated at 1.89 per cent of the cost of service.

TABLE V—ESTIMATED COST OF REPRODUCTION NEW—OPERATIVE PROPERTY, PUBLIC SERVICE RAILWAY

	Pre-War Prices		Sept. 1, 1920, Prices	
	Reproduction	Accrued Depreciation	Reproduction	Accrued Depreciation
501 Engineering and superintendence.....	\$2,660,869	.....	\$4,191,732	.....
502 Right of way.....	4,430,845	.....	4,781,863	.....
503 Other land.....	6,001,837	.....	6,001,837	.....
504 Grading.....	2,477,857	\$625,887	6,091,060	\$1,549,813
505 Ballast.....	1,360,685	160,292	2,599,673	320,497
506 Ties.....	1,533,631	720,584	3,634,570	1,707,062
507 Rails, rail fastenings and joints.....	5,381,808	1,561,918	10,237,305	2,972,485
508 Special work.....	2,561,894	995,542	4,937,945	1,918,866
510 Track and roadway labor.....	2,717,178	853,859	6,938,434	2,180,516
511 Paving.....	6,260,165	2,435,524	14,312,086	5,675,349
512 Roadway, machinery and tools.....	85,253	24,581	159,880	46,384
513 Tunnels and subways.....	217,867	10,893	471,145	23,557
514 Elevated structures and foundations.....	595,572	75,321	1,269,267	148,143
515 Bridges, trestles and culverts.....	1,339,031	168,452	2,662,677	313,336
516 Crossings, fences and signs.....	187,005	21,586	387,667	44,806
517 Signals and interlocking apparatus.....	202,812	57,161	458,731	129,552
518 Telephone and telegraph lines.....	50,791	15,198	122,939	36,795
519 Poles and fixtures.....	1,090,651	358,769	2,584,225	827,281
520 Underground conduits.....	395,056	59,215	961,581	144,142
521 Distribution system.....	3,431,267	579,887	6,323,816	1,069,128
522 General office buildings.....	2,847,529	217,003	6,259,725	477,858
523 Shops and carhouses.....	3,176,003	992,471	7,539,477	2,342,833
524 Stations, miscellaneous buildings, etc.....	419,990	98,815	983,702	231,792
525 Wharves and docks.....	552,356	175,732	1,346,027	430,851
530 Passenger and combination cars.....	7,226,120	1,805,446	17,704,251	4,423,407
532 Service equipment.....	457,889	114,403	1,145,627	286,235
533 Electric equipment of cars.....	5,110,462	1,333,831	12,108,732	3,160,380
534 Locomotives.....	6,834	1,754	17,001	4,379
535 Floating equipment.....	773,160	537,702	2,242,164	1,559,334
536 Shop equipment.....	550,061	186,914	1,199,133	407,472
537 Furniture.....	240,405	83,932	458,919	127,092
538 Miscellaneous.....	124,185	54,255	188,256	82,248
546 Law expenditures.....	1,513,006	.....	2,376,242	.....
550 Administration expenses.....	.....	.....	.....	.....
547 Interest during construction.....	5,301,194	.....	14,558,074	.....
549 Taxes during construction.....	619,620	.....	1,236,063	.....
550 Miscellaneous:				
(a) Preconstruction costs.....	2,066,023	.....	2,689,735	.....
(b) Auxiliary operation items.....	172,403	55,862	438,739	142,902
(c) Financing expenses.....	3,738,400	.....	11,485,100	.....
Additions to capital account.....	628,173	.....	1,514,160	.....
Going value.....	4,710,000	.....	13,170,000	.....
Consolidation value.....	5,600,000	.....	11,700,000	.....
Total.....	\$88,815,887	\$14,382,789	\$189,489,560	\$32,784,505

NOTE—The above totals for accrued depreciation were increased by 2.63 per cent for present-day prices and by 3.75 per cent for pre-war prices, representing one-half of the structural overhead costs for engineering and superintendence and for administration and legal expense to obtain the totals shown in the table given in the ELECTRIC RAILWAY JOURNAL April 16, 1921, page 717.

Setting aside that percentage from the cost of service in 1904, following the general consolidation in 1903, gives total savings of \$361,500 as of that time, which if capitalized at 6 per cent equals \$5,160,000. To this should be added \$440,000 covering the subsequent additions, making a total of \$5,600,000.

In arriving at the element of consolidation value applicable to reproduction under present-day prices, the estimate for pre-war prices was increased in proportion to the increase in physical value as compared with pre-war prices, thus allowing only for the decreased purchasing power of the dollar.

In addition to the savings accruing to consolidation the element of consolidation value can also be evidenced by expenditures made to effect the consolidation. Expenses on account of this element were determined by considering the price paid for a given property, the cost of the physical property, and the earning power. Expenditures made to effect the principal consolidations based on these considerations was estimated to have been at least \$7,300,000.

The book value of the railway power facilities turned over to the electric company under the 999-year lease of July 1, 1910, was approximately \$5,169,000. This was less than the reproduction cost new of such facilities based upon prices for labor and material prevailing at the time of the lease.

During 1920 the railway company paid \$3,992,000 for electrical energy furnished under this lease. This amount included an allowance for interest at the rate of 8 per cent on power facilities turned over July 1, 1910, and the actual interest paid the electric company in accordance with the lease on additions made by the electric company.

The cost to the railway company of producing and delivering an equivalent amount of energy from a modern plant was estimated at \$5,000,000, thus indicating a saving through the power lease for the year 1920 of \$1,119,000, which capitalized on an 8 per cent basis amounts to \$13,980,000. Adding this amount to the book costs of facilities turned over to the electric company makes a total of \$19,149,000 for present-day prices.

Under pre-war prices the saving through the operation of the power lease amounted to \$492,000, which capitalized at 8 per cent amounted to \$6,025,000. This then added to the new book cost of facilities totaled \$11,994,000.

In view of the fact that this lease is between two companies controlled by the same holding company, these profits add no specific value to the lease. The potential value, however, has been given consideration.

WORKING CAPITAL

The allowance for working capital was defined as the requisite amount of materials and supplies it was necessary to carry in stock to meet the regular demands for operation and maintenance of the property. To this should be added a sufficient amount of cash to meet promptly all payrolls and bills presented.

The value of supplies carried on Jan. 1, 1921, amounted to \$1,520,709. The amount of free cash on hand should equal at least one month's operating expense, which amounts to \$1,860,567. Adding these totals gives \$3,381,276 as the amount of working capital necessary.

The actual investment as of March 31, 1919, as determined by Mark Wolff on behalf of the New Jersey State League of Municipalities at the time of the zone fare

hearings was \$93,662,873. Additions and corrections were made in this figure to bring it up to Jan. 1, 1921, as follows:

Historical cost:		
Estimate of Mark Wolff as of March 31, 1919.....		\$93,662,873
Add—Payments omitted 1893 to 1898 to B. M. Shanley account of:		
Consolidated Traction Company.....	\$420,515	
Orange & Passaic Railway.....	658,000	1,078,515
		\$94,741,388
Deductions—		
Account of three errors of transcription.....	\$1,072,980	
Substitution of actual figures for estimates on costs in several cases.....	376,345	1,449,525
		\$93,291,863
Add capital additions on books of company to Dec. 31, 1919.....		2,562,245
Add corrections made in overhead allowances on original estimates changed from 3.5 per cent 19.7 per cent of total expenditures, which includes overhead costs equivalent to 10 per cent on construction expenditures—April 1, 1919, to Dec. 31, 1920, to cover financing expenses and interest and taxes during construction amounting to \$256,224.		14,862,840
		\$110,716,948
Less \$2,000,000 paid railway on assumption of power lease plus correction error of \$123,315.....		\$1,876,685
		\$108,840,263
Total historical cost.....		
Add intangible values not shown on books—		
Going value.....	\$4,710,000	
Consolidation value.....	5,600,000	10,310,000
		\$119,150,263

SUPERSEDED PROPERTY

The value of superseded or abandoned property, not including salvage of the existing railway company and its predecessor companies prior to the end of their useful life, amounts to \$4,701,943. An itemized list of this property follows:

Horse cars, cable, dummies, buses, etc.....		\$2,620,000
Subsequent to electrification:		
Track.....	\$652,064	
Power plant equipment.....	344,097	
Distribution system.....	49,926	
Car and equipment.....	652,673	
Abandoned track.....	68,479	1,767,239
		\$4,387,239
Fare zone expense.....		314,704
		\$4,701,943

An analysis by accounts on both reproduction price bases follows, together with other pertinent information concerning the physical property owned by the company.

Avoiding Transfer of Surety Bonds

IT IS now possible to bond the position instead of the individual employee. This plan of bonding all responsible positions was recently entered into by L. T. Hixon, auditor Terre Haute, Indianapolis & Eastern Traction Company, Indianapolis, Ind., with the result that the annoyance of having to transfer a bond from one person to another whenever there is a change in employees is eliminated. The company simply takes out a blanket bond, covering all bonded positions listed in an attachment made a part of the bond, for the amount specified for each position. The portion of the bond covering any particular position may be discontinued, or the amount covering a new position added on, at any time by deducting or adding the corresponding amount to the rate. This type of surety bond, which is understood to be a new development of the service of the National Surety Company, is said to be very liberal in character and to be available at practically the same rate as the old type individual bonds. The blanket bond is simply renewed yearly and that is about all the attention required.

Don't Hate Your Customers

A Talk to the Platform Men of Georgia Railway & Power Company by Its President

Preston S. Arkwright

Delivered March 31, 1921

I HAVE often wondered what you motormen and conductors think of the work you are doing. You get up early in the morning, many of you before day, frequently in the cold of the winter—you have done it many days before. You go down to the barn, get out your car, same car you got out yesterday, take it out on your route, over the same old street you ran on yesterday, and the day before that. You turn on and off the current, put on and off the brakes, running along a familiar street that you have run on many a time before, to the end of the line. You pick up the controller handle, walk through the car to the other platform, then run back over the same route to the other end of the line. Then you pick up the controller handle, walk through the car to the other platform and come back again.

The conductor rides with you on the back platform, ringing the bell for you to go, ringing the bell for you to stop, calling out the same old streets, when he calls them out at all. And so you go, five, seven, nine and eleven hours every day, day after day, month by month, year on year, in the rain, in the cold, in the sleet, Sundays, holidays, Christmases, finally reaching home again, late in the night, some of you in the early hours of the next morning. Oh! the dreary monotony—if you think that way about it.

Even at that it's no more monotonous than most other jobs.

How would you like to be a bookkeeper, perched on a high stool making figures in books all through the day, day after day and year after year, seeing nothing but figures, engaging in no activities of any kind, simply recording figures of the results of work that other men do?

How would you like to be a mechanic turning threads on bolts, doing nothing else but this, shut up in the shop all day, just turning threads on bolts all the time, day after day?

YOUR JOB IS WHAT YOU MAKE IT

How would you like to run an elevator, up and down the shaft, seeing nothing of the outside, just up and down the same shut-in shaft all the time. I know a man who does this very kind of work and he is the happiest and most cheerful man I know. He runs the elevator in this company's own office building. He makes it his business to make things brighter for everybody that works in the building. You really ought to go up and take a lesson from him.

As I say, if you think that's what your job is then that's what it is, and if you let your mind dwell on the monotony of it then you will not only never amount to very much at it, but it will drive you crazy some day.

If you'll take the right view of it you'll find your work altogether different from this. You are furnishing transportation service for a whole city. We people of Atlanta are very proud of our growth from a little cross-

road village reduced to ashes in the Civil War to a city of over 200,000 inhabitants. This couldn't have been done without you—you made this growth possible. You've got more right to be proud of this city's growth than any other single enterprise in it. You've taken the greatest part in bringing it to pass.

We are very proud of the Candler Building, for instance, and the other sky-scraping office buildings that mark out the skyline of the town. The people who built them took especially great pride in them, so much so that they gave them their names; Candler Building, Hurt Building, Grant Building, etc. These buildings couldn't exist without the work that you do. You transported the mechanics who put them up, you bring back and forth the tenants that occupy them. So you have had a part in the building of them. Your work entered into it.

RAILWAY MEN HELP ALL BUSINESSES

We are very proud of our fine churches. Atlanta has an unusual number of fine churches, with eloquent preachers and large Sunday congregations. These churches couldn't exist in the numbers they do except for the work that you are doing. There would be no congregations for eloquent preachers to preach to if you didn't bring them in. Why, the very reason you can't go to church yourselves is in order that there may be congregations for churches to hold.

You bring the teachers and the children to the schools. You are helping to educate the children of the community. They couldn't come to the schools except for the work that you do. So that your work, in part, is the education of children.

Mr. Howard recently erected a very fine theater that's an ornament to the city. He is very proud of his theater, as he has a good right to be. The whole city of Atlanta takes pride in pointing to the theater Mr. Howard built. You helped to build this theater. You brought the mechanics to the job, you bring the audiences to see the pictures. There couldn't be any theater without the work that you do. There wouldn't be enough people here to sustain it, and they couldn't get to it except for your work.

You take the workmen to the shops maintaining the equipment that runs on the railroad. You run our cars all night taking the train crews to and from the railroad yards, and you bring the passengers to and from the stations. You have a part in the transportation system of the country.

There are many beautiful residence suburbs around Atlanta. There are thriving, growing, prosperous suburban towns, such as Decatur, East Point and College Park. Where would they be but for the work that you do? People couldn't live in the suburbs. They would be huddled in dark, unsanitary, congested tenement houses except for the work that you do.

So all of the activities of the community, its entire prosperity and well-being and growth depend on the basic fundamental service that you are doing. You are not simply turning controller handles and ringing bells. You are making possible the city and all of its activities and you have a share in the accomplishment of everything worth while that anybody does here. This is why you have to get up in the morning before anybody else. This is why you have to stay at work until everybody else has gone to bed. This is why you work on Sundays, holidays and Christmases. There couldn't be any other work in a city of this size but for your work and there wouldn't be any Sundays or any holidays or any Christmases that people could enjoy.

You have got a right to be proud of the work you do. There is no other so necessary, so useful or so valuable.

I don't know why it is, but I think it is true some people look down on street car men. I don't know what the cause is. Maybe its a hangover from the days when we drove a mule; or because our transactions are in little money; or because we're so poor.

Perhaps we are responsible for it ourselves. I think we have had a low estimate of our work and a poor opinion of ourselves. Nobody is going to think any more of us than we think of ourselves, that's sure. If we think we are common trash, then other people are going to think we are common trash, and common trash we are and will remain. So, above all, have a good opinion of yourselves and a good opinion of the work you are doing. Take a pride in it.

YOU HAVE A POSITION OF RESPONSIBILITY

This company has confidence in you and trusts you. It puts in your charge the car, which is pretty valuable, costing from \$5,000 to \$15,000. It trusts you with its money. It trusts you with its responsibility for damages. It trusts you with its reputation.

The public has confidence in and trusts you. They trust their own lives and safety to your care. They put their wives and little children in your charge, confident not only that you will save their persons from injury but will protect them from all harm.

You have a position of trust and responsibility and are performing a work of great importance.

Don't go at it just as a temporary or despised job to make a living out of. If you feel you've got to eat to live, that you've got to make a little money to eat and that's why you do this work you are not going to get any happiness out of it and nobody is going to have any respect for you.

Sometimes we think the public is unfair and unjust to us. At times we are apt to believe they are our enemies. I won't let myself think that and don't you let yourselves think that. It isn't true. They are not our enemies, but whether they are or not don't think that they are. If you believe that the public are your enemies then you are going to be an enemy to the public, and if you feel that way about it, or if I feel that way about it, we are unfit to stay in this business. We are unfit to serve people if we are unfriendly to them.

These people are your customers. You are furnishing transportation for pay. They are paying to ride on your car. *Don't hate your customers.* If you were running a grocery store or a dry goods store or a clothing store would you hate a person who came in to

buy things that you sold? Now you *are* running a store. You've got charge of the car. You want people to ride with you. You want them to pay to ride with you. You ought to feel friendly with them when they do ride with you. Show your friendliness to them. Be glad to have them get on your car. Have a spirit of welcoming them. If you will show friendliness to them they will show friendliness back to you.

I have never myself been discourteously treated by a motorman or conductor. I have never witnessed discourteous treatment by a motorman or conductor of any other passenger. As a matter of fact I have very rarely been discourteously treated by anybody. Generally I think it is our own fault when we are discourteously treated. I know that some motormen and conductors do treat passengers discourteously. Sometimes I think it is due to the fact that some passenger regards the motorman or conductor as a menial servant. He shows this in his treatment and naturally you resent it. Sometimes you have got a chip on your shoulder and you take offense when no offense is intended, or you've got a grouch and you take it out on the passenger. Naturally he comes back at you.

COURTESY MUST BE INSTINCTIVE

Be considerate of passengers. This doesn't mean that you've got to apologize for living or that you must adopt a cringing attitude. It simply means that you are to put yourself in the passenger's place and treat him in the manner you would like to be treated by him. I am not talking about rules of etiquette. Pretense of good will or veneer of manner or slobbering over people is not going to get by. You've got to have the right spirit about it. You've got to like the work and want to do it properly in order to do it right. If you will get the right spirit all forms and rules of politeness will take care of themselves.

You run these cars every day and a lot of the same people ride with you day after day. You know them. Show that you know them. Learn their names, speak to them by their names. There is nothing that flatters people more than to be recognized and called by their names.

You come in contact with a great many people. This company transported about 95,000,000 passengers last year, or about 260,000 a day. In the early morning you meet the mechanics going out to construction jobs; you carry the people to the mills and factories and workshops; the clerks and business people and sales people to the offices and stores and business houses; you bring in the school teachers and the children to the schools and colleges; then come the women to shop in the stores; you carry people all day long on their various missions of business or pleasure or social intercourse. In the afternoons here come your passengers trooping back from the factories, the mills, the buildings, the shops, the schools, the stores and the offices. You bring the husband back to the wife at night and the mother back to the children. You reunite the families at home. You bring them out again to the amusements in the evening. You've got a part in all their various activities. Not only this but your treatment influences their happiness and the character of their work.

If you are grouchy in the morning you pass the grouch on to the men and women who go into the factories, the mills, the shops, the schools, the offices or the stores. You spoil their day. They pass on the

grouch they have got from you to the people they come in contact with. If you pass your grouch on to the returning passengers at night they pass it on to the home circle. If you are cheerful and happy you will better the work and the lives of all of these people you transport and all of the people they come in contact with. Nobody made us engage in this work, nobody keeps us in it against our will. If we don't like it let's get out of it. If we stay in it let's be happy about it.

You owe it not only to yourselves and to the company, but you owe it to all the other men in this business with you to have the right attitude and spirit toward this work and to conduct yourselves so as to deserve the respect and good will of the public you serve.

Sometimes in an organization this large a dishonest man will creep in. The passengers notice this man knocking down fares. They immediately say that all street railway conductors are damned thieves.

Sometimes the motorman or conductor will be uncouth and rude or even insulting, we'll say, to some lady passenger. The passengers who observe it will say that all motormen and conductors are boors.

Whatever one motorman or conductor does reflects on all the other motormen and conductors. So not only get the right attitude yourselves but interest yourselves in seeing that all the others have the right attitude. If there are those among us who are not fit to be here let's run them off. Let's raise the public's estimation of the street car man.

If we have respect for ourselves, the proper appreciation of the work we are doing, and the right attitude toward our customers, we will deserve the respect of the public and their co-operation and support. And when it comes to pass that we shall get them—as it surely will—how happy we shall be.

British Railway Electrification Situation

Standardization of System and Equipment Recommended—
Electrification Advocated as Most Economical Method of
Reducing Terminal Congestion and of Increasing
Capacity of Suburban Lines

IN ENGLAND, much more than in the United States, it is realized that if the electrification of the railways is to be undertaken on a large scale some standardization of system and equipment will be necessary. A great step in the direction of uniformity was made by the recommendation last year of the Ministry of Transport, in the opinion of London *Engineering*, that direct current at 1,500 volts should be generally adopted for the electrification of the British railways. It is to be hoped that this decision will put an end to the battle of the systems. Anyway, a reasonable decision is better than none at all.

Sir Philip Nash, in a paper recently read before the Institute of Transport, sums up briefly the British situation in regard to electrification. It appears, he said, to be taken for granted that the general replacement of steam locomotives by any system of electric traction on the trunk lines of England is far beyond the range of practical policy at present. The chief point for immediate consideration is the extent to which railway operation would be benefited by the electrification of suburban lines and large city terminals. There are also certain cases where special conditions of the line or of the traffic may indicate electrical operation to be best,

but, generally speaking, the center of interest lies with suburban passenger traffic.

At the same meeting, Sir Herbert Walker, in advocating further electrification, said that the traffic on the electrified portion of the London & Southwestern Railway had increased from less than half a million passengers a week in 1915 to more than a million per week today. During the same period the operating costs of the electrified lines had increased by only 100 per cent, although the corresponding cost of steam-operated lines had increased by 200 per cent.

A somewhat similar story was told by Sir William Forbes with respect to the Brighton lines. Electrification had enabled the mileage run to be increased by 150 per cent with an increase of 200 per cent in earnings. The financial result had been a return of more than 15 per cent on the capital spent in electrification. The company was putting forward proposals at that time for the electrification of the Brighton main line, although the return on the fresh capital required for this conversion would be but 6 or 7 per cent.

The real factor which is doing more than anything else to keep the question of electrification strongly before the English railway companies is the ever-increasing difficulty of handling suburban, and especially terminal, traffic with steam-drawn trains. It is said that 1,200 trains per day enter and leave Liverpool Street station, London, and in spite of capable organization on the part of the railway officials and good humor on the part of the public, the conditions at times have been almost intolerable. The traffic has outgrown the facilities of the station, and the experience of the railways like the Southwestern shows that many more passengers are ready to travel if a sufficient number of trains is provided. Electrification may be costly as a solution for this difficulty, but when the only alternative is the enlargement of the whole station and the duplication of track and platform, the installation of electrical equipment may be decided upon merely as the lesser evil. Moreover, the incidental advantages of electric operation at terminal stations in cities are by no means negligible.

In regard to the general railway situation in England, the lines are in a run-down condition. A recent report made to settle the accounts between the government and the roads deals largely with the arrears of maintenance of normal wear and tear and replacement of stores. No less than 2,100 fewer locomotives were given heavy overhauls in 1919 than in 1913, though the light repairs to keep these engines at work numbered about the same for these years. Heavy repairs on other equipment, such as coaches and freight cars, were in a like proportion. This condition seems to point to the fact that though the stock was kept running, it was yet decidedly behindhand in upkeep.

Capital expenditure, which for many years before the war used to run to about £10,000,000 per annum, amounted to only £12,500,000 altogether between 1913 and 1919 for Great Britain and £700,000 for Ireland. The total mileage of the railways of the country in 1919, reduced to single track, was 56,000, about 800 miles more than in 1913, the increase being nearly all in sidings.

The most noticeable item, in the report mentioned above, under the heading of "Modes of Traction," is an increase of 2,732,000 engine-miles by electric traction due to the improved electric services.

Machine Sells Gum to Railway Passengers

Novel Vending Device Proves Profitable—Its Use Brings Out Fact that One Passenger in Twenty-five Will Buy 5-Cent Packages of Gum on Cars

SELLING gum to street railway passengers is a new pastime, but it is being done with success in Little Rock, Ark. Two or three years ago, J. H. Mann, Jr., of Pine Bluff, Ark., conceived the idea of building a machine to sell a standard 5-cent package of gum, rather than the 1-cent pieces so frequently sold. In wondering where to place such machines, it occurred to him to place them on street cars. A machine was developed, and a number of them were tried out experimentally for several months on some of the cars of the Little Rock Railway & Electric Company. Finally a satisfactory foolproof machine was evolved. It is designed to lock against the depositing of a coin if the machine is empty, and also to prevent the insertion of a blank or slug.

For more than a year, about 1,200 of these machines have been in successful operation on the cars in Little Rock. A demonstration was made on ten cars of the Dallas Railway which resulted in a contract for the

this number was compared with the total number of passengers riding on those cars it was found that 4 per cent of all the cash-fare passengers riding on the cars so equipped had purchased gum.

The proposition which the manufacturer makes to the railways is to pay them a percentage of the receipts for the privilege of installing the machines in the street cars.

These vending machines are manufactured and distributed by the Transit Vending Machine Company, Pine Bluff, Ark., and another corporation, the Transit Sales Company, operates them. The operating company maintains the vending machines, fills them at night and extracts the coin when the cars come into the carhouse. On a basis of 10 per cent of gross receipts to the railway, the manufacturer estimates that a railway company operating 100 cars might expect to receive from this source a revenue of approximately \$7,500 a year.

More recently, the machines have been loaded with mints of the "Life Saver" variety, which seem to sell as effectively as gum. The machine, which weighs 3 lb., is built of steel. It is bolted to the posts between car windows.

Wages on the Steam Railroads

SO MUCH has appeared in the daily papers in regard to hearings on steam railroad wages that an official statement by the Association of Railway Executives is welcome. This is given in Table II and shows the figures relating to representative classes of railway employees under "national agreements," with the increase in number of these employees and increase in compensation. The increase in the number of men em-



INTERIOR OF A CAR WITH VENDING MACHINES PLACED ON WINDOW POSTS

installation of about 3,000 machines on the Dallas cars. Arrangements have been made for a test run at Knoxville, Tenn., and several other systems at this time are considering having demonstrations made.

The statistics of the past year in Little Rock are of interest. An average of forty-eight cars were equipped during the year, and on these a gross business of more than \$27,000 was recorded. From this, of course, the number of 5-cent sales could be calculated and when

employed is largely due, in the opinion of the Association of Railway Executives, to rules and working conditions which reduced the output per man and were introduced while the railroads were under government control.

The statement made by the Association of Railway Executives also includes a table of increases in wages since 1914 with percentage increases in cost of living as reported by the National Industrial Conference Board and by the Bureau of Labor. These figures are shown in Table I.

TABLE I—PERCENTAGE INCREASES OVER 1914 OF WAGES OF STEAM RAILROAD EMPLOYEES AND COST OF LIVING

Year	Per Cent Increase in Average Wage Over 1914	Per Cent Increase in Cost of Living Over 1914
1915.....	1.83	2 (Dec.)
1916.....	9.31	15 (Dec.)
1917.....	23.04	32.2 (Dec.)
1918.....	73.89	69.3 (Dec.)
1919.....	81.74	93.5 (Dec.)
1920*.....	121.32	113 (June)
1920†.....	134.07	94.5 (Dec.)

* Before wage award. † After wage award.

TABLE II—SHOWING INCREASE IN NUMBER AND PAY OF REPRESENTATIVE CLASSES OF STEAM RAILROAD EMPLOYEES UNDER NATIONAL AGREEMENT

Class of Employees	Number in Service		Increase 1920 Over 1917, Per Cent	Average Annual Compensation,		Increase 1920 Over 1917, Per Cent
	1917	a 1920		1917	b 1920	
General foremen—M. E. dept.....	1,549	1,859	20.0	\$1,661	\$3,039	83.0
Gang and other foremen—M. E. dept.....	18,043	25,488	41.3	1,352	2,786	106.1
Machinists.....	41,112	64,861	57.8	1,394	2,382	70.9
Boilermakers.....	12,931	20,504	58.6	1,425	2,473	73.5
Blacksmiths.....	8,115	10,807	33.2	1,258	2,237	77.8
Painters and upholsterers.....	11,087	12,223	102	950	2,029	113.6
Electricians.....	9,564	14,460	51.2	1,030	2,335	126.7
Air brake men.....	5,904	8,064	36.6	1,086	2,350	116.4
Car inspectors.....	19,661	26,349	34.0	1,141	2,425	112.5
Car repairers.....	66,531	89,239	34.1	993	2,116	113.1
Other skilled laborers.....	52,989	59,733	12.7	1,065	2,229	109.3
Mechanics' helpers and apprentices.....	86,021	129,757	50.8	822	1,638	99.3

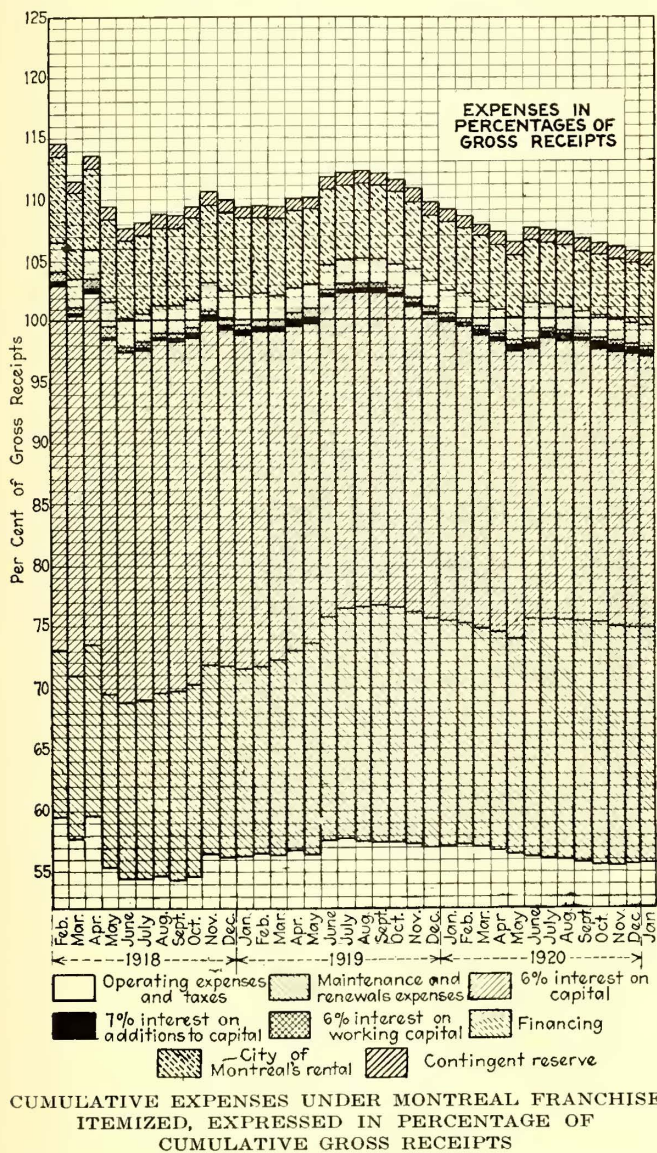
a First quarter, 1920.

b July wage award included for twelve months.

Service-at-Cost Results in Montreal

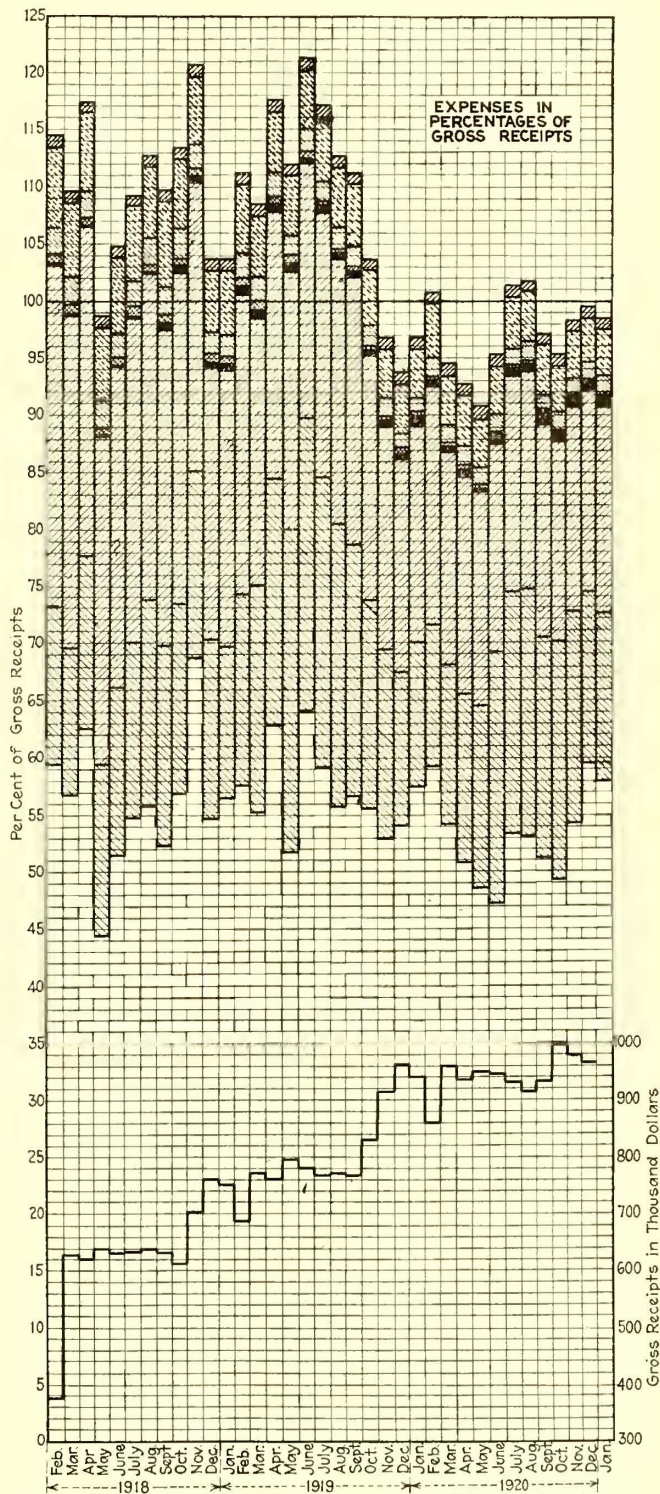
AT THE Ottawa convention of the Canadian Electric Railway Association, held Jan. 31 and Feb. 1 and covered in the issue of this journal for Feb. 5, Col. J. E. Hutcheson read a paper on the results secured under the service-at-cost franchise in Montreal. He exhibited some charts, two of them in colors, which showed the data in concrete form, these charts having been prepared for the Montreal Tramways Commission. The charts were not available for publication at the time, but arrangements to this end were made later and the data

1921, are given in the right-hand column. Referring to the right-hand chart, it will be noted that since November, 1919, the gross receipts have usually exceeded the expenses, so that a substantial reduction in the deficit was made during 1919. This deficit was accumulated while the actual authority of the commission to regulate fares was being determined in the courts. Colonel Hutcheson stated in his paper that the earnings per passenger were as follows: Feb. 10 to Sept. 30, 1918, 4.09 cents; Oct. 1, 1918, to Oct. 31, 1919, 4.80 cents; Nov. 1, 1919, to Aug. 31, 1920, 5.85 cents; Sept. 1 to Nov. 30, 1920, 6.09 cents.



were brought up to a considerably later date than those shown in the convention. For the reader's convenience the graphs have been combined to render them more readily comparable and they are reproduced on this page.

In both charts the expenses are itemized under eight heads, the percentages being laid off one above the other in the following order: Operating expenses and taxes, maintenance and renewal expenses, 6 per cent interest on capital, 7 per cent interest on additions to capital, 6 per cent interest on working capital, cost of financing, rental due city of Montreal and contingent reserve. For convenience these are expressed in terms of gross receipts, the actual monthly values of which, to January,



At top, itemized expenses expressed in percentage of gross receipts. At bottom, gross receipts in dollars per month.

American Association News

EXECUTIVE COMMITTEE DECIDES AGAINST EXHIBITS AND WILL ANNOUNCE CONVENTION CITY SHORTLY—APPOINTMENT OF NEW SECRETARY POSTPONED PENDING REPORT OF COMMITTEE ON PLAN AND SCOPE—NATIONAL ELECTRIC RAILWAY DAY TO BE CELEBRATED MAY 4

Executive Committee Holds Important Meeting

Settles Question of Convention and Will Make Study of Organization of Other Associations Before Appointing Secretary

AT A MEETING held in New York on April 16 the executive committee of the American Electric Railway Association decided to appoint a committee to study carefully the needs of the association and of the industry so as to make the association of greater benefit to all of its members than it has been in the past. The opinion was generally expressed that at this time and before a successor to Secretary Burritt should be appointed it would be most desirable to make such changes in the organization as might adapt it better to efficient work and to get such suggestions as might be available from the working of other national associations of somewhat similar character. For this reason the appointment of a successor to Mr. Burritt was postponed, pending the report of a new committee of twelve, whose selection was left to President Gadsden. At the same meeting it was decided not to have exhibits at the convention this year, but no definite decision was reached on the place for the convention.

The meeting was held at the office of the association and the members of the executive committee in attendance were:

President P. H. Gadsden, Philadelphia; Vice-Presidents Britton I. Budd, Chicago, and C. D. Emmons, Baltimore. Members of the executive committee, E. F. Wickwire, Mansfield; H. R. Mallison, Montreal; J. N. Shannahan, Hampton; W. H. Sawyer, East St. Louis; R. P. Stevens, New York; W. G. Gove, Brooklyn; John J. Landers, York, Pa. Past-Presidents W. Caryl Ely, New York; T. N. McCarter, Newark; Charles L. Henry, Indianapolis; L. S. Storrs, New Haven; John J. Stanley, Cleveland; C. L. Allen, Syracuse; George H. Harries, Omaha. Others in attendance included Frank W. Frueauff, New York; M. B. Lambert, Pittsburgh; Joseph K. Choate, New York; J. G. Barry, Schenectady; James H. McGraw, New York; S. M. Curwen, Philadelphia; Henry R. Hayes, New York; B. C. Cobb, New York; M. R. Boylan, Newark; H. G. Bradlee, Boston; J. D. Mortimer, New York; E. C. Faber, Chicago, and A. M. Robinson, Philadelphia.

AUDIT PRACTICALLY COMPLETED

President Gadsden opened the meeting by declaring that the audit of the accounts of the association had now been practically completed and he is anxious to have those in attendance as well as the members at large understand exactly what had been found and what was being done to avoid any defalcation in future. He explained that it has been the custom of the association for the past fifteen or twenty years to have the books audited in the fall of each year by members of the auditing department of the Public Service Railway of Newark, N. J. When the time came for the audit last

September, the auditors were requested by the former bookkeeper of the association, W. O. Gibson, to wait so that the books could be written up. Several other attempts were made to conduct the audit, but an excuse of one kind or another was made by Gibson in each case. When a start was made, it was found that the books had not been written up since June. President Gadsden was immediately notified by telephone, and further examination by the auditors showed that there had been defalcation. When confronted by the evidence, Gibson admitted that \$31,000 had been taken. The plan was that when he wanted money he would secure the signature of the secretary, who had perfect confidence in him, to a bank voucher and then would make no return of the voucher. The largest amount taken on any single voucher seems to have been \$5,200, and the evidence at hand indicates that the defalcation began about August, 1919.

President Gadsden said that after consulting with several members prominent in the association and near at hand he secured the arrest of Gibson, who is now out on \$15,000 bail. Up to this time no evidence has been found that any one else is criminally involved in the case, and Mr. Burritt, the former secretary, has been actively assisting the auditors. The prosecution of Gibson is in the hands of Carl R. Miner, an attorney connected with Hodenpyl, Hardy & Company, and the evidence so far indicates that the defalcation is between \$40,000 and \$50,000. It is possible that some of this may be got back from the defaulter.

WORK OF THE ASSOCIATION WILL NOT SUFFER

Fortunately the finances of the association, according to President Gadsden, are such that it will not actually suffer so greatly from the defalcation as might be expected. The reason for this is partly because of the increase in dues adopted last year and partly because with the higher fares prevalent on most properties and with the dues based on a percentage of the receipts, the amounts received have considerably exceeded the expenses of the association. Economy will have to be used, but no assessment will be required, and it is possible that with economical operation the rate of dues may be reduced next year. Mr. Gadsden added that he considered before this disclosure that the railways had run through the gamut of adversities, but this trouble certainly capped the climax. Nevertheless, he thought that the members might feel that the motto of the Salvation Army applied to them, namely, that a railway man may be down but he is never out.

As regards the immediate future, the association with the cash on hand and receipts expected during the rest of the year will have resources of about \$100,000, and expenses of about \$77,000, leaving a balance of between \$22,000 and \$23,000. This does not include, however, any amount for the salary of a secretary who might be appointed. He did not believe that the work of the association would be embarrassed in any way provided the president should be authorized to borrow

on notes a sum not to exceed \$10,000. In regard to bonds, he explained that the bookkeeper was under a bond of \$2,000 and the secretary under a bond of \$20,000, but owing to some unexplained reason these policies had been allowed to lapse. The policy for \$20,000, however, did not lapse until December of last year, and most of the defalcation had occurred before that date. Mr. Gadsden then said that in the emergency he had asked Mr. Welsh, at that time statistician of the association, to act as secretary pro tem. Mr. Welsh has performed the duties of this office in a very satisfactory way and the thanks of the association were due to him.

APPOINTMENT OF SECRETARY POSTPONED PENDING REPORT OF PLAN-AND-SCOPE COMMITTEE

Taking up then the question of the appointment of a secretary, Mr. Gadsden said that seven or eight names of possible candidates had been presented by members, but said he himself had no one particularly to recommend. He felt that in any such selection the president of the association should not take a preponderating part, as the president is a temporary officer only, whereas the secretary, if he is the proper man, will guide the affairs of the association long after the president has retired to the ranks.

Nevertheless, while he had no candidate for the position, Mr. Gadsden said that he had very positive views of the type of man who should be selected. In his opinion the time has come when the association should be set on a higher and broader plane of usefulness. Up to three or four years ago it was only a small organization with a budget of from \$30,000 to \$40,000. Everybody knew most everybody else, and the secretary's office was a sort of social headquarters for visiting railway men. This was all right so far as it went, but in the future the office should be a place where much more effective work should be done for the benefit of the industry. The future secretary should be a leader, a man with vision and personal force, some one to do the thinking for the industry as a whole.

The president said he thought the association could learn much from the practice of the National Electric Light Association and the American Gas Association, both of which were doing work largely along the lines which he had in mind. Then he asked whether it would not be wise to reorganize the association along such lines and then look around to see who would manage it.

In response to Mr. Gadsden's request for different members to express their opinion there were remarks from Messrs. McCarter, Budd, Bradlee, Curwen, Sawyer, Mortimer, Stanley, McGraw and Cobb, all of whom expressed themselves in agreement with the sentiments expressed.

The motion was then made and carried that the president should be authorized to appoint a committee of

twelve to make a study of the needs and opportunities of the association, to take as long as was needed and to report its recommendations with suggestions as to the name or names of men qualified to carry out the work of directing the work of the association. It was decided also that this would include the future publication policy of the association as regards *Aera*. Mr. Gadsden then said that he was sure that the committee would welcome suggestions from the members of the association as to ways in which the work of the association could be improved or desirable changes in the plan and scope of the organization of the association. He said he would not announce the membership of the committee at that time, but did so on April 19. The names appear in the panel on this page. Mr. Gadsden then said that he had asked the auditor of the association, Mr. Boylan, to prepare a statement of the entire financial situation to be included in the minutes of the meeting.

Several resolutions were then adopted. One was that for the present checks should carry two names, that of the president and that of B. A. Hegeman, Jr. Another was that the president would be authorized to issue a note for \$10,000 to care for any immediate liabilities of the association.

CONVENTION IN OCTOBER, BUT WITHOUT EXHIBITS

John G. Barry, chairman of the committee on location for the next convention, was then called upon to present the report of that committee. Mr. Barry explained that the committee had canvassed the question of an exhibit at the next convention and had also conducted a poll of the manufacturer members of the association. The recommendation of the committee was that there should be no exhibit. The presentation of the report of Mr.

Barry was followed by a general discussion as to the relative merits of different cities for the meeting. An early announcement will be made. It was decided that the convention would be held during the week beginning Oct. 2, and the president was authorized to confer with the committee on subjects to determine the length of the meeting, whether it should be four days as usual, or a shorter time because of the omission of exhibits.

OTHER BUSINESS TRANSACTED

Mr. Stevens for the Transportation & Traffic Association then asked the association to appoint a committee to take up certain phases of the one-man car situation, particularly to decide whether it would be worth while to compile considerable data in regard to the use of one-man cars and if so how best to obtain it. The motion was passed.

The president then announced that Frank Hedley, president Interborough Rapid Transit Company, had resigned as a member of the executive committee of the association on account of lack of time to attend to the duties of that office. The resignation was accepted.

Committee on Plan and Scope of American Electric Railway Association
Announced by President Gadsden
April 19, 1921

President: P. H. GADSDEN.....Philadelphia
Past-President: JOHN H. PARDEE, New York
Vice-Presidents:
 BRITTON I. BUDD.....Chicago
 C. D. EMMONS.....Baltimore

Members of executive committee:
 R. P. STEVENS.....New York
 W. H. SAWYER.....East St. Louis

Membership at large:
 JOHN G. BARRY.....Schenectady
 H. V. BOZELL.....New York
 H. G. BRADLEE.....Boston
 HARLOW C. CLARK.....Newark
 B. C. COBB.....New York
 MYLES B. LAMBERT.....Pittsburgh

The president then gave some figures of the number of requests for information that were being received by the association from member companies to indicate that the number of requests was increasing, showing that the normal functions of the association were going on and that it was of increasing benefit to the members.

E. C. Faber, Chicago, and Labert St. Clair of the association office, then gave some particulars as to the work of the committee on publicity. They explained that it is hoped to make May 4 a "National Electric Railway Day." On this day electric railways would be encouraged to emphasize the progress which had been made in the electric railway art during the last forty years and the additional service which these companies were now rendering the public. The date, May 4, was selected because it was the anniversary of the completion of the Richmond road in 1888. Mr. St. Clair then explained that a pictorial history of the industry was being compiled showing the growth and enormous increase in the investment, and the obsolescence to which such apparatus was subject. Mr. St. Clair also presented examples of car cards and other advertising, as well as other work of the department.

A discussion then followed on various methods of publicity. Mr. Budd told about the work of the Illinois Committee on Public Utility Information and said that a number of utility officials in Illinois had volunteered to be prepared to make addresses on utility problems before Chambers of Commerce and other organizations when requested to do so. Other speakers on the subject included Mr. Faber, Mr. Storrs, General Harries, Mr. Wickwire and Mr. Lambert.

The concluding business of the association was a discussion as to whether municipal properties should be admitted as members of the association, but no final action was taken. The meeting then adjourned.

National Electric Railway Day

MAY 4 has been designated by the American Electric Railway Association as National Electric Railway Day for the purpose of calling public attention to the present highly effective transportation service that the electric railways now render as compared to the service a third of a century ago. Electric railways throughout the country are urged to give the lesson of improved service on that day by displaying early-day cars, particularly horse cars, and by drawing attention to the improvements over former-day service. The big lesson, of course, that can be drawn from the display is that although service has greatly improved fares have scarcely increased, if, indeed, they are not lower in many cities, with the diminished value of the dollar, than they were in the old horse-car days, when the short hauls were in vogue.

May 4 has been selected because it is an important day in electric railway development. Thirty-three years ago on that date the contract for the first successful overhead trolley line to be conducted on a large scale was completed in Richmond, Va. Thirty cars were put into service.

A suggested program for the day and mats of photographs of early cars have been prepared by the advertising section of the Division of Information and Service and are being sent to member companies. Among the plans suggested are to man the early car with a crew which has been long in the service, offer prizes to school children for essays on the history of the local

transportation system and provide the trainmen with badges carrying the words "National Electric Railway Day," etc.

Distribution of F. E. R. C. Report

ACTING Secretary J. W. Welsh of the American Association has notified member companies that a limited supply of the complete proceedings of the Federal Electric Railways Commission report, bound in buckram, are available. As far as the supply will permit, the association will furnish without charge a complete set of the volumes to any city or college library, or to any city official designated by a member company. As the requests must come through the member companies and as the librarians may not know about the report, it devolves upon electric railway officials to take the initiative in seeing that their local college and public libraries are given an opportunity to secure these volumes.

Hoover Resigns as President of American Engineering Council

AT ITS meeting in Philadelphia on Saturday, April 16, American Engineering Council of the Federated American Engineering Societies accepted the resignation of Herbert Hoover as president. Mr. Hoover gave as his reasons for resigning the fact that the council was, by its constitution, necessarily engaged in furthering national activities which involve legislation and that he as a member of the executive branch of the Government could not consistently direct such activity as an officer of American Engineering Council. The council expressed regret at Mr. Hoover's retirement, and voted its appreciation of his leadership during the organization period of the council and his initiation of policies and effort.

The meeting of the council was one of the most important yet held. The committee on the elimination of waste in industry presented a preliminary report and indicated some of the benefits to be derived by American industry from the final report.

L. W. Wallace, executive secretary, reported on the employment service of the council and made recommendations for its broadening, which were adopted. He also explained the activity of the council with respect to licensing of engineers, which was in line with the policy previously announced and indicated in these columns. Other matters reported on were publicity, petitions of the council for appointment of an engineer as Assistant Secretary of War, not obtained, and an engineer to the Interstate Commerce Commission, still under consideration, and other relations to the executive branch of the Government.

The next meeting of the council will be held in St. Louis on June 3.

Trackless Trolley at Leeds

RECENT reports from Great Britain indicate that Leeds is preparing for trackless trolley service in one section by providing a bituminous concrete wearing surface over the present paving and tramway tracks, completely burying the latter. The Leeds Corporation Tramways is said also to have under construction a trackless vehicle of the double-deck type, to seat fifty persons.

According to present plans this vehicle will be provided with pneumatic tires.

News of the Electric Railways

FINANCIAL AND CORPORATE • TRAFFIC AND TRANSPORTATION

PERSONAL MENTION

Open Shop Likely

Present Controversy at Davenport Would Seem to Leave This as Only Course Open

The open shop looms up as a strong possibility in the industrial policy of the Tri-City Railway, Davenport, Ia., after June 1 as a result of two moves against the traction lines founded on a contract with the trainmen's union.

First came an injunction suit by the Socialist city attorney restraining the company from putting into effect a wage reduction from 70 to 40 cents an hour. The Socialists in the City Council had previously refused the company permission to install one-man cars and otherwise economize.

For this reason the company is bound under this injunction to keep a 70-cent scale until June 1 or to continue losing money and meet the exacting demands of a ruinous contract although the company states that this contract was negotiated on the understanding that wages could be reduced if the Council did not grant a fare sufficiently high.

Again, matters were complicated for the company with the public when a state board of arbitration found against the railway in a dispute over the discharge of a union official. The board found that the company erred in not submitting this dispute to arbitration in accordance with the terms of its contract with the trainmen.

EDITOR THINKS COMPANY ERRED

Last year a compulsory arbitration clause in the contract brought an increase in wages from 60 cents to 70 cents an hour. During times of rising wages the contract did not protect the company as it voluntarily raised the wage above the contract scale in order to secure an adequate supply of labor.

For these reasons there is a strong probability that when the unions refuse to accept the contract the company might feel justified in suggesting that employees will be hired and paid as the company shall see fit and not in accordance with the terms of any contract—in other words, the open shop.

The finding of the state board of arbitration against the Tri-City Railway growing out of the discharge of the union president by the company has provoked considerable discussion. An editorial writer in one of the local newspapers stated that in view of this decision of the board the company should reinstate the discharged union president. He stated that the discharge had been caused by a public address made by the union president and that employees' associations would employ business agents if their officers

could not speak without fear of discharge.

While the board which considered the matter of the discharge found the company was in error in denying the arbitration of the controversy, it did not recommend the reinstatement of the discharged union official, stating this was not within its province.

Wage Reduction Accepted Willingly

A group of former employees of the Eastern Massachusetts Street Railway, some of whom have been out of work

Cleveland Men Accept Wage Cut

MEMBERS of the union in Cleveland, at a referendum election on April 15, voted 2,158 to 348 in favor of a 20 per cent reduction in their wages effective May 1, when the present agreement with the Cleveland Railway expires. They ratified the wage cut rather than submit the matter to arbitration along with the proposition of permitting the open shop question to be an issue in arbitration proceedings.

Starting on May 1 trainmen in Cleveland will receive 55 cents an hour for the first three months of service; 58 cents for the next nine months and 60 cents an hour after the first year, instead of 70, 73 and 75 cents an hour, the rate which has been in effect. The company will still pay time and a half for Sunday and holiday overtime, but only time and a quarter for overtime on week days. Extra pay for spreads of more than fourteen hours on swing runs is abolished. There will be no eight-hour limit for runs on Sunday and holidays as in the past, nor will ten hours' pay be given for eight-hour runs on night cars.

Officials of the Cleveland Railway estimate that the wage reduction for trainmen will save the company close to \$100,000 a month. There is little prospect, however, of a change in fare under service-at-cost in the near future, for on April 1 there was a deficit of \$50,000 in the interest fund, which must be built up to \$750,000 before there can be a reduction in fare.

since that company ceased operation of its lines in Woburn, recently held a meeting in one of the carhouses and sent a letter to the trustees signifying their willingness to accept a reduced scale of wages if the trustees will resume operation in that district. A short while ago a similar communication was received from some of the men who worked on the Gloucester lines before that division suspended operations.

Wage Cut in Detroit

Mr. Burdick Reiterates Determination of Company to Reconcile Pay with Changed Economic Conditions

That the wages of the platform employees of the Detroit (Mich.) United Railway are to be decreased from 20 per cent to 28 per cent effective on May 1 was announced in a letter under date of April 15, addressed by E. J. Burdick, assistant general manager of the company, to officials of Division 26 of the Amalgamated Association. The decrease will put the men on the pay basis which existed before the wage increase of last May. It is being made because the company can no longer support the present pay roll and render adequate service to the public.

The pay for all motormen and conductors in passenger and freight service except those employed on the Pontiac and Flint city lines will be as follows: for the first three months, 50 cents an hour; for the next nine months, 55 cents an hour; after twelve months in service 60 cents an hour. The rates for Pontiac and Flint city line employees will be 2 cents less an hour in each of the three classes.

In his letter Mr. Burdick calls attention to the fact that since Jan. 1, 1916, wages of the low rate men have been increased 180 per cent, of the middle rate men 143.33 per cent, while the wages of the high rate men have been increased 134.38 per cent during the same period. A table showing the fluctuations of living costs for the period included between Jan. 1, 1916, and April 9, 1921, is included in the letter.

The present rates of pay received by the three classes of men are 70 cents, 73 cents and 75 cents an hour. The reductions to 50 cents, 55 cents, and 60 cents an hour will mean decreases of 28.57 per cent, 24.66 per cent and 20 per cent. The new rates will exceed the 1916 rates by 100 per cent in the case of the low rate men, 83.33 per cent for the middle rate men and 87.50 per cent for the high rate men.

A reduction in pay to all employees except motormen and conductors was made effective on Jan. 1, of this year. When the company proposed last December to decrease the wage rates of platform employees 20 per cent, the union officials questioned the company's right to open the wage question at that time. The men were willing to arbitrate the matter and an arbitrator was appointed by the company and one by the men. The two arbitrators were, however, unable to agree on a third arbitrator to complete the board.

No opinion has been expressed by the union officials as to whether or not the proposed wage cut will be accepted.

Utilities Commission Re-created

Kansas Industrial Court Overloaded and Another Body Is Created to Supervise Utilities

Governor Allen of Kansas, having found the Kansas Court of Industrial Relations too busy to handle the public utilities of the state in addition to the industrial question, addressed a special message to the Legislature on this point, and as a result that body has re-created a utilities commission to replace the one which had been abolished at the time of the creation of the Industrial Court and whose function had been assumed by the Industrial Court.

COMBINED HEARINGS PROVIDED

The new law provides, however, that cases involving question of wages, industrial conditions, or other industrial disputes, within the normal jurisdiction of the Court of Industrial Relations are to be heard as a combined case and determined at the same time by the Public Utilities Commission and the Court of Industrial Relations sitting as one body. The presiding judge of the Court of Industrial Relations is to preside at the hearing, and in the event of a tie vote the presiding judge of the Court of Industrial Relations is to cast the deciding vote.

National and local interest attached to the operations of the Kansas Court of Industrial Relations from the inception of that body. The fear that arose when it was proposed to re-establish the Utilities Commission that the advantageous feature would be lost of having one court look into both sides of a utility question, with regulatory power over labor as well as over capital, was overcome by placing a case which involved both labor and rates of fare before both commissions as a combined body. This fear, although pronounced, was shown by Governor Allen to be largely groundless, for in his message to the Legislature he pointed out that out of 650 public utility causes before the Industrial Court in the past year only three related directly to the subject of both rates and wages.

DUAL AUTHORITY CAUSED CRITICISM

In his argument for the re-establishment of the Public Utilities Commission Governor Allen pointed out that the unfortunate results of adding public utility administration to the work of the Court of Industrial Relations was to make up public utilities law paramount and the work of the Industrial Court incidental. Moreover, the Industrial Court had been unable to touch many duties of general industrial development. The Governor said:

In addition to the criticism of the court, due to lack of time for proper industrial work, it has suffered constant misrepresentation out of the unavoidable confusing of its purposes with the purposes of the public utility work. During the year in which the old Public Utilities law had been administered by the Industrial Court, there has been 650 public utility cases. The court has deemed it wise in a great number of these cases to increase public utility rates.

Notwithstanding the fact that none of the principles of the Industrial Court law were concerned in these public utility increases, every criticism that has come as the result of the increase in public utility rates has been placed, not upon the old Public Utilities law, but upon the new Industrial Court.

Public utility regulation thus was dramatized as a new thing which had its origin in the Court of Industrial Relations. The fact was lost sight of that it was a work carried on since the establishment of the Board of Railroad Commissioners in 1883, and the Industrial Court became familiar to the public, not upon its merits, but upon the activities which attend its regulation of public utilities in a peculiarly trying period.

Public utility administration, instead of becoming incidental to the Court of Industrial Relations, became distorted into the chief aim of the new court. The big, real purpose of the labor court was lost to public view. The real purpose and value of public utility regulations also became subjected to the unreasoning attack of those who as a result of labor politics was fighting the Industrial Court.

Judge Clyde M. Reed, one of the members of the Industrial Court, was made chairman of the new Public Utilities Commission. Further facts with relation to the personnel of the commissions will be given in a later issue.

God Bless Stone & Webster!

The *Seattle Daily Times* recently closed its contest and awarded prizes for the best solution of Seattle's municipal street railway problem, for which a prize of \$200 was offered. In the final analysis, the *Times* was unable to decide upon a single plan. In consequence, two winners were picked by the judges, and the full sum of \$200 was awarded to each.

The prize-winners were selected from the twelve contestants who had won prizes of \$25 each in the weekly contest. The two prize-winning solutions were submitted by E. H. Severson and C. T. Conover. Mr. Conover said:

There is only one thing to do—get down on our knees to the former owners of the street car lines, humbly and contritely beg their forgiveness, give assurance of a fair deal in future and make the best arrangement possible for a return of the lines. This would involve granting a fair equitable franchise and affording the company absolute security from persecution by the City Council. Perhaps nothing of this sort can be accomplished but it is the only hope.

Stone & Webster came into this city and bought up a lot of disconnected lines, some of them in the hands of receivers. The money was supplied by several thousand middle class New England people—some by the estates of widows and orphans—all invested on Seattle's good faith and prospects. The company became the largest employer of labor in Seattle and, unharassed by the City Council, gave us an admirable car service and made all reasonable extensions. It paid the largest burden of taxes of any corporation in Seattle and in addition paid a gross earnings tax; had to help build bridges, pave streets, etc.

It became the sport of the City Council; it was baited and harassed and strangled until no further extensions were possible; the equipment fell off and dividends practically ceased. Then the city stepped into the pit it had dug, surrendered the vast revenue from taxes and undertook to operate by political means what had very nearly failed under efficient private management, besides paying for the system from the revenues.

Every sane man knew it could not be done. There is only one solution: On what basis, if any, will Stone & Webster take the system back, assuming that they can be assured that the property will not again become the football of political opportunists?

Meantime we must elect to the City Council men pledged to fight to the last ditch to prevent the \$15,000,000 of utility bonds from becoming a general obligation and whose pledged word is known to be good. After that we shall have to "let nature take its course."

Purchase Negotiations Begun

Detroit United Railway Accepts Gracefully the Will of Voters and Helps City

Conferences are being held between the attorney for the Detroit United Railway and city officials with a view to starting negotiations for the city to take over eight day-to-day agreement lines of the railway as approved by the people at the recent election. According to Mr. Stevenson, counsel for the company, engineers for the company are now working on the cost figures of these eight lines. The figures will be taken from the company's books and will be based upon the cost of tracks and equipment.

PRICE MAY BE ARBITRATED

The day-to-day agreement lines were built by the company but the city reserved the right to take over the lines at cost less depreciation at such time as it was desired to operate them as part of a municipal system. It is the mutual belief of the company's attorney and the city officials that a board of arbitration will be resorted to to settle the price to be paid by the city.

While no definite views were expressed regarding the question of taking over the Fort Street and Woodward Avenue lines where franchises have expired, it was intimated by Mr. Stevenson that the company was willing to consider the views of the city at such time as the people decided that the city should take over these lines, with the idea of fully co-operating with the city in providing the needed service.

The Fort Street and Woodward Avenue lines, if joined with the lines the city is constructing and with those which it is planned to take over, will give the city two main lines to the heart of the city. The recent ruling of the Supreme Court upholding the legality of Mayor Couzens' municipal ownership system also held that the company's rights on Fort Street and Woodward Avenue having expired, these streets would have to be vacated any time the city desired. City officials believe that these lines will not be torn up but that they will be taken over instead in order that the people be subjected to as little inconvenience as possible. The voters may be called on to decide upon the purchase of the Fort Street and Woodward Avenue lines.

CROSSING QUESTION BEING ADJUSTED

The question of crossing of the company's tracks by city lines was also touched upon in the recent conference. Corporation Counsel Wilcox has filed a brief in the suit instituted by the city to determine judicially the city's right to make such crossings. A copy of the brief and blue prints of what the city considers the proper type of crossing have also been submitted to Mr. Stevenson. As soon as the company's engineers approve the blue prints, temporary crossings will be permitted until a type of crossing has been decided upon for permanent installation.

Agitation to Abolish Wisconsin Commission

Assemblyman Peterson of Milwaukee has announced that he will endeavor to have legislation enacted abolishing the present Railroad Commission. The idea is to substitute in its place a Public Service Commission with a membership of three, the personnel to be appointed by the Governor. It was Mr. Peterson who started the proceedings which resulted in the interpellation of the commission of Feb. 24 by Legislature regarding the commission's policy in dealing with public utilities.

An effort will also be made to have enacted an amendment to the public utility law which would require utility companies earning more than 8 per cent to place the excess in a sinking fund to be used to care for emergency conditions or for such other similar purposes as shall be determined from time to time by the proposed public service commission. The theory seems to be that the reserve fund would tide utilities over lean years and, perhaps, avoid increased rates. The measure will also provide that in fixing the value of a utility's property invested capital shall not be construed to include borrowed capital.

Whatever opposition exists to the present Railroad Commission will probably be mobilized in support of the Peterson legislation, but it is said to be doubtful whether this legislation will be enacted.

In connection with the attack upon the present commission, the Milwaukee Common Council has adopted a resolution instructing the City Attorney to draft legislation for introduction in the State Legislature abolishing all authority of the Railroad Commission over public utilities, vesting such authority in Common Council.

At the proceeding on Feb. 24, which revolved mainly around the Milwaukee Gas Light Company, Chairman Jackson of the Commission told the Legislature that the Milwaukee Gas Light Company, which had been recently granted a 20 per cent increase in rates, is earning only 3.7 per cent on its valuation as compared with 8 per cent considered reasonable by the commission. It was brought out that in the past ten years the Gas Company had declared dividends averaging 13.8 per cent and that in 1916 the dividend rate had been 23.7 per cent. Mr. Jackson pointed out, however, that the policy of Wisconsin regulation is to permit a fair return on the physical valuation basis and not to regulate dividends.

Trial Operation for Three Months

The railway system at Marietta, Ohio, has begun operations for a trial period of three months, during which time the officials of the company hope to demonstrate to residents of the community and city officials the exact financial status of the operation of cars in this city. One-man cars are being operated, with a 7-cent fare. Service

is maintained over three separate routes, transfers being issued to other lines.

With the expiration of the company's franchise, a tentative agreement was reached between traction officials and members of the City Council whereby the present test of three months was started. During this time receipts and expenditures on the various city lines will be recorded in order to determine exactly the revenue derived from each. The Council is privileged to examine all books of the company during the trial period and to name an auditor to examine accounts. A detailed report showing the expenditures and receipts of each line will be filed with the Mayor within fifteen days after the expiration of each thirty-day period.

New York State Wages to Be Arbitrated

The employees of the New York State Railways in Rochester, Syracuse and Utica represented by their union officials and the officers of the company have signed an agreement providing for the arbitration of the differences caused by the proposal of the company to reduce the wages of the men 25 per cent. The action came as the finale of more than a week's negotiation.

As noted in the *ELECTRIC RAILWAY JOURNAL* several weeks ago the company submitted a revised agreement to become effective on May 1. In this proposal it said that it felt that the wages as fixed by the National War Labor Board for trainmen under date of July 31, 1918, would be fair to all parties interested under the contract. The company also outlined changes which were desired in working conditions. It explained at that time that the wages of the employees had been increased 126.41 per cent over those paid at the beginning of the war.

In accordance with the provision of the present contract calling for arbitration the company will appoint an arbitrator, the men will appoint an arbitrator and these two will appoint the third member.

Pending the decision of the arbitration board the working conditions of the 1920 contract are to remain in force, but the rate of wages in the company's contract submitted under date of March 29, 1921, are to become effective as of May 1, except that in no case will the differential be more than that of motormen and conductors on city lines. It has also been agreed that the question of wages to be paid men operating one-man cars will be determined by the arbitration board. The award is to be retroactive to May 1. Both sides agree to be bound by the findings.

Benjamin E. Tilton, vice-president and general manager of the New York State Railways, has been selected as the company's representative on the arbitration board. Mr. Tilton was the company's arbitrator in the settlement of the strike of last May.

Mr. Culkins Sees Municipal Ownership Ahead

That the final outcome of the railway tangle in Cincinnati, Ohio, might be municipal ownership of the local railways was intimated by William C. Culkins, Director of Street Railways, in a letter addressed to members of the Ohio Senate, condemning the Griswold bill limiting municipal indebtedness as it has been amended and now pending in the State Senate.

Mr. Culkins said in his letter that in behalf of the car-riding public he urged the Senators to use their best efforts to bring about the defeat of the measure in its present form, since it practically would nullify the constitutional privilege of owning public utilities other than water-works.

Part of the letter reads as follows:

Although Cincinnati may never desire to exercise its purchase option, nevertheless it is within the range of possibilities that the present railway reorganization tangle can only be clarified by the city exercising its right to condemn and to buy the property.

The passage of any legislation which would take away from the city the power to exercise its option would materially weaken its position in controlling the traction situation and would in my opinion represent a triumph of the traction lobby over the constitution of the State.

Mr. Culkins said that there was nothing new concerning a definite plan for scaling down of capital of the Cincinnati Traction Company, but from the tone of his letter to the State Senators it is believed by persons interested in the traction situation that the city wants to be in a position to carry out its rights and not be hampered or handicapped by such a measure as the amended Griswold bill.

Trackless Trolley Recommended

The General Electric Company has recommended that the trackless trolley system be considered in the disposition of the railway problem of Greenville, Tex., according to H. L. Andrews of the railway and traction division of the company, who has made a special report of the Greenville transportation problem.

A trolley car system for Greenville is estimated to cost a minimum of \$251,600, which would provide five cars, the rebuilding of more than 9 miles of track and the construction of 2.72 miles of new track.

The estimated cost of the trackless trolley system with the same number of cars is given by Mr. Andrews as a minimum of \$107,000 with the possible maximum of \$109,300. The cost of installation of five storage-battery cars over the same mileage is given by L. Klopman, in a supplementary report, as \$199,330.

Peoria Men to Ask Increase. — Motormen and conductors of the Peoria (Ill.) Railway are said to have prepared demands for presentation to the company calling for an increase in wages of 3 cents an hour. This would increase the maximum wage from 59 cents an hour to 62 cents.

Boston Elevated Trustees Report on Fares

Different Rates Refused for Competitive Parallel Routes—Trustees Hope to Reduce Basic Fare When Deficit Has Been Wiped Out

In a report just made to the Massachusetts Legislature the trustees of the Boston Elevated Railway not only reaffirm the prediction made in their last annual report that the deficit of last year will be wiped out by July 1, 1921, but further suggest the possibility of some slight reduction in the present 10-cent fare after that date.

THE present report was made as a result of a resolve of the Legislature requiring the trustees to report on the feasibility of instituting a 5-cent fare on the line from Fields Corner, in Dorchester, to the South Station, in Boston. This latter proposition, the trustees refuse to recommend, as the distance is too great, and what they consider more important, such a line would be in direct competition with the regular 10-cent lines.

The trustees reported that the introduction of a 10-cent fare under the requirement of the Public Control Act instructing the trustees to establish fares which would meet the cost of service, resulted in an increase of revenue which, with economies and new methods of operation, has since been sufficient to meet the cost of service. The installation of the 10-cent fare, however, was accompanied by a loss in traffic at first large, then gradually diminishing and not yet fully made good.

This loss was largely confined to two classes of travel, one within local limits in outlying communities and the other between the business center of Boston and localities in close proximity. The through traffic between this centre and localities at the greater distance was not seriously affected although there was some loss of riding among those living along the lines of steam railroads, especially near stations where the railroad fare was less than 10-cents.

Under the law the trustees had no power to make experiments that would jeopardize the total revenue necessary to maintain a self-supporting service. They could, however, make experiments that offered reasonable promise of restoration of lost traffic without material invasion of net revenue or without the imposition of any unjust burden upon the rest of the riding public.

The localities selected for experiment were those which seemed to offer short distance riding, without transfer, upon surface lines not connected with the rapid transit service. Eight lines of this kind have been established each with a 5-cent fare, restricted to certain hours and to days other than holidays and Sundays. Five of them proved failures and were discontinued, but three of them are still in operation.

The policy of the trustees is:

To add a practically non-competitive new service, the net earnings from which are larger than the average earnings on all lines so as to increase net revenue and to enlarge the usefulness of the railway. To add a service which competes with the 10-cent lines and in so doing substantially

lessen net revenue would be to impose an unwarranted burden upon the rest of the travelling public and to threaten a deficit to be assessed against the cities and towns. Any plan that would furnish this limited service to some communities and deny it to others which offer like conditions would be plainly unjustifiable.

NO DIFFERENTIAL ALLOWED

The investigation by the trustees of the demand for 5-cent fare to Field's Corner from the South Station disclosed facts that appear to prohibit such service. The distance covered by the proposed routes would be 3.6 miles in one case and 4.6 miles in the other. The distance covered by the line in South Boston is 2.8 miles, that in Charlestown 2.4 and that on Washington Street in Boston 1.9 miles. Whatever might be the receipts upon the proposed lines in so far as they represented restoration of lost traffic or new patronage, they would beyond question be too small to bring them within the rule which has been adopted in protection of net revenue. Vital factors in the situation therefore seem to forbid the establishment of these lines named.

Continuing, the report says:

It does not follow, however, that the outlook for a limited cheap service in this district is hopeless. It lies rather in the direction of the experiment with another type of such service which, after a thorough investigation of conditions and upon a favorable report from General Manager Dana, has been introduced within a few days in Everett and Malden. This experiment is based upon the opportunity which physical transfer of passengers between surface cars and rapid transit trains at the Everett Terminal affords for an operating test of certain local lines in those cities under a low fare. The purpose is the restoration of local travel lost under the 10 cent fare with an increase in patronage that will mean more useful service upon lines where traffic is now light.

This experiment if successful the trustees say will have great significance in pointing a possible way to other restricted service in connection with the physical transfer now made, between surface cars and rapid transit trains. However—

It is not to be understood that these experiments with limited service will be allowed to delay or interfere in any way with a future reduction in the 10 cent basic fare whenever conditions make it possible to bring it about. The general interest in that fare and paramount importance of the service under it constitute the reason for the restrictions upon all cheaper service which the trustees believe must be rigorously maintained.

No reduction can yet be made, the trustees say, in the 10-cent fare over lines which as a part of the entire system carry extraordinary cost of investment in subways, tunnels and elevated structures, and which rightly demand, as a fundamental need, speed, frequency of service and operation over long distances throughout the day and far into

the night, on holidays and Sundays as well as on ordinary week days. Conditions now, however, seem to point toward the possibility of some reduction in that fare. The trustees in their last report predicted that the operating deficit outstanding on Dec. 31, 1920 would be absorbed before July 1, 1921.

The excess of receipts over expenditures for the first three months of this year has already reduced that deficit so that it is now practically assured that with the continued practice of justifiable economies the operating deficit of the earlier part of the year will have been made good, and the long outstanding deficit of \$435,348.46 incurred in May and June of 1919 will have been eliminated. This result will make it possible for the trustees in their report of next July to outline the conditions under which and the extent to which some reduction in the 10-cent fare may be expected.

Phenomenal Record of Interurban Outlined

At the sitting of the Ontario Hydro-Radial Commission at Toronto during the week of April 11, Charles E. Thompson, assistant to the president of the Chicago, North Shore & Milwaukee Electric Railway, gave evidence. This is the commission that is considering the advisability of building an electric railway from Toronto to Hamilton. Mr. Thompson went into the history of the road, its cost to construct and its cost to operate. He said that the labor bill now consumed 38.90 per cent of the total operating expenses. Wages for conductors and motormen ranged between 70 and 80 cents an hour. If the estimates of the Hydro Commission of Ontario at 55 cents an hour were applied to the North Shore railway the expenses of that company for labor would be reduced about \$500,000 a year.

The witness told the commission that 1½ cents per mile was the lowest commutation rate the road could allow without piling up unprofitable business. In the early days, the roads offered specially low rates in order to attract business and as the years went by these rates became fixed in the public mind and it was very difficult to secure higher rates. He thought the roads should get higher rates for suburban service.

Power expenses now amounted to 49.80 per cent mainly through the increase in the price of coal, representing a 20 per cent advance. The operating ratio for the year was 76.83 per cent exclusive of taxes, and 80.41 per cent with taxes.

By liberal expenditure upon equipment the gross earnings of the road had been increased from \$1,000,000 to \$4,000,000 a year. This phenomenal increase had been secured in the face of competition with five other roads running from Chicago to Milwaukee. Passenger traffic had grown from 7,459,669 in 1916 to 13,288,186 in 1920, largely because adequate entrance had been secured to Chicago.

One-Man Car Invades Pennsylvania Avenue

Pennsylvania Avenue, Washington, D. C., is the latest railway thoroughfare to welcome one-man car operation. True, there is only one representative of this clan among the numerous green cars of the Capital Traction Company, which traverse this nationally important thoroughfare, but this one representative seems able to hold its own in the heavy traffic.

The car in question is not a standard safety car, but is one which was rebuilt in the shops of the Capital Traction Company from an old Stephenson single-truck longitudinal-seat car. This car was recently equipped for one-man car operation, and while the body, truck and electrical equipment are those of the old car it does have the complete safety device equipment of the standard safety car, furnished by the Westinghouse Electric and Manufacturing Company.

The mechanical details are unimportant, however, for the present purpose as the car was put on Pennsylvania Avenue, starting operation Sunday, April 10, for an experiment from the traffic standpoint. It operates on a route from the Georgetown carhouse to Seventeenth and Pennsylvania Avenue, Southeast, then returns to Twenty-sixth and G Street, Northwest, then returns to Seventeenth and Pennsylvania Avenue, Southeast, thence to Georgetown and repeat. This takes this car through the heaviest traffic of the day, when the regular double-truck cars are operating at scheduled speeds of 8.5 m.p.h. and on headways of fifteen seconds and sometimes less. This one-man car maintains its place in traffic with thorough satisfaction. It is attracting a good deal of attention on Pennsylvania Avenue for it is about the same size as the newly installed Sixteenth Street buses, which also operate for a short distance on Pennsylvania Avenue.

The Capital Traction Company is announcing no future plans with reference to one-man cars, either on Pennsylvania Avenue or elsewhere on the system, but has put this car in operation merely for experimental purposes.

Publicity Campaign for Schools and Libraries

The Indiana Public Utility Association is preparing special bulletins which will discuss the origin and growth of the public utilities in the State and their problems for distribution among the libraries and public high schools for reference work. The first bulletin, of a general character, will go into the public utility business from a broader standpoint, while the other bulletins, eight in all, will deal with the various utilities separately. For example, one will take up the interurban problem, one water, one gas, one telephone, etc. John Mellett, who is in charge of the work of the Indiana committee on Public Utility Information, sent out letters recently to 204

libraries and 128 high schools asking if they desired copies of the booklets. Within three days he had received eighty-six favorable answers from the libraries and fifty-eight from the high schools. Not one was unfavorable.

Construction Being Hastened

Municipal Road at Detroit Hopes to Complete 82 Miles of Line This Year

According to announcements by the city officials of Detroit, Mich., work will be pushed with a view to completing as soon as possible certain Municipal Railway lines to connect with the Detroit United Railway lines which the people voted to acquire from the company.

Proceedings leading to the taking over of the lines at issue will probably be started by a letter from the Street Railway Commission to the company to serve as official notice of the commission's intentions. The commission will probably ask the Detroit United Railway to name the price at which it will sell the railway lines the city proposes to buy. The value of the lines will probably be finally decided upon either by a board of arbitrators or by the courts.

Work has been started at several points on the new municipal lines as part of the program to build 82 miles of lines before the end of the present year. The municipal line on VanDyke between Charlevoix and Harper Avenues is expected to be in operation in about two months. It will be the third line put in operation, and will connect the St. Jean and Charlevoix lines now operating.

The sale of \$2,000,000 of railway bonds has been authorized by the City Council, the proceeds to be used in financing the commission's construction program. They will mature in from twenty-seven to twenty-eight years. They are part of the \$15,000,000 bond issue voted last year.

Suit for \$100,000 damages has been brought against the city by John A. Mercier, the contractor who built some of the first sections of the municipal ownership line last year and whose contract for work on the uncompleted portion of the Charlevoix-Buchanan lines was canceled by the city. Mercier's previous suit to enjoin the commission from canceling his contract and proceeding with construction with its own forces was dismissed by Judge Hunt.

A. C. King has been appointed arbitrator for the city, and H. A. Creelius, Chicago, has been appointed arbitrator for the Detroit United Railway in the matter of the crossing controversy resulting from the forced crossing of the company's Mack Avenue line by the St. Jean municipal line. No definite decision has so far been reached and the proposal has been made by Corporation Counsel Wilcox that the city be permitted to use the crossing temporarily, as it is now installed. If no agreement is reached the court will probably appoint a third arbitrator.

New Franchise to Be Negotiated in Vancouver

With the object of arriving at a fair and satisfactory agreement on the fare and franchise questions negotiations are to be commenced shortly between officials of the British Columbia Electric Railway, Vancouver, B. C., and representatives of the various municipalities on the mainland served by that system. Mayor Gale has announced that the city will be ready in a short time to enter into discussion of the proposed franchise requirements of the company. By agreement entered into with the city all negotiations on franchise and rate questions must be concluded before Aug. 1.

The company's future policy of extensions and improvements depends very largely upon the arrangements it is able to make in regard to franchise. The company has announced that it will be required to expend at least \$1,000,000 before the end of 1922 on improvements to its Stave Lake plant to provide the power necessary to keep pace with the constantly growing demands of the city.

It is pointed out that if unreasonable regulations and starvation rates are exacted of the company by the city officials the problem of raising the necessary capital to make the required improvements will become increasingly difficult.

Italian Commission Will Arrive Soon

The Italian Commission on Railway Electrification, which expects to make an extended trip through the United States and Canada, visiting all heavy traction systems, will arrive from Europe on April 25 aboard the *Lorraine*. The commission is headed by Prof. Guido Semenza, consulting engineer, while the other members are Prof. Cian Giacomo Ponti, electrical engineer, Italian-American Electric Company; Marquis Ferdinando Cusani, manager, Italian-American Electric Company, and Curzio De Regibus, assistant chief engineer electric traction service of the Italian State Railways.

Besides all electric heavy traction installations the itinerary of the commission includes inspection of all urban rapid transit systems, the principal electric interurbans and many large electrical manufacturing plants. In addition such hydro-electric plants and high-tension transmission lines will be visited so that they may familiarize themselves with the most recent American practice regarding hydraulic power generation and transmission.

One of the main purposes of the delegation is to bring about better technical relations between Italy and the United States and a better reciprocal knowledge of the status of technology and electricity in both countries. This thorough investigation of the American transportation systems involving electric traction will probably keep the members of the commission in this country until Aug. 1.

Progress in Akron's Franchise Situation

The Merchants' Committee, chosen by the various civic organizations in Akron to assist in bringing about a satisfactory settlement of the street railway situation, is making progress toward ironing out the differences between the city and the Northern Ohio Traction & Light Company. The disagreement involves the sections of the franchise ordinance dealing with the method of valuation of the property and the rate of return to be allowed on that valuation.

The question of the valuation of the system seems in a fair way toward settlement. The city has secured the services of Hagenah & Erickson, the engineering firm that made an appraisal of the property for the city in 1918, while the company has secured the services of the firm headed by Dean M. S. Cooley of the University of Michigan, which it employed last year in making a valuation.

Hagenah & Erickson valued the city lines at \$4,810,000 in 1918 while Dean Cooley placed a valuation of \$7,200,000 on the lines last fall. It is expected the two firms will use their old valuations as a basis soon to reach an agreement. With the arrival at a valuation figure by these two firms the way will be opened for further negotiations when a settlement of the other points at issue will probably be reached without great delay.

Mayor Beck has announced that the Council will unquestionably pass any ordinance which has the approval of the civic organizations represented by the Merchants' Committee.

Taxpayers Still Attacking Purchase Deal

Attorneys for the Puget Sound Power & Light Company, Seattle, Wash., on April 11 filed an amended complaint in the United States court in an equity action against the fourteen taxpayers suing the city in the Superior Court. The equity action previously filed against the taxpayers, asking for a temporary injunction, was dismissed April 1 by Federal Judge Jeremiah Neterer, his order of dismissal, however, allowing an amended complaint.

The amended complaint alleges the taxpayers have combined and confederated together to induce and compel the city to default in and breach the contract between the city and the Stone & Webster interests, executed to provide for payment of interest and principal on the \$15,000,000 bond issue by which the city bought the railway property of Stone & Webster for municipal operation.

It is alleged that action of the defendants in denying, and in continuing to deny, that the city is obligated to pay the interest and principal from the gross revenues of the railway, in case such gross revenues are not sufficient to also pay costs of operating the system and its maintenance, has impaired

the value of the \$15,000,000 bond issue by many thousands of dollars. The action asks for a temporary injunction preventing the taxpayers from continuing to make these alleged claims and assertions, and from making any attack on the special fund created by city ordinance for payment of interest and principal on the bonds.

News Notes

Arbitrator to Settle Wage Dispute.—The employees of the Scranton (Pa.) Railway are seeking increases ranging from 10 to 13 cents an hour. The company refused the demands and suggested that the men consider accepting a reduction in wages or submit all matters at issue to an arbitrator or board of arbitration.

Commission Bill Lost in Committee.—The Illinois House of Representatives has refused to take from the state public utilities committee the bill introduced by Representative Alpiner to abolish the Illinois Public Utilities Commission. It was a strict party vote, the Republicans supporting a motion to postpone action until April 21.

Chicago Men Want Contract Renewed Unchanged.—The trainmen's union of the Chicago Surface Lines voted unanimously on April 4 to notify the company that it desired a renewal of the present contract, without change, for another year. The agreement expires on June 1. Both parties to it are required to give at least thirty days' notice of any proposed change. The Surface Lines management has not yet indicated its position.

Municipal Ownership Proposed in Eureka.—The city of Eureka, Cal., wants to buy the street car system operated in Eureka by the Humboldt Transit Company and has asked the Railroad Commission of California to fix a value of the tracks, equipment of all kinds, franchises and lands owned by the company. The application asking the commission to determine the just compensation to be paid by the city was filed on April 12 by George W. Cousins, Mayor of Eureka.

Supervisory Jurisdiction Proposed.—A bill is pending in the Legislature of Pennsylvania which provides for the extension of the duties and scope of the Department of City Transit of Philadelphia to include a supervisory jurisdiction over street railways in addition to the authority the department now has over city-owned lines. The Council of Philadelphia has indorsed the measure, but the bill on April 15 was still in the municipal affairs committee of the Senate. Senator Vare is chairman of this committee. It is charged that he is holding up the legislation.

Commission Wants Its Powers Extended.—The creation of a Public Utilities Commission by converting the Florida Railroad Commission into such a body is recommended by the State Railroad Commission in its twenty-fourth annual report to the Governor. That body is preparing a bill for introduction in the Legislature at its April session to bring this about. The commission's plan for financing the new body includes the levying of a tax on the gross operating revenues of all electric railways, lighting plants, gas companies, water companies, etc.

Commission Lowers Wage.—The Kansas Public Utilities Commission recently decreed that the railroads cannot close small way stations, has set \$40 a month as the proper wage for such station agents and has decided that such stations need not remain open throughout the day. The decision was the result of the roads' attempting to close a large number of small stations because the cost of operating them exceeded the revenue therefrom. The commission's ruling has broken a wage agreement with the Brotherhood of Railroad Telegraphers whereby the men were paid 53 cents an hour for an eight-hour day. It is expected that the union will appeal to the Industrial Court.

Program of Meeting

C. E. R. A. Summer Meeting

The Central Electric Railway Association has issued a bulletin describing the summer meeting and outing to take place on board the S.S. South American during a six-day cruise on the Great Lakes. As previously announced the boat will leave Chicago at 8:30 a.m. on June 26, arriving at Toledo on Tuesday morning. It will proceed from there to Detroit, and then on to Benton Harbor, returning to Chicago on Friday, July 1. Everyone is urged to take advantage of the entire cruise starting from Chicago; especially those living in that vicinity, for it will be convenient for them to take the boat there rather than to take a train to Toledo and embark from there. Tickets should be secured from John Benham, International Register Company, 15 South Throop Street, Chicago.

Tickets for trip on the steamship, including meals and berth and including Government war tax, are as follows:

Round trip ticket from Chicago to Toledo and return to Chicago, covering the entire cruise, \$70 each.

Toledo to Benton Harbor including war tax, \$35 each.

Toledo to Chicago including war tax, \$37 each.

Children more than five and under twelve years of age and accompanied by their parents will be charged half the full fare. Children under five years of age will be carried free, but there will be a charge of 75 cents each for any meals served to them in the dining room.

Financial and Corporate

\$130,120,197 Investment Increase

Despite This Figure, Reported in Illinois, Revenue for Paying Return Decreased in 1919 Over 1914

The accounting section of the Illinois Public Utilities Commission has recently made public the comparative consolidated statistics of the various public utilities of the State under pre-war and post-war conditions. This consolidated statement, including the telephone, electric railway, electric light, gas and water utilities, brings out some interesting things, when comparison is made between the statements for the two years under discussion.

All of the utilities with the exception of the interurban railroads show a decrease in the ratio of net operating income to the book value of the properties in 1919 as compared with 1914. The reason for this exceptional position of the interurban railways is due, according to the statement of the commission, to the fact that a number of these companies resorted to the courts and obtained injunctions against the enforcement of the law limiting passenger rates to 2 cents per mile. In the accompanying consolidated state-

ment for all utilities it will be noted that the amount of revenue available for paying a return on the investment, actually decreased in 1919 as compared with 1914, although the amount of investment devoted to operations in 1919 was \$130,120,197 larger than in 1914.

If the same rate of return had been earned on the book value of the property devoted to public service in 1919 that was earned on the book value of the property in 1914, namely, 4.77 per cent, a net operating income of \$53,304,018 would have been required in 1919. This amount is \$6,264,316 in excess of the \$47,039,702 actually earned in 1919, and indicates that the public of Illinois has received annually the benefit of more than \$6,000,000 resulting from a reduction of this amount since 1914 in the earnings of the utilities.

Whatever may be said as to inflated capitalization before the commission had jurisdiction over the securities, the \$130,000,000 added to the investment from 1914 to 1919 represents actual expenditures in money under the commission's regulations. Such added investment is entitled to a fair return for its use in the public service. Assuming that this \$130,000,000 should

earn 6 per cent, the amount required to be earned on this added investment would be \$7,800,000 per annum. Deducting this from the amount actually earned in 1919, \$47,039,702, leaves applicable to the \$987,382,451 book value of property in 1914 only \$39,239,702 of net income. This is \$7,902,855 less than the net income earned in 1914. It represents a reduction of profits to the utilities of 16.76 per cent and a corresponding saving to the public. If it be assumed that the actual new investment since 1914 should earn 7 per cent instead of 6 per cent as above, the reduction in profit of the utilities would be 19.1 per cent.

The comparative statistics for the electric railways are shown in the accompanying statement. They cover twenty-nine interurban companies, twenty-two city companies, and nine combined interurban and city lines.

Denver Bondholders Are Organizing

Holdings of the first and refunding sinking fund mortgage twenty-five-year 5 per cent gold bonds of the Denver (Col.) City Tramway are being solicited to deposit the bonds with a committee of which B. W. Jones, 16 Wall Street, New York City, is secretary. The court recently authorized the receiver to collect an 8-cent fare for adults, with two tickets for 15 cents, but the city and county of Denver are vigorously opposing even this temporary relief, and, in spite of the fare advance the current earnings, according to the committee of security holders, continue to be unfavorable.

On Nov. 1, 1920, the company defaulted the interest on \$9,888,950 of bonds of the above-mentioned issue, and also on \$484,500 Denver & Northwestern Railway first and collateral mortgage bonds. It had previously defaulted the interest on \$2,498,000 of 7 per cent collateral trust gold notes. On Dec. 24, 1920, a receiver of the property of the company was appointed in the United States District Court for the District of Colorado, upon a creditor's bill.

The company has also defaulted a second installment of interest due on April 1, 1921, on the 7 per cent collateral trust gold notes, and it cannot yet be determined whether the company will be able to take up the defaulted Nov. 1 coupons on the first and refunding sinking fund mortgage twenty-five-year 5 per cent gold bonds before May 1, 1921, and it may be compelled to default the coupons due on that date. The committee now seeking deposits says that in the event of default on May 1 remedies under the mortgage would be available against the company.

A protective agreement has been prepared, under which the bondholders are requested to deposit their bonds. Copies of the agreement may be obtained from the Bankers' Trust Company, New York, or from the International Trust Company, Denver, Col., or from the industrial Trust Company, Providence, R. I.

CONSOLIDATED STATEMENT OF THE ILLINOIS ELECTRIC RAILWAY COMPANIES

	Book Value		Per Cent Increase
	June 30, 1914	Dec. 31, 1919	
Interurban lines.....	\$84,057,041	\$86,973,770	3.47
City lines.....	298,934,913	315,118,819	5.41
Interurban and city lines.....	50,615,298	52,072,805	2.88
<i>Operating Revenues</i>			
Interurban lines.....	\$6,540,372	\$12,055,034	84.32
City lines.....	45,502,620	63,063,097	38.59
Interurban and city lines.....	4,941,557	6,302,485	27.54
<i>Operating Expenses</i>			
Interurban lines.....	\$4,330,407	\$8,907,417	105.69
City lines.....	25,580,227	45,224,557	76.79
Interurban and city lines.....	3,339,073	4,919,779	47.34
<i>Net Operating Revenue</i>			
Interurban lines.....	\$2,209,965	\$3,147,617	42.43
City lines.....	19,922,393	17,838,540	10.46
Interurban and city lines.....	1,602,484	1,382,706	13.71*
<i>Taxes</i>			
Interurban lines.....	\$254,309	\$451,347	77.48
City lines.....	5,552,381	4,669,265	15.91*
Interurban and city lines.....	137,511	188,834	37.32
<i>Net Operating Income</i>			
Interurban lines.....	\$1,955,656	\$2,696,270	38.37
City lines.....	14,370,012	13,169,275	8.36*
Interurban and city lines.....	1,464,973	1,193,872	18.51*
<i>Ratio Net Operating Income to Book Value</i>			
Interurban lines.....	2.33 per cent	3.10 per cent	.77
City lines.....	4.81 per cent	4.18 per cent	.63*
Interurban and city lines.....	2.89 per cent	2.29 per cent	.60*

* Decrease

CONSOLIDATED STATEMENT ALL ILLINOIS UTILITIES

Item	1914	1919	Per Cent Increase
Total book value.....	\$987,382,451	\$1,117,484,648	13.18
Operating revenues.....	154,579,081	234,860,653	51.94
Operating expenses.....	95,870,774	172,253,049	79.67
Net operating revenue.....	\$58,708,307	\$62,607,604	6.64
Taxes.....	11,194,611	14,956,307	33.60
Uncollectible accounts.....	371,139	611,595	64.79
Net operating income.....	\$47,142,557	\$47,039,702	.22*
Ratio of net operating income to book value of property...	4.77 per cent	4.21 per cent	.56*

* Indicates decrease.

New York Utility Legislation Completed

Prospective Earning Capacity at Contract Rate of Fare Made an Element of Value Under Governor's Urging

Governor Miller's special message to the New York Legislature, on April 13, resulted in the final passage of an amendment to the General Public Service Commissions law, which will make mandatory instead of permissive the things the commission shall do and consider in a hearing for increased fares, and which adds a clause that the Transit Commission shall also consider "the estimated prospective earning capacity of such property at the rate of fare at the time fixed and existent"—that is, the prospective earning capacity of each property at the rate of fare contracted for by the company and city.

AS WAS reported in the issue of the *ELECTRIC RAILWAY JOURNAL* for April 16, page 748, the Governor included arguments to support the consideration of prospective earning power under a franchise or contract rate as being one element to consider in the work of making a valuation.

The Governor's special message, which outlined some of these arguments, follows in full:

The ordinary standards of physical valuation, either original or reproduction cost less depreciation, do not meet the emergency with which we have to deal, and physical valuations according to any standard that could be prescribed will in most cases under existing conditions be grossly unfair to the public.

It is claimed that many surface lines in New York City cannot be operated at a profit at any reasonable or practical fare, and it will doubtless be necessary to discard some lines and operate others even at a loss to provide the public the necessary service. Any plan or any rate based on the physical valuation of such lines would manifestly be unjust to the public.

INFLATED VALUES GUARDED AGAINST

Moreover, the rate of fare fixed by franchise or contract is a proper, if not an essential, element to be taken into account in the valuation of the property affected. Companies which have agreed to operate at a 5-cent fare or have accepted franchises with conditions annexed imposing a 5-cent fare, and the investors in the securities of such companies have no just claim to a valuation of their properties without regard to the average earnings which they may reasonably be expected to make in the future at such fare under the conditions which are likely to obtain. Indeed, the true rule of valuation of any property for business purposes is the capitalized value of its prospective earnings under normal conditions. Where such earnings in the case of a public utility are limited by contract or franchise they should be computed and the property affected by them valued according to such limitation. Any other basis of valuation of the traction lines in the City of New York might result in enormous gratuities to the companies at the public expense.

We are dealing with a problem vitally affecting the public welfare, and for that reason alone the exercise of its police power by the state is justified. It is not a question of the rights of the companies, which are fixed by contract or franchise. The problem is to determine what is in the ultimate public interest, how credit can be provided to finance necessary extensions, and to obtain the additional facilities required to render adequate public service, and in the solution of that problem private interests must not be permitted to capitalize the public need.

It is very difficult to prescribe by statute a standard or principle or valuation that will be fair and not too inflexible. I fear that in the absence of any other prescribed standard the statute as it now stands will be construed as contemplating a valuation based on physical values, which, as I have said, may prove to be grossly unfair to the public.

A standard has been proposed which appears to me to be fair and sufficiently flexible to enable the commission to do exact justice while at the same time it safeguards the public interests. That is the standard which has to be employed in the conduct of business affairs; namely, the prospective earnings of the business to be valued. Applied to the matter in

hand the valuation should be based on the estimated prospective earnings at the fare in each case which the company is permitted to charge under its franchise or contract with the city, the valuation in no case to exceed the original cost or the fair reproduction cost less depreciation of the property necessarily employed in the public service.

INCREASED FARES OFTEN REDUCE REVENUE

The fare which any company can charge will, as a practical matter, be limited by what other companies are permitted to charge, and the amount which it is reasonable for the public to pay is also a limiting factor, and it has been found that increased fares often result in a reduction of revenue. Of course, the statute should be flexible enough to permit consideration of all relevant facts and circumstances, such as, for example, the prospect of increased earnings of lines now serving undeveloped territory.

The foregoing principle of valuation will, in my opinion, be fair to the public and to the companies alike, and, with the limitation that the valuation cannot in any case exceed the original cost or the fair reproduction cost less depreciation, it will adequately safeguard the public interest. Of course I construe fair reproduction cost to mean such cost under normal, not abnormal, conditions.

There are other verbal changes needed to limit the discretion of the commission and to define more accurately the jurisdiction of the Transit Commission.

The Governor issued a subsequent message to the press, expanding his ideas as to what he meant by the principle of valuing the properties on the basis of prospective earnings. In this statement he said:

The principle that I suggest is that the properties shall be valued on the basis of their earnings. Necessarily these must be prospective earnings, because that is the way you value all property under average conditions, conditions that are liable to obtain in the future, at the fare they have agreed to take.

A CONTRACT IS A CONTRACT

Here is the proposition. These contracts were made, and I think a contract is a contract. Now it is claimed that emergency conditions have existed under which an unusual situation is presented. Undoubtedly there is an emergency existing in transit in the City of New York at the present time. Nobody doubts that. Now, some just basis or principle of valuation must be hit upon if some comprehensive scheme is worked out. My principle is that these properties shall be valued at what they will earn at the stipulated fare under conditions that are likely to obtain, not under abnormal conditions.

Asked if a change in the fare for one company in New York City meant that all the railway companies would have to have the same fare, the Governor said:

It would ordinarily appear that if a company had a fare different from that at which another company could carry passengers between the same points it would not get any passengers if its fare was less advantageous to those who travel. If the surface lines had a higher fare than the elevated or subways everybody would ride on the elevated or subway. We are going to have a commission to work that out.

In response to the Governor's urging the Legislature passed amendments to

the Public Service Commission law so that the Transit Commission in New York City shall have jurisdiction and supervision over all railroads, street railroads and stage or omnibus lines or routes, and to persons or corporations owning, leasing or operating such lines which lie wholly or in part within the corporate limits of New York City. The general State Commission, however, shall have jurisdiction over construction, maintenance, terminal facilities, stations, etc., outside of New York City.

There is thus created a sort of joint jurisdiction over lines operating across the city lines. The Transit Commission also has jurisdiction over all holding corporations or persons which hold the majority of the stock of a corporation subject to the jurisdiction of the Transit Commission in respect of the relations between such corporation and the holding company or person.

The most important changes in the law, however, are that the Transit Commission is given power to regulate construction, maintenance, stationary equipment, terminal facilities, stations and local transportation facilities of street railroads, or stage or omnibus lines or routes within the City of New York, as well as to regulate operation and fares, and the provision which makes mandatory instead of permissive the things the commission shall do and consider in the hearing for increased fares, and that

The commission shall, with due regard among other things to the estimated prospective earning capacity of such property at the rate of fare at the time fixed and existent, and to a reasonable average return upon the value of the property actually used in the public service, and to the necessity of making reservation out of the income for surplus and contingencies, determine the just and reasonable rates, fares and charges to be thereafter observed and enforced as the maximum to be charged for the service to be performed, notwithstanding that a higher or lower rate, fare or charge has been heretofore prescribed by general or special statutes, contract, grant, franchise condition, consent or other agreements,

and finally, in connection with the valuation of the property to be made,

Such valuation shall be made with due regard to the estimated prospective earning capacity of the property necessarily used in the public service at the rate or rates of fare of the company prior to the taking effect of this act was entitled to charge, in view of the provisions of the contract or franchise under which the property is operated or held, or of any lawful order in force, fixing or regulating rates or fares and of the competition of other lines and with due regard to all other pertinent facts and conditions; but such valuation shall not in any case exceed the fair reconstruction cost of the property less depreciation. Such valuation shall be in such detail and shall include such elements of cost or values and shall be made in such manner as the commission may prescribe. Such valuation as finally determined by the commission shall be the basis for all allowances to the railroad companies under the plan and for thereafter fixing the returns on the property so valued, anything in this chapter to the contrary notwithstanding.

One other modification of interest is that in the plan of readjustment which the Transit Commission shall make, of the four purposes which were originally included, the following is now eliminated:

The readjustment of the existing rights and obligations of the railroad companies so that the real values in the railroads may be protected and securities stabilized.

Poor Showing Up State

New York State Railways and Schenectady Railway Fail to Earn Sufficient to Pay a Return

For the year 1920 the New York State Railways reports earnings of but \$1.75 per share of stock outstanding as against \$1.43 the previous year. On Aug. 1 a service-at-cost contract became effective with the city of Rochester for a term of ten years. This contract provides for an annual return, rang-

mated deficit was \$15,364, while the actual deficit was \$10,423. In February, instead of the deficit of \$32,560 anticipated by Mr. Harris, the actual deficit for the month was \$17,290. Mr. Harris anticipates a surplus for April amounting to \$3,350 and for May amounting to \$9,147. Deficits of \$146 and \$1,483 respectively are anticipated for June and July. The figures in Mr. Harris' table would result in the estimated deficits and surpluses for the individual months cancelling each other

Toledo Traffic Decreases

The net result of March operations of the Community Traction Company, at Toledo, Ohio, under the service-at-cost ordinance, shows a deficit of \$73,756, according to the April 11 report made by Commissioner Wilfred E. Cann.

While net earnings from operation show a surplus of \$18,854, as compared with \$9,998 for February, the daily revenue due to the poor industrial conditions is less by \$470 and operating expenses are also \$280 less.

INCOME ACCOUNT — NEW YORK STATE RAILWAYS AND SCHENECTADY RAILWAY

Item	—New York State Railways—			—Schenectady Railway—		
	1920	1919	Per Cent Change	1920	1919	Per Cent Change
Railway operating revenues.....	\$10,454,410	\$9,406,473	11.1	\$1,905,313	\$1,664,282	14.5
Operating expenses (a).....	8,369,558	7,134,491	17.3	1,629,966	1,380,325	18.1
Net revenue railway operations.....	\$2,084,852	\$2,271,982	-8.3	\$275,346	\$283,957	-3.0
Net revenue auxiliary operations.....	2,631	562	567.5	.....	.....	.....
Net operating revenue.....	\$2,087,483	\$2,271,420	-8.1	\$275,346	\$283,957	-3.0
Taxes.....	621,173	602,869	3.0	94,072	90,683	3.7
Operating income.....	\$1,466,310	\$1,668,550	-12.1	\$181,274	\$193,274	-6.2
Non-operating income.....	300,041	37,473	700.3	1,512	3,913	-61.4
Gross income.....	\$1,766,351	\$1,706,023	3.5	\$182,786	\$197,187	-7.3
Deductions.....	1,336,671	1,361,816	-1.8	149,935	151,484	-1.0
Net income.....	\$429,680	\$344,207	24.8	\$32,851	\$45,703	-28.2
Sinking fund appropriations.....	32,633	31,641	3.1	.....	.....	.....
Surplus.....	\$397,047	\$312,566	27.0	.....	.....	.....
Undivided earnings of other companies.....	21,075	27,699	-23.8	.....	.....	.....
Total for dividends.....	\$418,122	\$340,265	22.8	\$32,851	\$45,703	-28.2

(*) Including depreciation and deferred maintenance accrual.

ing from 6 to 8 per cent upon the base value of the property used in serving the Rochester city lines, tentatively appraised at \$17,500,000.

In Schenectady net income decreased 28.2 per cent, leaving but \$32,851 with which to pay dividends on \$4,100,000 of outstanding stock. The accompanying table shows the results of operation for the last two years for both the New York State Railways and the Schenectady Railway.

Memphis Doing Better Than Was Anticipated

Commissioner Horace Johnson has pointed out that while the deficit reported by the receivers of the Memphis (Tenn.) Street Railway for the month of February is several thousand dollars in excess of the January deficit, it is \$15,290 below the deficit in the estimate prepared by Ross Harris, consulting expert, covering each month for the year 1921. The January deficit was \$4,941 below the estimate of Mr. Harris.

Figuring on the basis of operations for previous years and using the other data at his command, Mr. Harris prepared a table for each month of 1921 in which he set out his estimates of items of expense included in cost of service. The report also gives the estimated revenue for each month, the number of revenue passengers and the number of car-miles. By means of his estimates of the total cost of service and the total revenue for each month he arrives at the estimated deficit or surplus for that month. Thus far the company has exceeded Mr. Harris' expectations.

In January, for instance, the esti-

by the end of the year, thus leaving untouched, however, the deficit of \$129,564 with which the receivers entered upon the year 1921.

The deficit at present is in the neighborhood of \$157,000. This includes the total deficit of more than \$129,500 for the year 1920, together with the January deficit of more than \$10,000 and that of February in excess of \$17,000. In the event the operations during March, April and May do not come up to expectations and the deficit continues to grow instead of taking a downward trend, the receivers may seek an 8-cent fare.

City Urges Consolidation

The brief filed by Corporation Counsel Geraghty of Spokane, Wash., with the State Public Service Commission in the action of the city to prevent the granting of the 8-cent fare to the Washington Water Power and the Spokane & Eastern Railway & Power Company, says:

These conditions compel us to the inevitable conclusion that the only solution for the situation, so far as the Spokane & Eastern company lines are concerned, lies in consolidation.

There is no question of confiscation involved here, because this is not a case where the city or the state has attempted by legislation to fix a rate of fare to be charged by the Traction company. It is a case where the company and the city made a contract which at this time has proved unprofitable to one of the parties. Courts and commissions do not, as a matter of law, relieve competent contracting parties from improvident contracts.

Some fanciful difficulties in the way of a consolidation were suggested by the representatives of the two companies at the hearing, but we have no hesitation in saying that if the companies desire in good faith to consolidate the lines no legal impediment will be found growing out of the city's laws. The responsibility for the failure to effect a consolidation must rest upon the companies themselves.

Fixed charges increased to \$92,610 through the raising of the amount paid into the depreciation and maintenance funds and the establishment of an injuries and damages fund.

There is a balance in all of these funds at the end of March of \$37,362, which may be deducted from the net deficit in order to compare with the previous month.

The stabilizing fund is now at a level of \$313,333, it having developed that only payments for interest on bonds and dividends on preferred stock may be drawn from that fund when revenues do not equal expenses and fixed charges.

Mr. Cann believes that with the elimination of the bus competition on April 21, the rerouting of the Huron-Erie line, the adjustment of wages and new speed schedules savings will accrue which will wipe out the deficit before a fare raise is necessary.

A tentative agreement has been reached with the interurban lines whereby they are to pay a rental of 40 cents a car-mile for the use of the city tracks, the overhead and power. This is a 41 per cent increase over what they are now paying on a percentage of gross receipts basis. Under the new contracts revenues, it is estimated, will be increased about \$80,000 a year.

During the month 5,710,010 revenue passengers were carried at a deficit of 1.29 cents each. Car-mile operating expenses totaled 41.56 cents against 42.86 during February. Revenue from operation was 42.4 as against 46.5 cents per car mile the previous month. Total for the month was 8.64, compared to 8.98 in the month of February, showing a decrease in traffic of 3.94 per cent.

\$400,000 Shrinkage in Louisville in Amount Available for Dividends

The accompanying income statement taken from the annual report of the Louisville (Ky.) Railway shows operations for the year ended Dec. 31, 1920. As operations during the preceding year were much affected by a strike of

and 2 cents additional for transfers for which it has petitioned.

The two engineers who signed the report found that the historical value of the plant was \$6,234,141 and that the reproduction cost would be \$10,362,964. William H. Weiss, the engineer representing the city of Knoxville, refused to sign the majority report, but made a separate report, finding, in his opin-

will continue in accordance with the financial ability of the company. It is anticipated that the entire dividend will be paid within the present month."

Trenton Road Valued at \$5,000,000.—The value of the property and business in the service of the public of the Trenton & Mercer County Traction Corporation, Trenton, N. J., has been determined by Ford, Bacon & Davis, engineers, New York, as being \$5,000,000. The methods pursued in the valuation were the same as used in the Public Service Railway valuation. The reproduction cost new of the property as a going concern based on Sept. 1, 1920, prices for labor and material is estimated to be \$9,391,228. The historical cost built up from the companies, records show a value of \$5,335,674.

Foreclosure Sale Set for April 30.—Paul E. Thomas, special master, will offer for sale at Meadville, Pa., on April 30 \$300,000 of capital stock of the Meadville, Conneaut Lake & Linesville Street Railway \$350,000 capital stock of the Crawford & Erie Railroad, and \$145,000 of capital stock of the Peoples Incandescent Light Company, all pledged under the indenture securing the first 5 per cent bonds of the Northwestern Pennsylvania Railway, Meadville, Pa., dated 1911. The securities are to be sold under foreclosure proceedings with a view to consummating the reorganization plans for the properties outlined some time ago.

Assets \$1,139,884 Less than Claims.—Robert W. Perkins, receiver of the Shore Line Electric Railway, Norwich, Conn., has filed with the clerk of the Superior Court his appraisal of the property as of Feb. 1, 1921, and a report of operations for fifteen months of the receivership. Portions of the road have been sold and dismantled. The appraisal of road and equipment is \$2,451,965. The receiver's report shows that on the entire system there was an operating deficit of \$52,227 for fifteen months up to Dec. 31, 1920, to which January of this year added an operating deficit of \$3,749 and February of \$6,112, making a total to March 1 of \$62,089. The difference between tangible assets and preferred claims is \$1,139,884.

Distribution Provided in Reorganization.—The Western Pacific Railroad on April 11 was authorized by the California Railroad Commission to issue and sell at 85 and accrued interest \$4,180,000 of its first mortgage 5 per cent bonds. The bonds will be acquired by the Western Pacific Railroad Corporation and then distributed to bondholders of Sacramento Northern Railroad who have agreed to sell their bonds to the Western Pacific. The Western Pacific has offered to pay \$27.50 a share for the first preferred stock, \$15 a share for the second preferred and \$6 a share for the common. It has also offered to exchange for the bonds of the Sacramento Northern first mortgage bonds of the Western Pacific on the basis of \$80 face value of the Western Pacific bonds for \$100 face value of Sacramento Northern bonds.

INCOME STATEMENT—LOUISVILLE RAILWAY

	1920	1919	1918
Revenue from transportation.....	\$3,962,206	\$3,371,567	\$3,556,031
Other operating revenues.....	184,301	165,667	151,658
Total operating revenues.....	\$4,146,507	\$3,537,234	\$3,707,689
Operating expenses.....	3,229,187	2,794,439	2,383,972
Net revenue from operations.....	\$917,320	\$742,795	\$1,323,717
Taxes.....	366,000	366,000	355,369
Operating income.....	\$551,320	\$376,795	\$968,348
Non-operating income—			
Lou. & Int. R.R. net income.....	124,256	\$100,000	\$84,657
Other non-operating income.....	2,675	5,297	3,758
Total non-operating income.....	\$126,931	\$105,297	\$88,415
Gross income.....	\$678,251	\$482,092	\$1,056,763
Deductions from gross income—			
Interest on bonds and notes.....	\$632,790	\$630,920	\$627,000
Amortization of discount on notes.....	9,207	8,677	5,055
Total deductions.....	\$641,998	\$639,597	\$632,055
Balance available for dividends on stock.....	\$36,253	*\$157,505	\$424,708
*Deficit.			

trainmen, comparative income figures are also shown for 1918, as well as 1919, to give a means of judging the condition of the company as compared with a year more nearly normal than was 1919.

The report also contains a historical sketch of developments leading up to the recent increase in fare from 5 cents to 7 cents as well as the valuation of the property by J. G. White Company details of which have already been printed in these columns from time to time.

Knoxville Valuation Figures Expected Soon

A decision of the Tennessee Public Utilities Commission relative to the appraised value of the property of the Knoxville Railway & Light Company is expected within the next few days.

The appraisal made by Albert S. Richey, representative of the commission, and J. H. Perkins, representative of the company, was submitted to the commission for its consideration on Dec. 19, 1920. A combination of circumstances has caused a delay in the final outcome. The election came on in Tennessee. The Legislature met and has just adjourned. These took the time of the members and then Mr. Campbell took his seat on the board after the first hearing on the subject of the appraisal and he desired to go over the records thoroughly before casting his vote.

After the commission has made its decision on the value of the property of the traction company, together with its commercial lighting plant, another decision will follow as to whether the company is entitled to a 7-cent fare

ion, that the appraisal of the other two engineers was approximately \$2,000,000 too high.

Financial News Notes

St. Petersburg Road Doing Well.—The St. Petersburg (Fla.) Municipal Railway showed a profit of \$10,000 for the month of March, according to Director of Public Utilities R. E. Ludwig. He states the lines will more than earn interest and sinking fund charges this year after taking care of operating expenses and many additions and improvements—including several new one-man cars which have been bought.

Too Soon to Draw Conclusions.—J. P. Barnes, president of the Louisville (Ky.) Railway, is disappointed but not discouraged over the results with the 7-cent fare put into effect there recently. The new fare has hardly been in force long enough to justify the drawing of a general conclusion, but the expected increase of 20 per cent in revenue under the new rate has proved actually to be not more than 10 per cent.

Guaranteed Dividend Being Paid.—Frank Hedley, president of the Interborough Rapid Transit Company, New York, N. Y., on April 14 authorized the following statement: "The dividend due on April 1 to holders of Manhattan Railway stock under the terms of the lease to the Interborough Rapid Transit Company, will be paid in groups, commencing April 15, and payments

Traffic and Transportation

Six Cents in Indianapolis

Basic Five-Cent Fare Preserved Under Ticket Ruling—One Cent for Transfer

A cash fare of 6 cents, twenty tickets for \$1 and 1 cent for a transfer were authorized by the Public Service Commission of Indiana on April 15 in passing on the petition of the Indianapolis Street Railway for higher fare and more revenue. Under the order those who buy tickets will pay the same fare as they have been paying recently. The 1-cent charge for a transfer was continued by the commission's denying the company's petition for a 2-cent transfer charge. The company's request for a 6-cent cash fare and twenty tickets for \$1 is granted. The commission feels that under the order 5 cents is preserved as the basic fare. The order took effect at 12.01 o'clock a.m. on April 18.

John W. McCardle, a member of the commission, dissented in a brief statement as follows:

I must dissent from the relief granted for the reason that I do not believe it will provide the revenue that is necessary.

Commissioners Lewis, Van Auken, Barnard and Johnson concurred in the order.

The order is temporary. It says:

That the commission continue consideration of the prayer of petitioner for an extra 1-cent transfer charge, pending a period of thirty days, in which there shall be determined the effect, in percentages, of patrons paying cash fares and traveling on tickets, of the fares hereinbefore authorized, but the commission reserves the right to pass on the matter of the prayer for an additional charge of 1 cent for transfers at any time if it should be conclusively shown that the percentage of patrons paying cash fares is so small as to nullify the relief which the commission herein seeks to provide.

The order also directs that within the next month

The Indianapolis Street Railway and the interurban railroads, which are parties to this order, bring before the commission for final conclusion all matters pertaining to the carrying out of plans filed with the commission in conformity with its order of Dec. 18, 1920, for the remedying of inadequacy of interurban freight terminals in the city of Indianapolis, to the end that said matters may be brought to an early conclusion.

The local company, which has provided freight terminal facilities, recently made an agreement with the interurban companies by which the latter are to take over and develop the Kentucky Avenue freight terminal site. The agreement, before becoming effective, must be approved by the Public Service Commission, and this matter is to come before the commission soon.

Ferdinand Winter, attorney for the company, declared recently in a reply brief filed with the commission:

The railway does not claim that there is anything in any order of the commission that obligates the commission to provide rates of fare that will enable it to pay dividends upon its preferred stock. It does

claim, however, that the public has no right to the use of its property except by the payment of rates which will afford a reasonable return upon the value of such property, and that, as the commercial rate of interest ranges from 7 to 8 per cent such reasonable return should be at least 7 per cent, after payment of all operating expenses, including the sum set apart by the commission for maintenance and repairs and all taxes.

The brief continued by pointing out that the company understood the commission had set 7 per cent as a fair return, but that the company was asking for much less than this amount. It pointed out that the value of the property as fixed by the State tax board was \$16,500,000 and that the value of the property as tentatively fixed by the commission, including recent improvements and additions, was approximately \$16,000,000. It also showed that 7 per cent of this sum was \$1,120,000 and that the proposed net earnings of the company would be only \$891,237. This would be further reduced by \$52,796, representing the difference between an overestimate of estimates of receipts from cash fares and an underestimate of expected receipts from transfers.

Eight-Cent Fare in Syracuse

The New York State Railways, is authorized to charge an 8-cent cash fare, with four tickets for 29 cents, on its Syracuse lines under a decision handed down by the Public Service Commission for the Second District of New York on April 19. The new rate is authorized to go into effect on three days' notice.

Determination of the commission was announced following a long executive session in which a report of Commissioner Joseph A. Kellogg, who heard the case, was discussed at length.

The company asked for a 10-cent fare. It has been charging 6 cents.

Opposing the application, Corporation Counsel E. H. Lewis argued that a 7-cent fare, with four tickets for 25 cents, would be adequate.

The increased fare is granted for a period of six months and will continue thereafter until a further order of the commission.

The valuation fixed by the commission on the property was \$8,922,728. The company claimed a valuation of \$21,500,000. The city put in figures, prepared by Milo R. Maltbie, expert, showing a valuation of \$5,121,453.

The Mayor's commission, which recommended a service at cost agreement, placed the valuation at \$12,415,000.

The fare for children may be increased from 3 to 4 cents, the commission decided.

No other changes in the charter, newspaper rate, or other rules and regulations is permitted under the order.

Preferential Fares Raised

I. C. C. Over-rules Intrastate Franchise Fare on Ohio Lines of Wheeling Traction Company

Certain intrastate fares of the Wheeling (W. Va.) Traction Company were found to be preferential to intrastate passengers while prejudicial to interstate passengers in a decision handed down by the Interstate Commerce Commission in the case of Beall vs. Wheeling Traction Company. Discriminations arose because interstate passenger fares were higher than the fares between points within the State of Ohio. The intrastate fares in certain Ohio cities where the road operates were inadequate and could not be raised because of franchise requirements.

There were two complaints brought by citizens of Wheeling and Wellsburg, W. Va., the circumstances of which were so nearly identical that they were consolidated and disposed of in one report by the commission. To cite one case will be sufficient.

Wheeling, W. Va., and Bridgeport, Ohio, on opposite sides of the Ohio River, are connected by bridges. The distance from Wheeling to Bridgeport, Ohio, is 1.5 miles, to Martin's Ferry, Ohio, 5.72 miles, and to Bellaire, Ohio, 8.16 miles. The intrastate fare between Martin's Ferry and Bellaire, a distance of 8.94 miles, is 5 cents. The interstate fares from Wheeling to Bellaire, 8.16 miles, and from Wheeling to Martin's Ferry, 5.72 miles, at the date of hearing were each 10 cents. Subsequently they were increased to a cash fare of 12 cents and a ticket fare of 10 cents between Martin's Ferry and Wheeling and a cash fare of 16 cents and a ticket fare of 13½ cents between Bellaire and Wheeling. The transportation conditions under which the three movements are made are similar. The entire intrastate journey is made upon cars operated in interstate commerce since no through cars are operated between Bellaire and Martin's Ferry and intrastate passengers are required to transfer at Bridgeport from and to cars operated in interstate commerce.

Under the terms of the franchise granted it by the city of Martin's Ferry, the traction company may not charge more than 5 cents between Martin's Ferry and Bellaire, a distance of 8.94 miles. The Public Utilities Commission of Ohio permits the company to charge 10 cents between Bellaire and Bridgeport, a distance of 5.7 miles, the passenger in the latter journey traveling over the same rails in the same car as the Bellaire-Martin's Ferry passenger. A passenger boarding a car at Bellaire who states his destination as Martin's Ferry pays but 5 cents and is given a transfer to be used at Bridgeport. One who states his destination as Bridgeport, 3 miles less distant than to Martin's Ferry and over the same rails, must pay 10 cents. The practical result is that the traction company cannot make use of the au-

thority granted it by the Public Utilities Commission of Ohio to charge 10 cents from Bellaire to Bridgeport because passengers to the latter point invariably escape the higher fare by stating their destination as Martin's Ferry. The same situation prevails with respect to travel from Martin's Ferry to Bellaire.

The commission regarded the interstate fares as reasonable and the intrastate fare of 5 cents between Martin's Ferry and Bellaire unduly low and ordered the Wheeling Traction Company to "desist from practicing the undue prejudice, preference and advantage and unjust discrimination." For this intrastate line the commission set the rate of fare at 16 cents cash or 13½ cents when tickets are purchased.

John E. Benton, General Solicitor for the National Association of Railway & Utility Commissioners, announced on April 14 that the association looked upon the decision at Wheeling as assumption by the Interstate Commerce Commission of jurisdiction enabling it to prescribe intrastate rates for the purpose of increasing the revenues of city railways. He said the decision would be contested. Mr. Benton is quoted as follows:

The possible far reaching effect of the decision in offering opportunity to street railway carriers of that charter to secure revision of rates now limited by franchises, even though their lines be wholly intrastate, is evident.

The possible consequences of this decision, if adhered to, and sustained by the courts, are obvious even without suggestion. Inasmuch as every street railway that connects with another which is interstate can easily become an interstate carrier, it may be said to rest with such carriers, of the class described in this case, to bring themselves under the jurisdiction of the Federal commission whenever they desire to do so.

If the order of the commission in the Wheeling Traction Company case stands, it is evident that as to a large part of existing street railway lines, final power of rate regulation has passed from the states to the Federal commission.

If the commission has jurisdiction to declare intrastate interurban fares discriminatory on the ground that it injures an interstate carrier to lose money—and hence interstate commerce—it would seem certain that it hurts just as much to lose it in the city as in the country.

If it may be regarded as certain that street railroads which come within the rule as finally laid down will speedily create situations which will call for the extension to their full limits of the principles involved in the decisions made accordingly, if the Wheeling decision stands, busy days would seem to be ahead for the Federal commission.

Jitney Ordinance Upheld

A court order of April 12 at Davenport, Ia., continued in force a temporary injunction under which operation of jitney buses on the public streets is prohibited. The court held that a "jitney bus is an automobile competing with a street railway company for business on the public streets." The jitney men's attorneys sought to prove that their clients were not jitney bus drivers but taxi cab proprietors and as such had the same right as any taxi-cab to operation on the streets. This decision forces the bus men to take out bonds and in other ways conform to the jitney bus ordinance now on the city's books.

Iowa Rate Cases Decided

U. S. Supreme Court Declares Confiscatory Rate in Ordinance Cannot Be Enforced

When the Supreme Court of the United States handed down its opinion on April 11 on the rate case of the San Antonio Public Service Company it rendered also an opinion in three cases of lighting rates in Iowa. The San Antonio decision, as abstracted in this paper for last week, upheld the position of the railway because the court held that the city did not have power to establish a rate of 5 cents. The Iowa cases were decided in favor of the utilities upon very similar grounds. In passing upon them the court said that the statute forbade the cities from making contracts regarding rates.

The cases were Southern Iowa Electric Company vs. City of Chariton; Iowa Electric Company vs. City of Fairfield, and Muscatine Lighting Company vs. City of Muscatine.

In its decision in the lighting rate cases the Supreme Court says:

Two propositions are indisputable: (a) That although the governmental agencies having authority to deal with the subject may fix and enforce reasonable rates to be paid public utility corporations for the services by them rendered, that power does not include the right to fix rates that are so low as to be confiscatory of the property of such companies. . . . and (b) that where, however, the public service corporations and the governmental agencies dealing with them have power to contract as to rates and exert that power by fixing by contract rates to govern during a particular time the enforcement of such rates is controlled by the obligation resulting from the contract, and therefore the question of whether such rates are confiscatory becomes immaterial.

In the three cases in question the court held that a contract did not exist in the case of the Iowa cities, and it quoted comments on this subject by the Supreme Court of Iowa. A portion of this quotation follows:

There was a time in the history of our legislation when the right of contract as to rates was conferred by statute upon the city councils. . . . By the revision and codification of 1897 the right of contract as to rates for utilities of this character was entirely eliminated, and the legislative power to regulate rates was conferred upon the city council in all cases. The reason for the change of method is obvious enough. Under the contract method the rights of the public were often bartered away, either ignorantly or corruptly, and utility corporations became empowered through the contractual obligations to enforce extortionate rates. The net result of the progressive legislation is found in our present section 725 whereby it is forbidden to any existing city council to bind the city to any rate for any future time. The power of regulating the rate is always in the present city council. It must be said, therefore, that the rates fixed by section 6 of the ordinance hereinbefore referred to were not fixed by contract.

In another case the Supreme Court of Iowa says, in referring to section 725 of the Code of 1897:

That statute in positive terms forbids any abridgement of the right to regulate and fix charges of service corporations named in the statute, either by ordinance, resolution or contract. No one would now contend, in the teeth of the statute prohibition, that there can be a valid contract fixing permanent rates. As to corporations named in that statute, we have held repeatedly that there can be no contracting that rates fixed for service cannot be changed.

In commenting on this situation the Supreme Court of the United States says:

The total want of power of the municipalities herein questioned to contract for rates which are thus established and the state public policy upon which the prohibition against the existence of such authority rests, absolutely excludes the existence of the right to enforce, as the result of the obligation of a contract, the concededly confiscatory rates which are involved, and therefore conclusively demonstrate the error committed below in enforcing such rates upon the theory of the existence of a contract.

Spokane Fare Case Concluded

The Washington State Public Service Commission has heard the applications of the Washington Water Power Company and the Spokane Traction Company for permission to increase fares in Spokane from 6 cents to 8 cents. Statistics and estimates submitted by the companies included:

Washington Water Power Company—Earnings for 1920, \$1,082,760. Estimated earnings for 1921 (with 8-cent fare), \$1,364,480. Increase, \$281,720. Annual depreciation or replacement reserve, \$174,600. Appraisal of property and working capital, \$1,966,687. Eight-cent fare will yield 8.5 per cent. Present 6-cent fare yield, 2.82 per cent.

Traction Company—Appraisal, property and working capital, \$2,059,569. Eight-cent fare will earn (estimated), \$606,177. Net income for the company (estimated), \$60,863. Yield, 3 per cent.

Outstanding features of the hearing, in nutshell form, were:

Attorney Post for Washington Water Power Company requested that permission be granted to amend its complaint and ask for a 10-cent fare in the event that the city releases jitneys.

The city revived its suggestion for a merger of the two railway systems as the only solution of the fare problem.

The Public Service Commission engineer estimated a loss of 5 per cent in travel if the 8-cent fare is adopted. The Washington Water Power Company placed its estimate of loss in travel at 8 per cent. The commission's engineer valued the lines of water power company at \$400,000 more than was claimed by the company.

If an 8-cent fare is granted the Washington Water Power Company will add \$26,000 a year to the payroll of its trainmen by shortening the working day. It will also increase its charge for power for the railway from \$90,000 to \$180,000 a year.

Strike Emergency Over, Jitneys Must Go

Supreme Court Justice Hinman at Albany N. Y., on April 15 granted a request made by Harry B. Weatherwax, as a citizen and resident, that Mayor Watt clear the streets of the motor buses and jitneys which have carried the bulk of traffic in Albany and its suburbs since the trainmen of the United Traction Company struck on Jan. 29. The Court issued a writ of mandamus to compel the Mayor, through the police, to enforce the provisions of the transportation corporation law, which prohibits a bus line from operating without its owner first obtaining a permit from the city and a certificate of necessity from the Public Service Commission. Mr. Weatherwax is vice president and general manager of the United Traction Company.

Injunction Prevents Fare Increase in Cincinnati

The possibility of another "half-cent" increase in fare by the Cincinnati (Ohio) Traction Company on May 1 was defeated temporarily during the week ended April 16, when Judge Stanley Struble granted an injunction enjoining the company from taking such action. In the suit filed by City Solicitor Saul Zielonka and William J. Kuertz, assistant city solicitor, it was said that the company had reported a deficit in its operations for February and March. William C. Culkins, Street Railway Director, investigated the reported deficit and found that there was no real deficit, but that the methods which the company employed in keeping its books were responsible for the unfavorable report for February and March. A similar injunction was issued by Judge Stanley Matthews two months ago, after a suit had been filed by the city solicitor setting forth the same claims. It was only a temporary injunction as was the one issued last week.

Zoning Plan Continued in Westchester

An order holding that it is "unreasonable" to require the Westchester Electric Railroad, the New York, Westchester & Connecticut Traction Company and the Yonkers Railroad to transport passengers between points in different municipalities for a single 5-cent fare was issued on April 8 by the Public Service Commission, Second District.

The order permits the three lines to continue to collect fares on the basis of the present zoning system for the transportation of all passengers in Westchester County.

Franchise fare restrictions were waived in April, 1919, for two years and these waivers are about to expire. They permitted collection of fares by zones, generally each municipality constituting a zone.

The order of April 8 continuing the zoning system was granted on the application of the operating companies.

Re-Routing Considered in Milwaukee

Plans for re-routing a number of the city lines of the Milwaukee Electric Railway & Light Company, Milwaukee, Wis., passing through the down-town district of Milwaukee were discussed at a hearing held by the Wisconsin Railroad Commission in Milwaukee on March 22. At the conclusion of the hearing, the company was given until April 1 to analyze the different re-routing schemes suggested and to formulate a plan of its own. The commission will hold another hearing about April 15.

The hearing was held as a result of a recent decision of the commission ordering the joint use of tracks on Wells Street by the Milwaukee Northern

Railway, the Chicago, North Shore & Milwaukee and the Milwaukee Electric Railway & Light Company.

Ten-Cent Case Presented

Hearing Well Under Way on Appeal of Public Service Railway for Increased Rate

Thomas N. McCarter, president of the Public Service Railway, Newark, N. J., said on April 11 that his company had no objection to the valuation by Ford, Bacon & Davis, just made public, being included in the pending fare case although the officers of the company felt that the figures of increased expenditure by the company were sufficient in themselves to justify the 10-cent fare. The hearing on the appeal of the company for increased rate had then been under way for about a week. Mr. McCarter also agreed to a further suspension of the proposed 10-cent rate until July 15.

For the commission, Mr. Osborne, who sat in place of President Treacy, said that the commission felt it was only fair to all parties concerned to express its views now in order that the least time possible might be lost. If the valuation was to be considered at all—now or at a later date—it might better be included in the present proceedings and the whole thing disposed of for all time. The commission wanted to settle the matter. If the question of valuation was to come up later, the time taken in the present proceeding was being wasted.

At a previous session of the present hearing Mr. McCarter startled his auditors by saying that the company had not come before the board before for relief because the commission did not want the company to ask for higher fares. He was referring to the commission which the present board has succeeded. He is reported to have said:

We heard that the board did not want to hear any more applications for increases in 1920. However, we made the application in December because we decided we needed the higher fare, whether or not the board wanted to pass on the matter.

Mr. McCarter regarded it as an amazing spectacle to see Mr. Record, counsel for the municipalities which are opposing the increased fare, criticizing him for not asking for an increased rate.

Another witness for the company has been Richard E. Danforth, vice-president in charge of the railway. The tenor of his argument was that the 10-cent fare was reasonable and all that the traffic would bear. It took no greater proportion of the worker's income now than a 5-cent fare took in 1916. Mr. Danforth admitted that the public used jitneys because they liked automobiles, desired speed and disliked the railway corporation. He was unwilling to admit, however, that the growth of the jitney business was a consequence of the failure of the railway adequately to meet transportation needs.

The hearing will be resumed on April 22 with the presentation of testimony in the interests of the municipalities.

Eight Cents in Poughkeepsie

The Public Service Commission for the Second District, has granted permission to the Poughkeepsie & Wappingers Falls Railway, Poughkeepsie, N. Y., to charge an 8-cent fare. Commissioner Kellogg, in a memorandum accompanying the order, said:

It would seem that in a city located as is Poughkeepsie, where walking is under ordinary conditions permissible an increase in fare of such a substantial nature, especially one that arouses the antagonism of the people, would result in a very substantial falling off in the number of passengers carried. It is not probable that the slight increase authorized will diminish the fare paying passengers to any appreciable extent.

Mr. Kellogg said further that the company had never made a fair return on its investment. In the event that downward prices would affect and reduce operating expenses it is hoped that the company will promptly reduce the fare to a proper level. The old fare was 7 cents. When the company petitioned for a 10-cent fare the public protested against the proposed increase by organizing walking clubs with the slogan "We Walk."

Bamberger Electric Petition Denied

The Public Utilities Commission of Utah has refused to grant increases in passenger fares asked for by the Bamberger Electric Railroad, except that 1,000-mile mileage books may be increased from 2 to 2½ cents a mile, and that the increase of one-tenth of a cent may be permitted to students' rates.

The rate on the 500-mile book remains at 2 cents a mile. Unlike the 1,000-mile book, the 500-mile book is not interchangeable with other lines. The new student rate is 1.1 cent a mile, but observance of the 5-cent minimum is required in all cases where the per mile fare amounts to less than 5 cents.

The 2½-cent rate will not materially increase the revenue of the Bamberger line, the commission notes, but will materially simplify auditing as between the company and connecting lines, and for that reason this request was granted.

The company had asked for increases all along the line in its passenger fares, as well as certain increases in its freight tariffs. The latter were disposed of Dec. 31 last, when certain increases were permitted.

On the policy under which increases may be allowed, the commission makes this comment:

The commission is of the opinion that the assumption is fundamentally wrong that the assumption that this petitioner should be granted the same scale of passenger fares in effect on connecting electric lines, in order to establish and maintain a parity of rates, in that it leaves out of consideration the important element of the cost of service. This petitioner's line connects the two largest cities of the state and traverses a territory with relatively dense population. Moreover, there is considerable interline traffic, and this petitioner, being the middle, or connecting link in the chain of electric roads that reaches from Payson, Utah, to Preston, Idaho, tapping and serving the rich central valleys of Utah, necessarily profits by its advantageous location, because the other lines act as feeders and supply it with

both freight and passenger traffic. The volume of traffic is, therefore, much heavier than is enjoyed by either of the connecting lines.

The above comment explains the commission's attitude that the mere fact that other electric railroads in Utah have been permitted increased passenger rates does not of itself justify the granting of an increase to the Bamberger Electric.

Jitneys Under State Control in Connecticut

Jitney control in Connecticut is now in the hands of the Public Utilities Commission. Although the new jitney regulation bill became effective on April 15 when the signature of Governor Everett J. Lake was affixed, there is a provision which states that no certificate shall be valid until ninety days after the act becomes a law. This will be July 15. It will then be mandatory for all persons or corporations operating automobiles as jitneys to apply to the Public Utilities Commission for a certificate and satisfy the requirements of the law.

Jitneys are defined in the bill as any autos carrying passengers for hire, operating over regular routes or in any manner resembling the service rendered by electric railways. Rules governing fees, routes and continuity of service that apply to all common carriers must be observed by the jitneys.

Applicants for certificates must first show the public necessity for such service over the route proposed, must outline the route in detail and state the character of service proposed. It is provided that hearings by the Public Utilities Commission will be held in the town where the applicant resides or proposes to render service and states that the mayor, selectmen or chief officials of such a town shall be notified to attend the hearing.

To Connecticut's motor vehicle commissioner will fall the duty of licensing and registering drivers of jitneys. Violation of any of the terms of the act will be punishable by a fine of not more than \$100 or a jail sentence of not more than sixty days, or both.

Power to make future rules and regulations regarding the operation of jitneys within the State is vested in the Public Utilities Commission.

Wants Higher Fare.—J. J. Coleman, general manager of the Scranton (Pa.) Railway, recently appeared before the City Council at the request of the latter to explain why much-needed improvements to the system have not been made. Mr. Coleman pleaded for a higher fare claiming that extensive improvements could not be undertaken without money and the issuing of securities appeared out of the question. Last year the railway lost \$47,340. By figuring in the company's estimated maintenance expense of \$200,000 for this year the total expenditures, including the improvements, would run to \$650,122.

New Orleans Railway Cites San Antonio Case

Judge Rufus E. Foster, of the Federal District Court at New Orleans, La., upon whose decision Receiver O'Keefe, of the New Orleans Railway & Light Company, was to accept or reject the ordinance adopted by the Commission Council on April 11 cutting fare from 8 cents to 7½ cents, has rejected the action of the Commission Council and has refused to approve the reduction.

Under instructions from Judge Foster, Receiver O'Keefe applied to the court for an injunction. The case was set for hearing on April 18. The proposed fare reduction was to have become effective on April 22.

The receiver alleged in his petition, which followed his refusal to accept the new rate of fare named in the ordinance, that the fare of 8 cents fixed by the Commission Council was confiscatory since it enabled the company to collect only 2 per cent per annum on the property, said by him to be worth \$29,000,000, and that the Federal Court alone could determine whether or not an 8-cent fare was required to operate the railway system.

In asking permission of the Federal Court to reject the requirements of the ordinance reducing the fare from 8 cents to 7½ cents the receiver referred to the recent decision of the U. S. Supreme Court in the San Antonio suit, wherein the city was enjoined from enforcing a 5-cent fare with universal transfers. Following the lead of the company at San Antonio Receiver O'Keefe alleged that the 5-cent fare established on the New Orleans lines was a regulatory rate and not contractual.

Youngstown Jitneys Curbed

Jitneys at Youngstown, Ohio, are to be regulated. This is made so by a decision of the Court of Appeals for the Seventh Judicial District of Ohio that a regulatory ordinance passed Feb. 25, 1920, is constitutional, excepting for a few minor requirements.

The city was enjoined from enforcing the ordinance soon after its enactment, a group of jitney drivers attacking provisions requiring bonds, license fees, citizenship of drivers and the like. Their contentions were upheld in part by the Court of Common Pleas and the case was taken to the Court of Appeals. The decision of that body has now permitted the city to enforce the regulatory ordinance.

The ordinance requires that all operators of jitneys be American citizens, that each owner must provide a \$5,000 bond for liability for personal injuries and a like bond for damage to property; that each owner must pay an annual license fee of \$10 and each driver a license fee of \$5. Each bus must be lighted in the interior and none is to carry passengers on the running boards or more than two in excess of the seating capacity. All

owners or drivers must be more than twenty-one years old. Penalties for violation are a fine of not more than \$100 or six months imprisonment for each offense. In the discretion of the court, any license may be forfeited upon a third offense.

The ordinance originally provided that every owner or driver must have been a resident of the city for at least six months; that every bus must give at least sixteen hours' continuous service and that it must operate over designated routes only. These provisions were declared unreasonable and invalid by the Court of Appeals.

Dallas Asked to Play Fair

The application of the Dallas (Tex.) Railway for authority to increase fares in Dallas from 6 cents to 7 cents is still under investigation by the City Commission. The company at first sought a straight service-at-cost franchise with a sliding scale and guarantee of 7 per cent on the agreed investment. This was refused by the City Commission. The company then applied for authority to increase fares to 7 cents, under the plea that the 6-cent fare now being charged is inadequate. Hearings were begun on Feb. 3 before the City Commission on the application.

At a recent hearing before the City Commission, Jack Beall, chief counsel for the company, made a plea for an immediate decision on the application, declaring that if the city declined to grant the increase, only one course lay open to the company—to go into the Federal Court and seek relief there on the ground that the present fares are unreasonable and confiscatory.

At the conclusion of a hearing at which J. F. Strickland, president of the company, was present, Mr. Strickland told the commission that, while he regarded the 7-cent fare as absolutely necessary to the continued successful operation of the lines, the company would accept a fare of four tickets for 25 cents, with a fare of 7 cents if paid in cash. This advance, he estimated, would mean an increase of between 4 and 5 per cent in the gross receipts of the company.

C. W. Hobson of the Southwest General Electric Company, who, with Mr. Strickland, was granted the franchise in 1917, was also a witness before the commission in the fare investigation. Mr. Hobson declared that the Dallas Railway had paid no dividend on its stock under the present franchise. Mr. Hobson said that he and Mr. Strickland were granted the franchise about the time the United States declared war and were reluctant to accept, knowing the inevitable consequence of the war. He said that they took the full ninety days allowed by the Board of Commissioners to accept, and did so then only in the hope of solving the railway problem for Dallas. Mr. Hobson said that every commitment made by the company when the franchise was accepted has been or will be carried out before May 1.

Transportation News Notes

Car Cards Quote This Paper.—A poster now being displayed in the cars of the Virginia Railway & Power Company of Norfolk reads: "The City Council of Kansas City, Mo., passed an ordinance on March 21 prohibiting jitneys from operating on streets where electric railways now operate. The Mayor signed the order on March 22. New routes must now be assigned away from car lines.—ELECTRIC RAILWAY JOURNAL."

Ten-Cent Fare in Ossining.—An order has just been issued by the Public Service Commission for the Second District of New York permitting the Hudson River & Eastern Traction Company operating in Ossining to advance its fare from 8 cents to 10 cents because the commission finds the road "performs more nearly the services of an elevator." The longest line is not more than 2 miles. The grades are very steep.

Chicago Fares Before Supreme Court.—The fight of the city of Chicago against increased fares of the Chicago Surface Lines was carried to the United States Supreme Court on April 13 when the appeal from the decision of the Illinois Supreme Court was filed in Washington. This is the case involving the jurisdiction of the Public Service Commission of Illinois, which on Aug. 6, 1919, allowed an increase in rates from 5 cents to 7 cents. Later the fare was increased to 8 cents.

Fares Come Down in Quincy.—An announcement made in Quincy, Mass., on April 14 by the home rule committee of the Eastern Massachusetts Street Railway stated that a reduction of the fares there will go into effect within a short time. This decision came as the result of a conference held a few days ago with the trustees of the railway. The committee announced that the recommendation of the home rule committee of Quincy that the number of rides per dollar be increased from thirteen to fifteen had been accepted, as it was stated the financial condition of the Quincy division warranted such reduction.

Skip-Stop System Defended.—In reply to an attack by a Milwaukee women's organization on the skip-stop system of operation in the city, E. J. Steinberg, resident engineer of the Wisconsin Railroad Commission in Milwaukee, is reported to have stated: "The commission holds that where streets are less than 440 ft. apart, every other stop can reasonably be eliminated. The majority of streets in Milwaukee are less than 440 ft. apart. There are 175 streets in the city less than 340 ft.

apart; more than 200 are 380 ft. apart; 75 are 510 ft. apart, and 95 are 660 ft. apart. These constitute the greatest number of car line crossings in the city."

Nine Cents in St. Joseph.—The Public Service Commission of Missouri on April 9 denied the application of the St. Joseph Railway, Light, Heat & Power Company for a straight 10-cent fare. The commission permitted the company to charge a cash fare of 9 cents, or a ticket fare of three for 25 cents, for adult passengers, and 4 cents for children. The increase became effective on April 20. It was in connection with the controversy over fares in St. Joseph that the Federal court at Kansas City, Mo., last November ruled that wrong methods had been used by the commission in valuing the company's property. The court considered the present fair value as the correct value for rate making.

Injunction Prevents Fare Action by Commission.—Fred E. Allen and W. H. Sawyer, receivers for the Alton Granite and St. Louis Traction Company, Alton, Ill., on April 2 obtained from Judge English of the U. S. District Court an injunction restraining the Illinois Utilities Commission from interfering with a proposed increase in street car fares in Alton. A case known as the 10-cent carfare case now before the commission cannot be decided until Judge English dissolves the injunction, which the city of Alton will make every effort to have dissolved. The present fare is 8 cents cash, with 7 tickets for 50 cents. The higher fare for the Alton street car system will probably be 10 cents cash with a ticket rate of eleven or twelve for a dollar. The company, tired of waiting for a decision on its 10-cent fare case, acted to hasten the fare increase.

Special Depot Car in Terre Haute.—A novel addition has been started to the street car service of the Terre Haute, Indianapolis & Eastern Traction Company, Terre Haute, Ind. A special car is now run between the union depot and the Deming Hotel only. This car operates without schedule, the plan being to make immediate service available at the station upon the arrival of any train. If one of the regular cars operating on this line is at hand to take care of the travelers this special car waits until another train arrives, unless it should happen that a second car is necessary to accommodate all incoming people. In addition to making immediate car service available for all persons arriving in the city this special car will also augment the service from the downtown district to the station. The idea of installing this character of service is one of a number of good suggestions in developing new business on the depot lines, made in a paper by W. McK. White, presented before the Illinois Electric Railway Association and appearing in the issue of the ELECTRIC RAILWAY JOURNAL of July 31, 1920, page 225.

New Publications

Women Street Car Conductors and Ticket Agents

Bulletin of the Woman's Bureau No. 11, United States Department of Labor, 1921. 90 pages.

This bulletin describes an investigation made in June, July and September, 1919, and in January, 1920, by representatives of the Labor Department. The hours, wages and conditions of work of women conductors in Detroit and Kansas City and of ticket agents on the street railways in Boston and Chicago were studied. The investigation was made after the dismissal on a large scale of women conductors and women ticket agents in New York City following changes in the statute relating to the employment of women.

The report explains that the service of conductors is quite different from that of ticket agents, and this should be understood because legislation may be drafted to regulate hours for both groups together, without special consideration of the very different demands of the two occupations. In conductor service, the report points out, the conditions were more arduous on the roads examined than would otherwise have been the case because the women were the more recent employees and the best runs were chosen by the men who had seniority. Nevertheless, the report finds there is "no particular reason to prove that the work of street car conductor is unfit for women." On the contrary it seemed to combine many advantages not always found in the traditional occupations for women.

Forty-six women conductors in Detroit told the investigators that they preferred the work to any other they had ever done before. Only one woman, who used to drive a rural free delivery wagon, liked her previous occupation better. The difficulties with which both the companies and the women were faced in complying with the law in Detroit and Kansas City emphasize, however, in the opinion of the investigators, "the need for a very careful study of local conditions before any phase of a transportation law is decided upon, with a view to determining possible local adjustments to make compliance more feasible and less likely to wreck disaster upon those it was framed to benefit."

On the question of ticket agents the records from Boston and Chicago "show that with the eight-hour day and six-day week, without night work and with a wage far superior to that paid women in any other occupation, the woman ticket agent and collector is an accepted and permanent fact in two large cities." The report is an elaborate one and contains many interesting tables.

Personal Mention

Cincinnati's New Director

Mr. Kuertz's Appointment as Street Railway Director a Complete Surprise

William J. Kuertz, assistant city solicitor of the city of Cincinnati, Ohio, has been appointed director of street railways to succeed William C. Culkins, who retires on May 1 to become executive secretary of the Chamber of Commerce.

The choice of Mr. Kuertz came as a surprise to him as well as financiers, business men and city officials. Three hours after he had accepted the position he was in conference with Mr. Culkins, pertaining to street railway affairs. Mr. Kuertz accepted the posi-



W. J. KUERTZ

tion after a brief talk with Mayor John Galvin.

Mr. Kuertz has been assistant city solicitor for the past three years. He began the practice of law in 1904. He is a self-made lawyer, never having attended any law school, but educated himself while employed as an office boy and later as a stenographer connected with the law firm of Ellis, Kincaid & Rogers.

In selecting Mr. Kuertz, Mayor Galvin said he was sure that he had picked a man who was capable of filling the position. The mayor said his name had not been mentioned to him by any of the business factions about town who came forward with candidates for the position, but Saul Zielonka, city solicitor, and he had discussed Mr. Kuertz for the position. Mr. Kuertz, who is associated with Mr. Zielonka, has been engaged with him in every legal action brought by the city against the Cincinnati Traction Company. He is thoroughly conversant with every one of the many legal questions which are now pending in that connection.

A conference has been arranged between Messrs. Kuertz and Culkins for the latter part of this week, so that Mr. Kuertz can thoroughly familiarize himself with all the angles of the situation.

Vacancies on Indiana Commission Filled

Governor McCray of Indiana on March 23 made his first announcement concerning appointments to important state positions, naming three members of the Public Service Commission. George M. Barnard, Republican, Newcastle, was appointed to succeed Paul P. Haynes, whose resignation was announced in these columns several weeks ago. John McCardle, Republican, Indianapolis, was reappointed, and State Senator Maurice Douglas, Democrat, of Flatrock, was appointed to succeed Fred Bates Johnson, Indianapolis. The appointment of Mr. Barnard is for the unexpired term of Mr. Haynes from April 1 to May 1, 1924. The reappointment of Mr. McCardle is for a four-year term from May 1, and Senator Douglas will serve four years from May 1.

The appointments were regarded as the most important which were before the Governor.

Mr. Barnard is an ex-Mayor of Newcastle. He is at present corporation attorney for the city. He has appeared before the commission several times as a representative of the public in municipal cases and is highly regarded at the statehouse. Mr. Haynes, who resigned recently, became engaged in special practice of the law in Indianapolis on April 1.

Mr. McCardle is vice-chairman of the commission. He was first appointed by ex-Governor Goodrich four years ago. He has served on the commission during the important war and readjustment periods when many complex problems were presented to the commissioners for solution.

State Senator Douglas represented Shelby and Bartholomew counties in the recent General Assembly. He was elected State Senator in 1916. He served several times as a member of the House prior to his election as Senator. Mr. Douglas is secretary of the Indiana Federation of Farmers' Associations. Mr. Johnson, who is to be succeeded by Senator Douglas, let it be known some time ago that he was not an applicant for the appointment. He is expected to resume the practice of law in Indianapolis.

There are five members of the commission. E. I. Lewis, Republican, Indianapolis, is chairman. Glen Van Auken, Democrat, is the other member of the commission.

Long Service Rewarded

J. W. Harris, for Thirty-six Years Manager of California Cable Road, Becomes President

James W. Harris, of the California Street Cable Railroad Company, San Francisco, Cal., recently was elected president and general manager and chairman of the board of directors. Mr. Harris began work with the company April 1, 1879, in a construction gang, and has served continuously since.

His first work with the company was as a carpenter in the construction of an extension of the line from Filmore Street to Presidio Avenue. When the work on this line was finished Mr. Harris was transferred to the car shops and in three years he had been promoted successively to foreman and master mechanic.

In 1891 Mr. Harris was given charge of the extension of the line along Hyde-Jones and O'Farrell Streets and from Kearny Street to the ferry.

Following the death of James B.



J. W. HARRIS

Stetson, president of the road, in 1909, Mr. Harris was made vice-president and general manager, and was given a place on the directorate. At that time J. Henry Meyer was elected president. At a directors' meeting following the death of Mr. Meyer a few weeks ago Mr. Harris was elected to his place, meanwhile retaining his post as general manager.

John T. McGhee, who had been assistant superintendent, was made superintendent, and Harry N. Stetson, son of the former president, was elected to the board of directors.

With a record of thirty-six years as superintendent and general manager of the California Street line Mr. Harris is one of the oldest American street railway executives in point of service.

Charles F. Arendt, for many years employed by the Trenton & Mercer County Traction Corporation, Trenton, N. J., has been promoted to the position of chief inspector. He succeeds Harry West, who has been made night foreman at the company's carhouse in South Trenton.

Governor's Appointments Show Wide Choice

Political Affiliations Ignored in Selection of Members for New York's Transit Commission—State-Wide Commission All New

George McAneny, formerly president of the Borough of Manhattan and president of the Board of Aldermen, was named as chairman of the Transit Commission, a body created with the broadest authority the state can bestow on an administrative agency under its police powers, and with a mandate to clear up the muddled transit situation in New York City. The other appointments to the Transit Commission are Le Roy T. Harkness of Brooklyn and Major General John F. O'Ryan of New York. William A. Prendergast of Brooklyn will be chairman of the State-wide Public Service Commission. His associates will be William R. Pooley of Buffalo, Charles Van Voorhis of Rochester, Oliver C. Semple of New York, and Charles G. Blakeslee of Binghamton. All these appointments, which were sent by Governor Miller to the Senate on April 16, have been confirmed.

MR. McANENY has long been active in public life. Among his accomplishments during his municipal service was his long fight in the Board of Estimate for the adoption of the dual subway system.

Among other positions of public service Mr. McAneny has been president of the Board of Aldermen and president of the Borough of Manhat-

Association. Mr. Harkness paid particular attention in his report to the underlying securities of the city's transit lines and their relation to the actual value of the properties. The report is in the hands of the Merchants' Association, which has already made known its willingness to offer it to the new commission.

John F. O'Ryan, although a lawyer

of Comptroller of the City of New York for the first time in 1910, Mr. Prendergast has been active in discussions of the city's transportation problem. Recently he has attacked Hylan's "do-nothing" policy, asserting that the Mayor by his attitude had forfeited the right to interfere. He has been a strong advocate of Governor Miller's traction plan.

Mr. Prendergast was born in New York on May 23, 1867, and attended public schools in Manhattan and Brooklyn. He entered business at the age of fourteen.

Oliver C. Semple is a New York lawyer, who has had an extensive experience in traction affairs. He aided in the drafting of the original Public Service Commission law and was himself counsel to the commission between 1907 and 1918. He was largely responsible for the drafting of the revision of that law and of the revision of the rapid transit act of 1920. He also assisted in drawing up the Interborough and the Brooklyn Rapid Transit contracts in 1913. Mr. Semple has been a consistent supporter of Gover-



©Paul Thompson

LE ROY T. HARKNESS

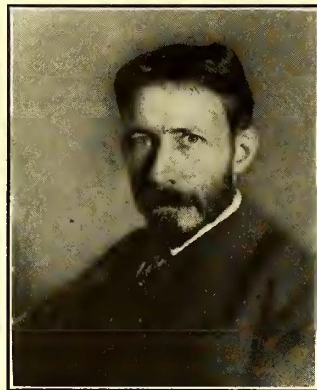
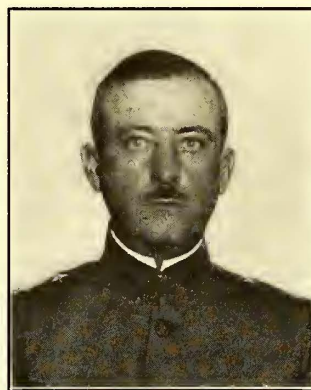


Photo by Paul Thompson

GEORGE McANENY



©Underwood & Underwood

MAJOR-GEN. J. F. O'RYAN



©Underwood & Underwood

W. A. PRENDERGAST

tan. He started his career as a newspaper man, going back to it as associate business manager of the *New York Times*, in 1915, a post he relinquished only recently.

Mr. McAneny was born in Greenville, N. J., on Christmas eve, 1869. He was educated in the public and high schools of Jersey City, later studying law, although he never practiced at the bar. He served on the committee which framed the municipal home rule amendments to the State Constitution adopted in 1894.

Le Roy T. Harkness, former legal adviser to the New York Public Service Commission, is credited with signal service in safeguarding the city's interest in the drafting of the dual subway contracts. He has had a wide experience in New York traction affairs because of his long service with the commission.

Recently, with the co-operation of Charles E. Hughes and Oliver C. Semple, Mr. Harkness undertook a study of the traction situation in New York at the request of the Merchants

by profession, has long been a soldier. He enlisted as a private in the National Guard in 1897, and after a succession of promotions became a major general intrusted with the command of the Twenty-seventh Division during the war. General O'Ryan is one of the few civilians holding a diploma from the War College, and was the only militia officer to command a division in the A. E. F. He was born in New York in 1874.

Of the commissioners who will serve on the transit board Mr. McAneny and General O'Ryan are Democrats. The former is classed as an independent, while General O'Ryan has been favored by Tammany Hall for positions in the public service. Politically Mr. Harkness classes himself as an independent Republican. All the new members of the Public Service Commission are Republicans. The salaries of each commissioner will be \$15,000 a year.

William A. Prendergast is an authority on municipal financing and accounting. Throughout his long political career, which brought him into the office

nor Miller's traction plan, declaring that home rule was not involved in the situation and that "public interest" means something more than the interest of one city or its people."

Charles G. Blakeslee of Binghamton is a Republican power in Broome county. He is a lawyer by profession, but an engineer as well. He has been corporation counsel of Binghamton, and has appeared at legislative hearings in opposition to the Governor's traction bill.

William R. Pooley was colonel of the old Seventy-fourth of Buffalo. He is a lawyer by profession.

Charles Van Voorhis is a lawyer of Rochester, of the firm of John Van Voorhis & Sons. During the war he served in the navy.

The Transit Commission is approaching a most complicated task. Questions of law, finance and the mechanical details of subway, elevated and surface operation must be considered in all their aspects before a single comprehensive plan at which the Governor aims can be evolved.

Manufactures and the Markets

DISCUSSIONS OF MARKET AND TRADE CONDITIONS FOR THE MANUFACTURER,

SALESMAN AND PURCHASING AGENT

ROLLING STOCK PURCHASES

BUSINESS ANNOUNCEMENTS

Cut of Ten per Cent on Steam Flow Meters

Considerable Interest Shown in This Product as Means of Checking Boiler Room Costs—Prompt Deliveries

One of the large manufacturers of steam flow meters has reduced prices 10 per cent effective April 19, but so far as can be learned other producers have not taken similar action. Considerable interest is being manifested in flow meters on the part of electric railways and power companies, it is reported, as a means of checking up boiler room costs and effecting economical operation. Demand, of course, under present adverse general market conditions, is not as large as has been the case, but at the same time a fairly good volume of business is being placed, several producers report. As a rule manufacturers do not stock this class of goods but at the same time deliveries are prompt and can be made in ten days or under.

Cement Prices Drop 60 Cents per Barrel

Demand Is on the Increase, but There Is Little Likelihood of a Shortage This Year

Consumers of cement are now able to buy this product at 60 cents per barrel cheaper than it cost the first of this month owing to a reduction in the price of bags in which cement is shipped. These formerly cost 25 cents each but manufacturers announced about the first of the month that on April 10 they would begin to ship cement in bags for which they now charge 10 cents each, thus accounting for the decrease noted above. The retail price of cement delivered at New York is now \$3.50 per barrel. This compares with a peak price of \$5.10 per barrel which was still in effect early last November.

Producers express satisfaction over the way the market is beginning to improve. Electric railways are doing very little buying for there is not much new track construction work under way this spring, apparently, but on the other hand the building industry is recently showing noticeable activity. Since February the curve of demand has climbed upward and at the present time shipments are said to be very little behind 1919 which was a fairly normal year.

Good stocks and immediate shipments prevail with producers in general, and despite some reports to the effect that a cement shortage will again prevail later this year there

seems little likelihood of that. The maximum annual productive capacity of the country is estimated at 147,000,000 barrels, and last year, which was considerably above the average in demand, only about 96,000,000 barrels were shipped. The limiting factors in the cement supply for 1920 were railroad tieups, labor and coal shortages, and all these conditions are now very favorable for a large production if necessary.

Railways Not Turning to Used Equipment Market

Plentiful Supply of Material Awaits Anticipated Increase in Buying, but Present Demand Is Light

In view of depleted finances which, with many electric railways, has been the main factor in curtailing buying of new equipment to low levels, it might be thought that traction companies are turning to the second-hand market at this time as a source of supply. This is a logical conclusion, dealers in that field state, and ordinarily would hold true, especially in view of high prices of new material. At the present time, however, representative companies dealing almost exclusively with used electric railway products report that the market is extremely quiet. The chief factors inducing this inactivity are the declining state of the market, lack of finances and the need for labor readjustments on the part of railways.

There is a strong potential demand for good second-hand cars, trucks, motors and control equipment, electric locomotives and also for power plant equipment. With the large needs of electric railways in this respect in view, dealers are optimistic that with improving business conditions they will find a strong demand later in the year. Acting on this basis at least one of the leading factors in the market is going right ahead and stocking material but others are buying little or nothing to carry in stock. Those who are pursuing the latter course may be induced to do so by the fact that nearly all classes of material are in plentiful supply and can be picked up as needed, and furthermore, dealers' stocks are fairly well filled as it is.

A feature of the current demand is that most interest, it is stated, is being shown in double-truck rather than single-truck equipment to be used for one-man operation. Prices may still be said to represent peak quotations on second-hand material, for decided reductions have not been made, but on the other hand it must be remembered that dealers in used equipment advanced prices but sparingly the past few years.

Start of New Coal Year Finds Production Drastically Cut

Market Is Quiet with No Increase in Demand from British Strike—Prices Firming Slightly

With the ending of the coal year 1920-1921 on March 31, now three weeks past, little actual improvement is seen in the slump which the bituminous coal market is undergoing. Expectations of an increased demand resulting from the British coal strike have not been realized, and with the passing of the danger of a general strike in Great Britain there seems little likelihood of any increased buying from that source. The strike has now been in effect three weeks, and though many inquiries for coal from abroad have been received actual orders are lacking, for European markets are overstocked, too.

Though the present coal market is extremely quiet and consumers are apparently indefinitely postponing placing contracts signs are not wanting of a slightly firmer tone to the market. Production has declined steadily since last November and is now ranging around the unprecedentedly low figure of 6,000,000 net tons per week, according to the Geological Survey. Except for the extraordinary period of the coal strike in November 1919, this rate of production is lower than at any previous time since early in 1914.

PRICES AT PRESENT ARE LOW

Forced sales of steam coal are now fewer and prices, as reflected by the weekly index of *Coal Age*, are not only making a determined stand against further reductions but are also even firming slightly. As a matter of fact present prices are equivalent to those of two years ago, though labor costs have risen some 40 per cent since then. Furthermore, with reduced man power and an increasing number of coal cars in bad repair on steam roads, prospects of a car shortage on a return of anywhere near normal demand for coal are increasing. Taken all in all, indications point to a decided jump in soft coal prices next autumn.

The flat-footed refusal of union miners to consider any reduction in their scale of wages, together with the feeling that freight rates should be lower, are two factors that are important in delaying the return of buying confidence in the coal market. With a large part of the miners idle, however, and with the current volume of business of steam railroads as evidence of the crying need of rate readjustments both of these conditions bid fair to be remedied.

Tie Producers See Better Times Ahead

Increased Demand Generally Expected
—Stocks Decreasing and Production
Curtailed to Minimum—
Prices Soft

Producers of wood ties see several factors in the present market which lead them to expect an increased demand later this year. The payment of money to steam roads under the Winslow Bill should result in additional ties being bought, it is stated. Labor prices are coming down and with the influx of immigrants under way once more the expensive labor factor in track construction should be greatly minimized. Furthermore, there has been a general buying strike due to expectations of lower prices, for one thing, and as prices have now receded a considerable amount it seems likely that the latter half of the year will show more activity than the first.

Production, it may be safely said, is confined almost entirely to actual orders, and meanwhile stocks are decreasing rather than increasing. As a matter of fact present tie stocks, especially of southern yellow pine, while adequate to make very prompt shipments, are not extra large.

There is a good deal of shopping done on the part of buyers and quotations consequently are soft. While labor costs at southern tie camps have been reduced as much as 50 per cent in some instances, it is reported, and water freight rates have also come down slightly, there seems to be a chance of still lower prices prevailing on behalf of both these factors. A representative producer reports that yellow-pine ties are about 20 cents apiece lower now than on Dec. 1. An idea of the market can be gained from the price paid by a large steam road recently for some yellow-pine ties, which was \$1.85 each delivered f.o.b. car for the heart-center ties and \$1.35 for the sap tie.

Several of the large steam roads have contracts for ties now in effect at the high prices prevailing early last fall. Some of these contracts still have a few months yet to run and are undoubtedly a factor in holding up the market. One road for instance has been forced to pay \$1.85 for white oak ties, 8½ ft. long, 7 in. x 9 in., while the market at present is about 50 cents lower than that.

Lower Prices of Armature and Field Coils

Since the first of the year armature and field coils have dropped about 25 per cent, a large producer reports. This company's latest reduction was a cut of 10 per cent effective April 15. Another manufacturer dropped prices about 5 to 10 per cent on March 25.

Good stocks are being carried by producers and consequently deliveries are exceedingly prompt. The famine conditions of supply that prevailed last

year have long since entirely disappeared. One factor in maintaining the good supply has been the mild winter just past which dealt kindly with railway motors in the matter of burnouts.

Inactive Market for Car Curtains

With Prompt Deliveries and Considerably Lower Prices, Roads Are Not Repairing Summer Curtain Equipment

Producers of car curtains are one in reporting that electric railways are not repairing summer car equipment so far as curtains are concerned. For all the buying that is being done in this market at present the cars might well be run without curtains and in fact, it is stated, there is some tendency shown at present to buy new cars without curtain equipment in order to cut down expenditures. Not only are the electric lines inactive buyers but business in the steam road field is also absolutely dead, too. There is some hope expressed that sales will increase the latter part of the year, but on the other hand, some producers say they will be satisfied to make expenses this year. The one thing that would most aid a return of business, it is thought, is lower labor costs on railways.

In view of existing market conditions producers have very much curtailed their output, production in one representative case, for instance, being at only 25 per cent of capacity. Stocks of raw material now carried are ample, even somewhat larger than present conditions warrant, and deliveries are prompt, only ten days or less being required to finish an order.

The cost of cotton has of course taken a tremendous slump since the peak price of last summer, spot cotton which was worth over 40 cents a pound at that time now being quoted at about 12 cents, New York. Wages have receded slightly too, cuts of about ten per cent having been put into effect in the plants of some curtain manufacturers. Consequently prices of the finished product are considerably lower than the top price of 1920, just how much the reduction has averaged not being available, though one manufacturer reports 35 per cent.

Steel Corporation Drops Price on Sheets

The United States Steel Corporation has lowered its prices on sheets \$7 to \$14. This brings an even market again with corporation and independent mills on the same level. Black sheets, Pittsburgh, are 4 cents, blue annealed are 3.10 cents and galvanized are 5 cents. So far there has been no disposition to shade these prices and even with the former reductions there was little appreciable increase in demand. But with this lowered price it remains to be seen what the mills will do if the demand does not soon pick up. Sheet mill operations are running only at about a 30-per cent rate.

Iron Conduit Lower by from 5 to 10 per Cent

In line with general reductions in steel prices within the past few months—and more particularly in view of the recent drop in prices of the United States Steel Corporation on merchant pipe and other products—general reductions on conduit have been made by manufacturers. The decrease ranges from about 5 per cent to slightly more than 10 per cent on different sizes and became effective on April 14, 15 and 18 with various producers.

The general increase in discounts that was made is the same in several instances and amounts to two points on ½-in. conduit, three points on ¾-in. and 5 points on 1-in. and larger sizes, both black and galvanized. The discount on elbows and couplings is increased by three points. Incidentally, prices of the United State Steel Corporation on standard steel pipe, the raw material of conduit, have been decreased in the same proportion as the above.

Rolling Stock

Princeton (West Va.) Power Company, recently purchased two of the emergency Hog Island cars and three others released by the Bangor (Me.) Railway & Electric Company.

The Detroit (Mich.) Municipal Railway, has not yet placed contracts for the 100 Peter Witt cars mentioned in the March 19 issue and new bids will probably be called for. The company has, however, ordered twenty-five additional safety cars from the Osgood-Bradley Car Company, Worcester, Mass., at a cost of \$6,695 each f.o.b. Detroit. Deliveries are to start within sixty days at the rate of two cars a day.

The New Bedford & Onset Street Railway Company, New Bedford, Mass., is converting its double-truck, closed passenger cars for one-man operation. Three cars are practically completed and these are expected to be placed in operation on the company's Middleboro division about May 15. Ten cars in all will be converted. They are Wason forty-seat cars. The summer line between Onset and Onset Junction will be operated by these, but on the line running into the city of New Bedford, two men will be used, the conductor boarding and leaving the car at the city fare limits.

Franchises

Linnton, Ore.—J. B. Schaefer, S. P. Parr and Louis Osberg have obtained a franchise from the County Commissioners to operate an electric railway along St. Helens road between Linnton and Twelfth and Burnside Streets. The franchise, approved as to form by Deputy District Attorney Pierce, is to continue in force until Aug. 20, 1940. A 10-cent fare is provided.

Track and Roadway

San Francisco (Cal.) Municipal Railway.—City Engineer O'Shaughnessy of the city of San Francisco, Cal., has been instructed by the Supervisors to prepare estimates of cost for extending the San Francisco Municipal Railway to the Ocean View District.

Evanston (Ill.) Railway.—This company will lay about 250 ton of new rail, replacing present track, this summer. Work is now in progress to replace all of the overhead copper. These replacements will bring the physical condition of the Evanston property up to a high standard.

Androscoggin & Kennebec Railway, Lewiston, Me.—The Androscoggin & Kennebec Railway has placed orders for one G. E. automatic substation control and one Westinghouse 500-kw. rotary converter with transformer and switch-board.

Tulsa (Okla.) Street Railway.—According to the city attorney the Corporation Commission will instruct the Tulsa Street Railway to double-track the Kendall and Main Street lines, and to spend about \$388,000 within the next year in extensions and improvements.

Brantford (Ont.) Municipal Railway.—City Council has passed by-laws providing for the issue of debentures for the sum of \$80,000 for extension, improvements and addition to the Brantford Municipal Railway, and for the issue of debentures for an additional sum of \$40,000 for the construction of the St. Paul's Avenue subway.

Ohio Electric Railway, Springfield, Ohio.—The work of eliminating the grade crossing at Mount Street on the Norfolk & Western tracks will be delayed because of the inability of the Ohio Electric Railway to perform its share in the work. The Ohio Electric Railway is in the hands of a receiver.

Blue Ridge Traction Company, Danielsville, Pa.—The Blue Ridge Traction Company expects to build an extension during this year of three miles from Walnutport to Palmerton. Bids are now open for the construction work.

Montreal (Que.) Tramway.—Construction of direct tramway line to Model City is contemplated by Montreal Tramways.

Dallas (Tex.) Railway.—The Dallas Railway has begun work on the Seventh Street extension of the Tyler Avenue line in Oak Clix, one of the extensions to which the company was committed under the terms of the franchise granted the Strickland interests in 1917. Work on this line had been postponed and additional time granted by the city on several occasions, due to the unsettled conditions and the inability of the traction company to purchase material. The line will be single track, and will cost approximately \$100,000, according to estimates of the engineers of the traction company.

Mesaba Railway, Virginia, Minn.—The Mesaba Railway expects to install eight road crossing signals shortly.

Newell Bridge & Railway Company, Newell, W. Va.—The Newell Bridge & Railway Company expects within the next two months to refloor its bridge over the Ohio River. White oak ties 6 in. x 8 ft. x 8 in. will be used and white oak planking, largely 3-in. stock.

Power Houses, Shops and Buildings

Cincinnati (Ohio) Traction Company.—Preparatory to purchasing power from the Union Gas & Electric Company, the Cincinnati Traction Company has asked the city street railway director, to approve an expenditure of \$380,000 to equip seven transformer stations in different parts of the city. Three of the stations will work automatically. The contract for purchase of the power goes into effect in September.

Professional Note

Lawrence P. Crecelius and Victor B. Phillips announce their association in the firm of Crecelius & Phillips, consulting, constructing and operating engineers with offices at 1302 Hanna Building, Cleveland, Ohio.

Trade Notes

Consolidated Steel Corporation announces the removal of its offices on April 16 to the Cunard Bldg., 25 Broadway, New York City.

The Superheater Company announces that after May 1, 1921, its general offices will be moved from 30 Church St., to 17 East Forty-second St., New York City.

The Corliss Carbon Company, Bradford, Pa., manufacturer of Corliss carbon brushes, has increased its capital stock from \$500,000 to \$1,000,000.

The Automatic Reclosing Circuit Breaker Company, Columbus, Ohio, announces the opening of an office at 401 National Bank of Commerce Bldg., St. Louis Mo., with C. P. Lohr as manager.

Victor T. Goggin, has severed his connection with Fred T. Ley & Company, Inc., as New England sales manager, to associate himself as contracting engineer with Dwight P. Robinson & Company, Inc., New York.

Bemis Car Truck Company, Springfield, Mass., has completed arrangements with James H. Denton, whose office after May 1 will be in the Marbridge Bldg., 1328 Broadway, N. Y. City, whereby the latter will represent the company in the territory comprised of New York, Pennsylvania, New Jersey, Delaware, District of Columbia, Virginia and Maryland. Mr. Denton in addition will continue as agent of the companies he has previously represented.

The Haskell & Barker Car Company, Michigan City, Ind., in its annual financial statement recently issued shows gross profits of \$3,789,390 for the year ended Jan. 31, 1921. Expenses for repairs, renewals and maintenance amounted to \$511,070, \$300,000 was allowed for depreciation, and estimated federal taxes were \$700,000, leaving a balance of \$2,278,319. Quarterly dividends paid during the year totaled \$880,000 so that the sum of \$1,398,319 remained to be added to surplus. The report states that the non-payment of money owed the railroads by the government was effective in bringing to a halt the buying movement of railroads. Recent remedial legislation is expected to bring relief in that respect.

International Combustion Engineering Corporation Holdings.—What has been characterized as one of the biggest accomplishments in the development of stoker business and combustion business generally thus far is the organization of the International Combustion Engineering Corporation to control the Combustion Engineering Corporation of New York and the Underfeed Stoker Company, Ltd., of London, England. It owns almost all the stock of both these companies and of course controls also their subsidiary companies and representatives. The Underfeed company occupies in England a position similar to that of the Combustion company in this country, and the former company has agencies and representatives throughout the world.

New Advertising Literature

Solder.—The Union Smelting & Refining Company, Inc., St. Charles Street, Newark, N. J., is putting out a new handy-package "Usarco" solder in stick form for electrical use.

Catalog.—American Jobbers Supply Company, Woolworth Building, New York City, has recently issued bulletin No. 7 covering its line of crossarms, line hardware, glass insulators, wood pins and brackets.

Evaporators.—"Lillie Evaporators for Waste Waters and Solutions Generally" is the title of bulletin 11 distributed by the Wheeler Condenser & Engineering Company, Carteret, N. J., describing the Lillie evaporator.

Pumping Equipment.—The Goulds Manufacturing Company, Seneca Falls, N. Y., has issued a catalog describing the Goulds "Autowater" system, electrically-driven pumps, etc. The company is also circulating a small booklet giving instructions for the installation, operation and care of Goulds "Hi-Speed" pumps.

Screw Thread Standards.—The Bureau of Standards, Department of Commerce, Washington, D. C., is distributing miscellaneous publication No. 42, entitled "Progress Report of the National Screw-Thread Commission." The report contains standards for screw threads ascertained and established by the commission.