

Electric Railway Journal

Consolidation of Street Railway Journal and Electric Railway Review

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G. J. MACMURRAY, News Editor W. R. ANDERSON, Assistant News Editor

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We're Not Talking to the Right People

THE past few weeks have given added evidence that the best publicity efforts of the industry are very inefficiently utilized. At the last meetings of the Central Electric Railway Association and the Indiana Public Utility Association W. L. Goodwin and E. K. Hall, respectively, gave addresses that would have been of inestimable assistance if they had only been addressed to the public at large. Their value was not all lost, of course, for these men talked with the idea of putting words into the mouths of the railway men to pass along to the public. But, unfortunately, few people, and this includes utility executives, have the gift of talking about their business in a public meeting in a way that both interests and impresses. The efficiency with which these speeches will reach the public is thrice decimated by the absorption power of the man who listened to either, by his probable failure to pass the speech along, and by his poor speaking if he makes the effort.

Ways must be found to get such speakers as those named before the public, so that the latter will hear them at first hand. This fact that addresses such as these are not being made to the right people a good part of the time is not a new thought, but it emphasizes the argument put forth by Mr. Goodwin at Indianapolis recently that what the electric railway companies need are sales managers. It also proves that the publicity problem of the railways now is largely a matter of how to reach the people effectively rather than what to tell them and that every practicable means of publicity must be used.

The Falling Ride Rate Versus Wage and Fare Revision

THE detail statistical reports for the last month or two are not yet to hand, but informal discussions among groups of electric railway men bring out the dour fact that the industrial depression has begun to hit the rate of riding pretty hard. In some places the loss is confined almost entirely to the peak-hour or home-factory traffic, with no diminution in the more voluntary riding. In at least one place, however, there was an abrupt falling off in shopping traffic a full week before Christmas, induced by a panicky feeling among the many foreign workers that the lay-offs were going to last longer and the cuts in wages be more drastic than first expected.

Facts like these indicate that the electric railways are again likely to suffer innocently from what might be termed the "economic lag of a public utility." Yesterday fares or revenues were not permitted to rise as fast as the cost of unregulated commodities. Today, with the fares in many cities at the desired level, the purchasing power and riding necessities of vast masses are greatly decreased long before electric railways can hope to lower their operating expenses per car-mile.

For one thing, rents and fuel are still at such high levels and the actual, permanent drop in the cost of food staples is still so uncertain that anything like an early drastic cut in wages is sure to provoke trouble. It is true that track laborers and other small groups, including at least one president and his staff, have already been sliced, but, as all know, the wages of the platform men are the *bête noire*. As a class, these men will stand out for the letter of their contracts, many of which have nearly half a year to run. Under the circumstances, the wisest course for the managements to follow is to secure all possible data on the late adjustments in living costs, so that when the inevitable arbitration proceedings begin they will be prepared to present a case that will meet public sympathy when coupled with the slogan, "We cannot reduce fares in the face of declining traffic unless we can reduce our payments for our two biggest items—coal and labor."

Long-Lived Track and Wood Preservation

THERE has been some disagreement among track engineers on the question of the value and the need for preservative treatment of wood ties when laid in conjunction with well-paved track. Not a little light is thrown on the subject through the article by W. L. Whitlock in the issue of this paper for Jan. 22, wherein the statement is made that treated hemlock ties were found to be in a good state of preservation after twenty-two years of service in the tracks of the Denver Tramway.

Hemlock ties, untreated, have an average life of five years in open track, according to estimates on tie life given in H. F. Weiss' book on timber preservation. On this basis the results reported for the Denver installation indicate that the treatment has increased the life of the tie more than four times the estimated untreated life. Mr. Weiss gives the estimated life of treated hemlock ties in open track as fifteen years. Hence, it may reasonably be argued that the track pavement under which the ties in question have been in service, by keeping the ties in a fixed state of moisture content, has added seven years to the estimated treated life of hemlock ties.

Mr. Whitlock also states his belief that the good waterproof pavement, which was wisely installed when the tracks were built, proved to be a prominent factor in preserving the other parts of the track structure and accounts for the remarkably small amount of deterioration found in all details of the track. This statement fits in with the observations of the editors of this paper to the effect that good pavements are essential to good tracks and that when the water is kept out of the substructure the pavement acts as a real track life preserver. "Keep the water out" has become an axiom in the track engineer's manual.

This information from Denver should lead track engineers to investigate comparative cost of the treated hemlock tie as a substitute for the more expensive oak, yellow pine and chestnut ties which have prevailed heretofore, and a considerable impetus should be given to the use of preservative treatments for ties, no matter what wood they are made of. In this connection it is very opportune that the three standing committees of the Engineering Association which are most concerned with this subject have been asked to prepare reports on wood preservation, because the subject is assuming an increased importance in the search for every available means of reducing maintenance cost.

Action on the Reports at Chicago

THE discussion being proposed in this paper on the proposed indorsement by the association at the Chicago conference of the reports of the Federal Electric Railways Commission and the Chamber of Commerce committee shows that the difference of opinion on such action centers largely about two points. One of these is clause XV of the federal report, which recommends the adjustment of the capitalization of a railway company to correspond with the valuation of the property employed in public service. The clause reads that a fair valuation of the property of every utility should be made and then that "the company should voluntarily reduce any excessive capitalization on the basis of such value." Although not so stated in the report, it may be assumed that the commission believes the converse is equally true and recommends an increase in the capitalization if such is necessary to make the capitalization equal the value of the property.

The report of the Chamber of Commerce committee declares in one place that the public should allow a fair return upon the value of the property used in rendering the service but should not be asked to pay more, but this report does not make any recommendations as to capitalization.

The second clause in the federal report to which criticism has been particularly directed is XVIII, which says that cost-of-service contracts are in an experimental stage, but where they have been tried they seem to have secured a fair return upon capital, established credit and effected reasonably satisfactory public service. It adds that such contracts may safely be entered into where the public right eventually to acquire the property is safeguarded. As this indorsement is quite tentative objections to Clause XV are rather more important.

Mr. Cobb, under the title "A Car Rider's Reply," discusses Clause XV directly and presents a point of view which undoubtedly is widely held. Briefly, he declares that if the railway does not earn more than a fair return upon a fair valuation the public is not concerned as to how the return is divided among the different classes of securities. Moreover, he points out that in some cases at least it would be very difficult without the appointment of a receiver for a company to scale down its capitalization, and that this step would often work great hardship on many classes of security holders.

Undoubtedly this view is correct. It may be admitted that good service to the public can be given by a company even if its capitalization does not exactly correspond with the value of its property. Nevertheless

this does not preclude the industry, as an industry, from accepting both of these reports as outlining bases which are desirable and toward which practice can trend in the relations of the companies and public.

To some any action approving the report may not seem necessary. Most if not all companies, they say, are now doing all that these reports enjoin, at least in essence, so why "indorse" them? Will not such approval give the impression that the reports favor the companies unduly and so prejudice the acceptance of their principles by the public?

This argument, too, has some reason, but it is believed by those who favor indorsement that the advantages of so doing far outweigh those of rejection. They show that the companies no longer consider a franchise as an opportunity for large private profit, but that their duties are of a public nature though directed by private management. This conception of the function of a utility, though common now in the industry, is not yet fully understood by the public. If indorsement of the reports at Chicago will help this idea a step forward will be gained.

Bookkeeping in Connection with Power Plant Operation

INEFFICIENCY cannot be tolerated in the power plant today, with fuel cost about 80 per cent of the total cost of operation and with the example of many a good installation producing power at 15 per cent thermal efficiency. The remedy is to operate in the light of facts disclosed by systematic testing. To be sure, tests are a nuisance. They disrupt routine operation and they require the services of expert technicians if best results are to be secured. However, if as a result of tests dollars are saved the tests contribute to the accomplishment of the object of the power plant, namely, to produce power economically.

Nearly all plant engineers perform routine tests on equipment, and many secure data necessary for maintaining a continuous heat balance. Other engineers, however, think of the test itself as the chief feature of their work, and they prefer to specialize on testing of only one type of their plant equipment. Some spend their time on combustion and boiler tests, others on prime mover tests, and still others on tests of steam traps and auxiliaries. Such a plan of power-plant testing furnishes no indication of plant efficiency. This follows because, for example, more heat may be lost through frequent cleaning and blowing down of boiler tubes than is saved by a slight gain in boiler efficiency; again, more heat may be lost by improper type or condition of auxiliaries than is saved by efficient prime movers.

To borrow an illustration from another field, the manager of a department store cannot devote his attention to the shoe department this week, the hardware department next week, the housefurnishing department the week after next, etc., and be certain that his whole store is operating well merely because the housefurnishing or some other department is operating at maximum efficiency. He knows what his store efficiency by a careful and systematic study of the day-to-day bookkeeping records of all departments and the monthly balance sheet.

Similarly, a continuous heat balance is the only logical method for maintaining maximum power plant

efficiency. It serves to eliminate needless tests and to indicate when tests are necessary. Tests in themselves serve only to fix the limits in the heat balance.

A continuous heat balance involves some financial outlay and a slight change in operating routine, but the cost of weighing coal daily, measuring CO₂ and flue gas temperature, determining the B.t.u. content of fuel, metering the steam produced, etc., will be more than offset by the increased economy. Modern conditions cause a power plant engineer to keep both a day-book and a ledger if he wishes to operate efficiently, and the bookkeeping cost is not a factor to be compared with the value of exact knowledge of the operating conditions of the plant.

The Word "Justice" Causes a Shock

IT IS NOTEWORTHY, though not surprising, that a great outcry has been raised in certain circles in New York over Governor Miller's message in which he recommends "exact justice to all" in the New York transportation situation. Violent protests are being made against "8-cent fares" and what is called "robbing the people," and a newspaper campaign has been begun against the "Traction Trust," which is represented in familiar cartoonist style as a very stout individual buffeting and getting the best in other ways of a meek and diminutive man labeled "voter." Nevertheless Governor Miller's message may be read in vain for any reference to either an 8-cent charge for city transportation or even for a higher fare. He does, it is true, say that the transportation systems are headed toward disaster, and he expresses his wish to save both them and the city from selfish politicians and financiers, after an examination of the situation by a commission shall disclose the most desirable plan. Surely even his opponents should agree with him in his desire to have justice done in the matter. Why justice raises visions in their minds of an 8-cent fare may well be left to their consciences to answer.

In fact, the chief argument brought against revision of the transportation changes in New York by its opponents up to this time is that a 5-cent fare is nominated in the bond and must be continued or the city will exact its pound of flesh, whether or not its victim dies in the process. In this particular case, however, strict insistence on the terms of the bond is as bad for the city as for the company. A community of the size of New York is peculiarly dependent upon its transportation system and upon the expansion of its transportation facilities with its own growth. Hence there is every reason for a policy of getting together and mutual concession and the call for the exercise of state sovereignty in case the present city authorities fail to rise to their duty and their opportunities. The policy of dilly-dally must give way to something constructive.

Employers Can Well Encourage Thrift Campaigns

IN ONE of the recent advertising letters on thrift which Henry L. Doherty is publishing in the New York daily papers he brings out the close interest which employers ought to have in the present movement for thrift. They are concerned with it in many ways. Poverty in the community, always a drag upon its energies, would be reduced. The acquisition of property by a person, especially when earned by him, helps toward self-respect and regard for the property rights of others, and the added credit of the nation gained through thrift stimulates industrial enterprises and helps for prosperity.

It is needless to say that electric railway companies which are seekers after credit to develop their properties would gain greatly by a nation-wide campaign for thrift. Their men also are in a good position in many ways to join thrift movements because of the continuity of their work, which is not subject to the periods of non-employment common in other industries. This regularity of work does away with the demoralization in saving plans occasioned by periods of high income alternated by periods of no income, so that railway men should be able more easily to live according to a budget, which is a great help in saving campaigns.

It may be that some will say that the earnings of an electric railway employee are inadequate to permit him to join a thrift club, but this is not so. Every one who is at steady work can save something, except under unusual circumstances, and even if this was not the case with all railway operators those with few family responsibilities can save something if the same wages are adequate for another to support a large family. Moreover, it is being done. On the Philadelphia Rapid Transit system, for instance, the annual subscriptions of the employees to their thrift fund now amounts to more than \$1,000,000.

The point cannot be too strongly stressed, however, that the advantages which will come by such a movement to electric railways and other enterprises requiring an influx of capital are not dependent upon the investment by thrift organizations in securities of such companies. Some of the capital will undoubtedly go into good utility securities, but if it was all invested in government bonds, there would still be great benefit to

the railways. In fact, we see certain objections to the investment by a thrift society made up of employees of a company in the securities of that company unless possibly in bonds of a thoroughly fundamental character. Otherwise, it is a good deal like putting all of one's eggs in one basket. But it is obvious that the tendency, and a desirable tendency, will be for much of these thrift savings to go into the underlying securities of enterprises of a productive character. This will help to develop the country and provide employment for many.

Quotation from the Federal Electric Railways Commission Report

No. 6

THERE can be no satisfactory solution of the electric railway problem which does not include the fair valuation of the property employed in the public service, and where that is done the companies should voluntarily reduce any excessive capitalization to the basis of such value.

Your commission believes that excessive payments to the underlying companies by the operating company have greatly diminished the net operating revenue and that there can be no satisfactory solution of the street railway problem in such communities until the system has been valued as a whole and the accounts so kept that the public may know that the rate of fare paid yields no more than fair return upon the value of such property.

How Indiana's Commission Works

In the Hoosier State the Commission Is Proud of Its Record—Receiverships Have Been Avoided, Low Car Fares Have Been Maintained and an Optimistic Outlook for the Future Has Been Established—The Progressive Policies of the Commission Have Been an Important Element in the Situation

IN A RECENT address before the convention of the National Municipal League at Indianapolis E. I. Lewis, chairman of the Indiana Public Service Commission, referring to commission control of utilities, made the following significant statement:

In behalf of such operation and control, adopted in this state, I would point to the fact that only one of the present 118 electric railway receiverships in the country is in Indiana and that receivership antedates the war disturbances and will be closed this year; that only six of the 600 cities having more than 5-cent fare are in this state, and that the street railways in Indiana emerge from the trying ordeals of the post-war period solvent and hopeful. In more than 1,400 utilities of all kinds in the state there are not to exceed a half dozen receiverships, and the commission points with considerable pride to the fact that they have not resulted from the confusions and disturbances incident to and following in the trail of war. While no utilities have been going into receiverships, the commission during the war period has brought a number out and established them on sound bases for future usefulness as agencies of service and as corporations offering secure investment.

The Indiana Public Service Commission was established by legislative enactment in 1913, the new organization superseding the original Railroad Commission of 1905. This legislative act is patterned very closely after that of the State of Wisconsin. It was not until the establishment of the present personnel, however, in May, 1917, with E. I. Lewis of Indianapolis as chairman, that the new progressive policies in utility regulation were inaugurated. While Mr. Lewis as chairman has had the leadership, the progressive cast of the commission has been sustained throughout the entire membership. The other commissioners are John W. McCardle of Indianapolis, Paul P. Haynes of Anderson, Glenn Van Auken of Auburn and Fred B. Johnson of Indianapolis. Carl Mote, who has been secretary of the commission since May 1, 1917, has just recently resigned.

Six distinct departments comprise the organization of the Indiana Public Service Commission, each directed

as follows: (1) H. O. Garman, chief engineer; (2) Harry Boggs, chief accountant; (3) A. B. Cronk, chief of the traffic department; (4) D. E. Matthews, chief railroad inspector; (5) R. D. Armstrong, librarian; and (6) M. D. Atwater, director of service.



MEMBERS OF THE PUBLIC SERVICE COMMISSION OF INDIANA
Seated, E. I. Lewis, chairman. Standing, left to right, Commissioners Fred Bates Johnson, John W. McCardle, Paul P. Haynes, Glenn A. Van Auken and Secretary Carl H. Mote (resigned)

levels than in most states, while receiverships also are lower and the utilities in sounder and more optimistic condition. From the report for the year 1919 the following quotation is significant:

The unfavorable operating conditions of the last year are responsible for most of the rate cases before the commission. In many cases it is impossible to fix rates that will yield the revenue needed to maintain service and provide a normal return on investment, for the reason that to increase the rates beyond a certain point would have the effect of discouraging business and reducing net income, thus laying a burden on the public without achieving the purpose of the increase. No public utility can operate successfully on inadequate rates. The inevitable result is poor quality of service, inability to make needed extensions to assist in developing the community, and in extreme cases discontinuance of service and junking of plants needed by the public. The commission has found little disposition on the part of the public to deny the utilities revenue needed for these purposes. It has gone on the assumption that its prime duty during the emergency is to keep necessary public utilities in operation, with as good quality of service and as liberal extension of service as can be secured.

The charts on page 256 indicate very forcefully the burden of cases taken over by the present administration and the expediency with which both old and new cases have been dispatched. Over two hundred more cases have been disposed of in 1920 than in the previous year, the work of the commission, of course, having been unusually heavy, due to the abnormal rise in prices of materials and wages and resulting operating cost. The Indiana commission, during the trying war and post-war days, has concerned itself with maximum revenues instead of maximum rates. It has insisted that the lowest rates will often produce the most revenues, with the result that rates in Indiana probably show lower

The conditions for the year 1920 have not been materially different, the same quotation being referred to in the 1920 report as representative of that year as well. The coming year is considered to be one, however, in which promises of substantial relief may be extended for lower prices to consumers, better returns to utilities and fewer abnormal readjustments necessary on the part of commissions.

In spite of the high costs of materials and labor additions to utility plants have been made during the past year under the general supervision of the commission valued at \$13,189,530. These are distributed as indicated in the table shown below.

From this table it will be noted that the interurban and street railways of Indiana have been able to do their portion of the total construction work actually accomplished. The commission estimates, however, that public interest demands that the expenditures indicated in the table be made to serve adequately the public needs for the next two years. These are exclusive of the needs of the steam railroads.

The plan, rather unique in Indiana, which has enabled this commission to consider and settle satisfactorily so many cases in a given time has been to appoint for the responsible heads of the various departments experienced men capable of hearing minor cases themselves and either effecting a compromise agreement among the parties at the hearing or reporting back a proposed finding for consideration and formal approval by at least three members of the commission.

Generally speaking, the formal presentation of a case by counsel and the hearing of lengthy expert testimony, except in very important cases, have been discouraged. Officers of the smaller companies and complainants, possibly accompanied by engineers to advise their clients upon technical problems, have been encouraged to present informally their cases, often without legal counsel, before the chief engineer, director of service, or examiners of the commission. One typical case, involving rather serious interference between light and power transmission lines and rural telephone service, was amicably settled in a hearing of about two hours' duration before the chief engineer, the parties involved having been advised by two different members of the instructional staff of the School of Electrical Engineering of Purdue University. A formal dismissal of the case written by the commission closed the issue.

This important department of the commission has been directed by H. O. Garman throughout the entire

period the public service act has been in force, during which time both political parties have been in office. The staff is made up of experienced investigators, mostly graduates of Purdue and Indiana Universities.

During the past year alone this department has appraised property values equal to 30 per cent of the entire valuations made since the commission was organized in 1913. That the electric railways have had sufficient consideration in this matter is indicated by the valuations of the table given below.

The difficulties accompanying an equitable appraisal during the period of widely fluctuating unit costs are well illustrated by the recent statement of Mr. Garman to the effect that:

All the utilities of the city of Indianapolis could be appraised at any figure from \$50,000,000 to \$120,000,000, depending upon the point of view of the body making the appraisal. At present the general policy is to use twenty-year average price on steel rails, fifteen-year average price on copper wire and ten-year average price on cedar poles, because the one-year averages are entirely out of proportion to the actual costs.

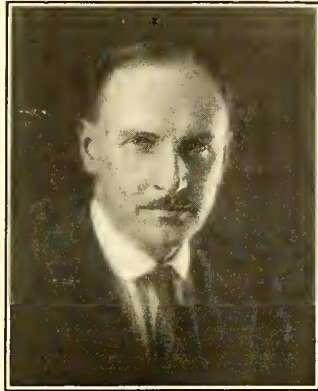
Plant equipment, such as engines, boilers, pumps, generators, switchboards, etc., is priced after the making of a study of the actual original cost new as indicated by the contracts and specifications, when available, the cost of similar equipment purchased about the same time, and the present-day cost of similar equipment. A figure is finally applied which is considered ample to reproduce each piece of equipment under the approximate circumstances and conditions obtaining during the time these prices of equipment were purchased and installed.

The question of the proper appraisal of pavement, which is often the subject of controversy in rate cases, has been standardized by the engineering department.

In no case do we allow cost of cutting pavement when the pavement was put down subsequent to the laying of the mains and services. We endeavor to determine in each case the amount and kind of paving actually cut and upon these items put a price which is substantially a five-year average cost. All pavement cut to repair mains and services should be paid for out of the maintenance fund and is an operating expense and not a capital charge, and is therefore excluded from the appraisal.

An amount in general equal to 12 per cent of the total of all items of the appraisal exclusive of material and supplies is used as a tentative figure known as "structural overhead expense."

If the evidence shows that this cost was paid out of operating expenses by the company we suggest that it be eliminated, and if the evidence shows beyond a shadow of a doubt that more than this much was spent and that it has not been included in any of the unit prices then this percentage should be increased. The item of structural overhead cost should include such costs as engineering, superintendence, interest during construction, taxes during construction, fire and liability insurance, small omissions of inventory, contingencies, etc.



M. D. ATWATER,
director of service, provides photographic exhibits for hearings



H. O. GARMAN
has been chief engineer since the commission was organized in 1913

RECENT AND DESIRABLE UTILITY EXPENDITURES

	Expended in 1920	Desirable for Next Two Years
Municipal electric.....	\$370,000	\$15,000,000
Electric.....	4,747,100	
Electric interurban railways.....	1,191,000	32,700,000
Electric street railways.....	2,527,500	17,000,000
Gas.....	71,000	8,000,000
Hot water heating.....		
Steam railroads.....	1,635,000	
Telephone.....	1,499,055	12,000,000
Water.....	1,148,875	3,000,000
	\$13,189,530	\$87,700,000

APPRAISALS BY ENGINEERING DEPARTMENT

	May 1, 1913, to Sept. 30, 1919	Oct. 1, 1919, to Sept. 30, 1920	Total
Electric.....	\$33,787,233	\$9,445,769	\$43,233,002
Electric railways.....	43,572,015	10,626,248	54,198,263
Gas.....	25,709,154	12,031,135	37,740,289
Heat.....	4,362,012	722,103	5,084,115
Telephone.....	20,033,242	22,111,917	42,145,609
Water.....	18,727,097	6,951,167	25,678,264
	\$146,190,753	\$61,888,339	\$208,079,542

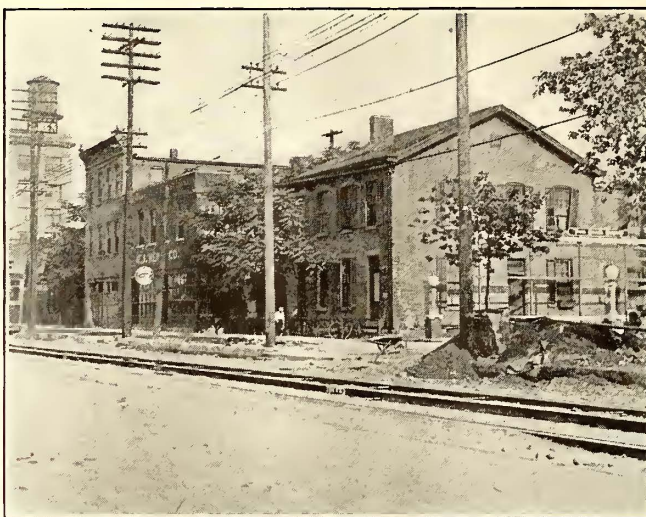
The Indiana commission endeavors to determine an equitable "fair value" of appraised property after the engineering department has submitted in its report all of the available evidence usually associated with "original cost" and "present value." To arrive at such a value under present conditions is a difficult problem.

The commission is of the opinion that until sufficient time has elapsed to demonstrate conclusively that a new and fairly permanent higher price level has been reached normal cost of reproduction should be determined by costs prevailing immediately before the European war, with a consideration, perhaps, of what may reasonably be calculated to be a natural trend of prices had the war and other abnormal conditions not occurred.

In its consideration of "going value," a term always interpreted with difficulty, the commission seriously attacks one common method of predetermination of such a value amounting to \$4,592,367, which was rejected in a decision in the Central Union Telephone Company case.

The commission cannot accept petitioner's claim for going value nor can it approve the methods by which petitioner calculates his claim. To this commission it appears utterly unreasonable to base an allowance for going value upon the imaginary cost of presently reproducing or re-establishing a business which, under the wildest flight of fancy, never will be completely reproduced or re-established.

A rather unusual policy has been adopted by the engineering department with regard to meter testing and standardization. Practically no such calibration is done by the department itself. In fact, no standards are maintained by the department except for purposes of illustration of those which the utilities are required to install. The entire responsibility in matters of standards of service is placed upon the utility and the municipi-

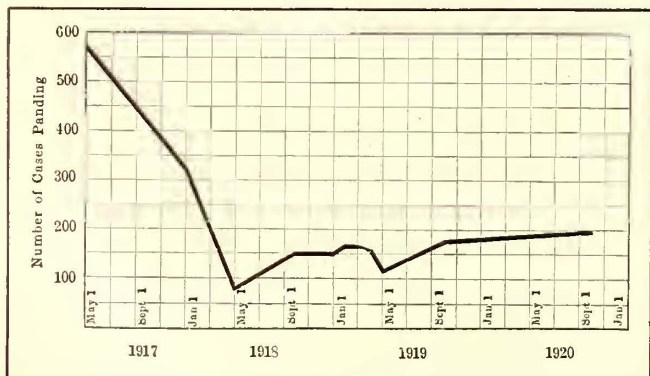


POLE MOVED AND EXTRA POLE SET IN SPAN AT EXPENSE OF PROPERTY OWNER TO IMPROVE ENTRANCE TO GASOLINE SERVICE STATION

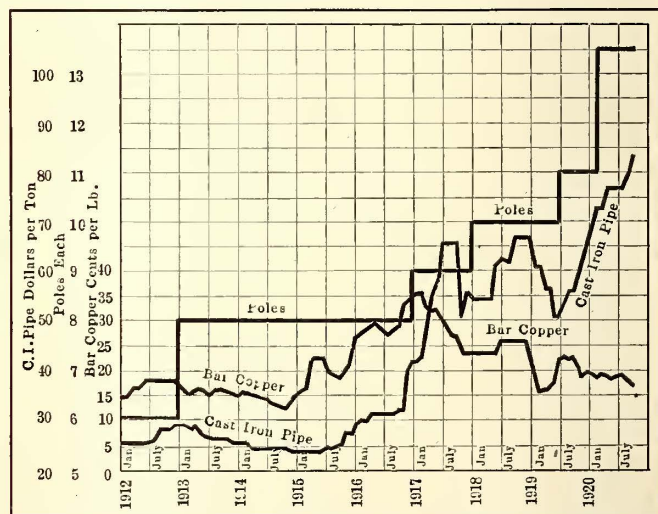
The librarian of this commission not only performs the usual functions of such an office but holds hearings in the rôle of examiner for the commission and reports to the commission upon many special problems. Among such 1920 reports which will be found on file in the library should be noted the following, of particular interest to electric railway executives:

1. Power of commission to compel priority in coal car distribution to mines supplying public utilities.
2. Whether in approving a purchase and sale the commission must find that the consideration represents the value of the property.

3. Power of the commission to order a depreciation reserve to be set aside *in cash*.
4. Power of the commission to authorize the issuance of securities to represent the surplus of a public utility.
5. The necessity and legality of a municipal election to approve purchase of property by the municipality from a public utility whose stock is owned by the municipality.
6. Power of city in connection with the obstruction by trains of crossings of city streets and railroads.
7. Power of commission to order spur tracks for shipper to build across land of another owner.
8. Power of commission to order steam railroads to tender cars to traction company at junction of steam railroad and switch tracks of traction company for transportation to shipper on switch track.



EFFICIENCY OF PRESENT ORGANIZATION IS INDICATED BY REDUCTION IN CASES PENDING



UNIT COST VARIATIONS MAKE EQUITABLE APPRAISALS DIFFICULT

palities, such matters coming to the commission only on appeal. In the few appealed cases which come up the test is usually made on the consumers' premises under the observation of a representative of the engineering department of the commission. In many instances utilities are requested to send their standards to the State university or to commercial testing laboratories for calibration. The commission charges no fees for tests.

9. Power of municipalities to lease their public utilities to private corporations.
10. Power of commission to order a stock dividend.

ACTIVITIES OF THE SERVICE DEPARTMENT

M. D. Atwater, director of service, has made greater use of photographs of service conditions throughout the state than is usually the case with other commis-

sions. Enlarged photographs of accidents and bad construction have provided valuable evidence in hearings before the commission.

During the past year the following record has been made by this department:

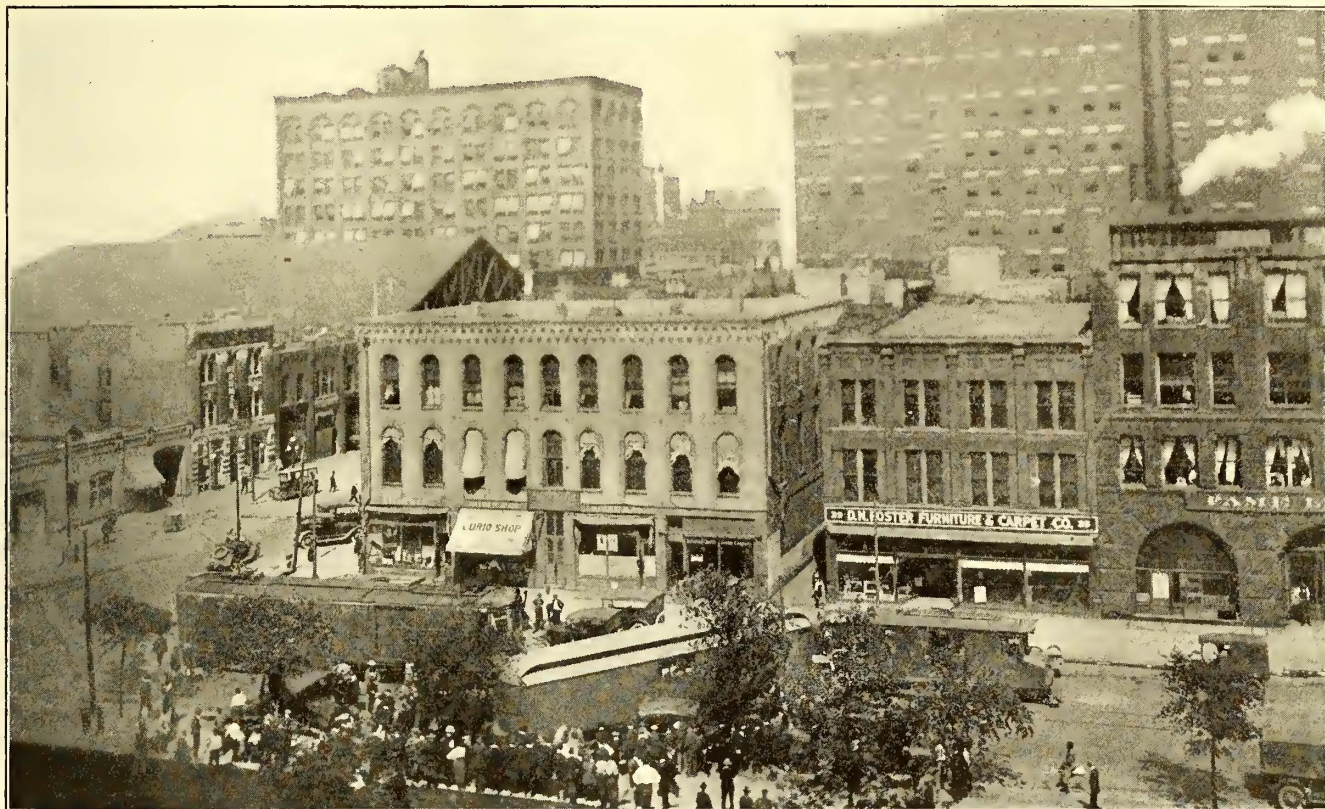
Informal complaints closed.....	23
Cases adjusted.....	365
Plants inspected.....	120
Photographs taken for record.....	544

During the period of governmental control of the railroads it was not required by the commission that tariffs be filed as a matter of record by the railroads. Many such were furnished voluntarily, however, and since the return of the railroads to private control the back records have been completed in the files of the commis-

to build highways at ever increasing expense. In the case of the interurban railroads, at least, the increasing freight business, which has been consistently developed, and a "policy of elimination of watered stock" adopted by the commission have contributed materially to save the situation from chaos.

RELATIVE IMPORTANCE OF STREET RAILWAY FARES

The seriousness of the problem of street and interurban railway fares is pointed out by Mr. Lewis in the address previously quoted. After noting the care and attention given by the Interstate Commerce Commission and by Congress to the adequate solution of the steam railroad rate schedule he emphasizes the fact that while



PHOTOGRAPH EXHIBIT OF INTERURBAN WRECK DUE TO DEFERRED MAINTENANCE ON SPECIAL TRACKWORK, FORMING PART OF FILES OF COMMISSION

sion. Now no new tariffs may be put into effect without the approval of the commission.

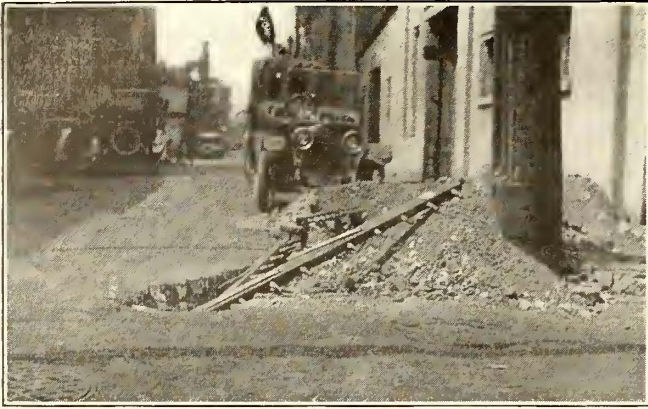
In general the increase of intrastate rates established by the Indiana commission are slightly less than the interstate rates founded by the Interstate Commerce Commission. It is believed by the Indiana commission that if it should increase intrastate rates to the extent of interstate values prayed for the discrimination in competitive territory vital to Indiana commercial interests would be increased over that which was pronounced unjust by the Railroad Administration under advice by the Interstate Commerce Commission. The Indiana commission believes that the intent of Congress in the transportation law was not to create a rate which would be discriminatory between states. Nor is it deemed likely that the transportation act meant to maintain exactly the same intrastate and interstate rates in a given district.

Electric interurban rates generally have been increased to the level of the steam railroads. Both steam and electric railroad systems have been heavily taxed

the steam railroads transport approximately one billion persons annually the street railways transport fourteen or fifteen persons to every one carried by the steam roads.

Speaking of the Indianapolis conditions Mr. Lewis said:

While the discovery of a place where one can actually buy 18 miles of riding for 5 cents is notable, it is not as remarkable as the discovery that the company is solvent and full of hope. Returning confidence in its future is indicated by higher bid prices for its securities. On July 1, 1920, there were 118 companies, with a total of 7,820 miles of track, in receivership. Since July 1 there have been a number of receiverships added to this depressing total. Other companies, some of which have exhausted possibilities of 8 and 10-cent fares, are showing hopeless tendencies. Fifty-six of those 118 receiverships occurred between June 1, 1919, and July 1, 1920. Obviously the departure from the 5-cent fare has not been a complete success. What can be more remarkable than the experience of a public utility commission having gentlemen who two years ago sat on the front steps bemoaning the denial of a 6-cent fare petition coming around and saying, "We need some temporary relief to get us past the exorbitant coal price era, but we want to hold fast to this five-cent fare."



HIGH-VOLTAGE FEEDER OF MUNICIPAL LIGHTING COMPANY PASSES OVER CABLE BOX SEAT OF TELEPHONE COMPANY WITH CLEARANCE OF ONLY 6 IN.

Five symptoms of the disease were diagnosed as follows:

1. The company was not collecting its earned revenues.
2. The value of petitioners' property did not warrant its financial obligations.
3. A sinking fund for the retirement of bonds with bonds was still drawing interest as well. Payments to the sinking fund, and payment of interest on bonds held in the sinking fund, were amounting annually to almost \$200,000 of money that was badly needed for property and service.
4. Local social and industrial activity was not normal, due to the war, hence traffic was abnormal.
5. A superimposed holding and operating company.

The prescriptions issued included the following:

1. Elimination of unwarranted financial obligations.
2. Elimination of a holding company, and, incidentally, the elimination of absentee landlordism.
3. Awakening to the fact that the short haul passenger is the profitable passenger.
4. Collection of earned revenues, largely by the introduction of pay-as-you-enter cars.
5. Calculating the subnormal traffic during the war and correct forecasting of increased volume of traffic after 1918.
6. A healthy spirit of co-operation.
7. An intelligent handling of the whole situation by the city.
8. Better public relations.
9. After the financial structure is recast, and the face value of securities represent, and are warranted by, values of property put to public service, those financial obligations must be protected.

It may be asked why the popular remedy known by the "service-at-cost" label was not prescribed. The pos-

sible merits of this prescription in its many varied forms were very carefully studied and analyzed by representatives of the commission, the city and the railway corporation, all enthusiastic indorsers of the newly heralded panacea for all ills. After a thorough investigation of many of the systems in operation and the formulation of a new plan which seemed to eliminate many of the objectionable features of those already adopted, the whole proposition was tabled upon the initiative of the city in favor of other remedies previously noted.* It was felt, in brief, that incentive would be lacking and that increased costs of operation would be too readily accepted with the feeling that such burdens might be passed on to the public in the form of higher fares. "Service at cost," as ordinarily defined in practice, was therefore not recommended by the commission for Indianapolis. In fact, that approximation toward service-at-cost rates involved in the coal clauses of many light and power rates as well as in railway fare decisions has been avoided by the Indiana commission except in cases where the cost of coal represents but a small portion of the total operating expense.

The Indiana commission points to the fact that in cases of commission regulation of utilities, where the commission is really unbiased and in which it makes a careful study of valuations and operating costs and establishes a rate which provides for a reasonable return upon fair valuation over and above operating cost, depreciation and taxes, it really is putting in force a service-at-cost principle without the objectionable features as ordinarily administered by the utility.

The Indiana Public Service Commission, as in the case of several other state commissions, is just at present undergoing severe attacks in the Legislature, which is now in session. The outcome is, of course, problematical. As was said by one interested party recently, "We believe we must have been very nearly correct in our decisions, for we have critics in the ranks of both utilities and consumers." However that may be, the present Indiana commission has not suffered, apparently, from participation in politics and it has established conditions in most communities which will be recognized by the careful student of public service relations to be just and equitable.

Activities of the American Engineering Standards Committee

AMONG a number of specifications submitted to the American Engineering Standards Committee for approval, in accordance with the special provision in the procedure of the committee under which important standards in existence prior to 1920 may be approved without going through the regular process followed in new work, the American Society for Testing Materials has submitted several, including the standard method for sampling coal. The National Fire Protection Association has submitted the "National Electrical Code" for approval as an "American Standard." The Bureau of Mines has suggested, among others, its "specifications for storage battery locomotives—schedule 15—as a tentative American standard."

The Standards Committee has compiled a list of engineering standards of foreign countries, which are on file at the office of the committee, 29 West Thirty-ninth Street, New York City. They can be consulted there or photostatic copies can be furnished by the committee.

*See ELECTRIC RAILWAY JOURNAL, Nov. 13, 1920, page 1025.



MANHOLE MOVED BY UTILITY AT A COST OF \$2,000, AS RESULT OF STREET DEVELOPMENT FIFTEEN YEARS AFTER INSTALLATION. ILLUSTRATION OF "SUPERSEDECENCE"

This Is the Second of a Series of Articles on the Report of the Federal Electric Railways Commission, Written by a Commissioner

Will the Electric Railway Industry Respond to the Vision of Its Present-Day Leaders?

A Forward-Looking Policy by Electric Railway Companies Is Essential—The Public Will Insist Upon Receiving Adequate Service at Lowest Attainable Cost, Consistent with Highest Efficiency—To Gain Public Approval the Companies Must Eradicate Conditions Which Constitute Injustice to the Public Interest

By LOUIS B. WEHLE

Formerly General Counsel of the War Finance Corporation;
Member of Federal Electric Railways Commission

IT SEEMS to me that the most favorable sign for the electric railway industry in the United States today is that, in its struggle against financial prostration and municipal ownership, it has turned for leadership to a traction man who is generally understood to be sympathetic toward the public's principal grounds for criticism. Mr. Gadsden, the new president of the American Electric Railway Association, has done more than sympathize with public critics of the industry. He has had enough statesmanship to co-operate with those critics and to interpret them plainly to his own economic group. His work in originating and pushing the idea of a Federal Electric Railways Commission, his labors on that commission, and his more recent public activities would justify us in characterizing him—using the term in its best sense—as a real political leader.

"JUST AND STABLE ARRANGEMENTS WITH A FRIENDLY PUBLIC"

Why is the leadership of the electric railway industry today in its essence a political leadership? Because the electric railway industry does an economic-social business—the people's business. In the long run the people will certainly impose upon the street railways, if they continue to use them, their purpose that those railways shall be run at the lowest attainable cost consistent with the best service to the city's social needs and consistent with the highest efficiency. That purpose they will impose through law. The man who is today guiding the policies of the electric railway industry is dealing with the thought of the public,



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LOUIS B. WEHLE

has in mind necessarily the laws which can be framed by it to regulate his industry, and is, therefore, in a very certain sense a political leader. To borrow a phrase from the Federal Electric Railways Commission's report, Mr. Gadsden and his associates are concerned today by economic adjustments, essentially political, with improving the financial credit of the electric railways of the country "through just and stable arrangements with a friendly public."

The arrangements with the public must be just and they must be stable if the financial credit of the electric railway industry is now to be strengthened with any permanency. The winning of higher fares does not in itself furnish any real solution to the industry's long-range problem, because high fares cannot prevent—rather do they tend to stimu-

late—local public agitation which might quickly impair or destroy a company's credit. Nor does the introduction here and there of varying plans bearing the "service-at-cost" label solve the difficulties. The leaders within the industry itself, and within the separate traction systems all over the country, should quickly eliminate, wherever they exist, those deeply rooted evils which today remain as irritants to public opinion. It is not enough that those evils, frequently due to public as well as to private neglects in the past, will in due time under present or future laws be abolished by public service commissions. If the industry is really to be saved to its owners, they must, it seems to me, follow those few leaders in the industry who are courageously advocating a drastic housecleaning. Ar-

rangements which are just will necessarily be stable because they will create a permanently friendly public, immune from the demagogue, upon whose laws and mental attitude long-term financial arrangements can with confidence be carried through under private ownership and management.

HOW CERTAIN LEADERS IN THE INDUSTRY WOULD CREATE A FRIENDLY PUBLIC

The question is whether the leadership of men like Mr. Gadsden and General Guy Tripp in the electric railway and allied industries is going to be seriously followed by the industry. These men see into the future. I think they see the heavy drift toward municipalization, and realize that real reforms within the industry, promptly and spontaneously made, can alone save it from engulfment in

the experiment of public ownership, an engulfment in which the large and the small stockholders and bondholders, the owners of the property, may fare none too well at the hands of a public perhaps half informed or strongly prejudiced, and itself thus not capable of entire fairness.

In his testimony before the commission, at a time when prices were still moving up grade, General Tripp said in effect that the valuation of street railways for rate-making purposes should be made upon the basis of actual money which has gone into the property itself.

In the unanimous report of the commission, Mr. Gadsden and Mr. Beall, the latter a member of one of the largest investment banking firms concerned with traction investment, joined in expounding the seven following points, among others:

1. That "holding companies in many instances have been responsible for overcapitalization and have insisted upon drawing from the underlying companies every possible cent that could be secured, in order to make a showing on these inflated securities."

2. In many cities consolidations have resulted in underlying companies receiving guaranteed fixed returns which are excessive and "have greatly diminished the net operating revenue, and that there can be no satisfactory solution of the street railway problem in such communities until the system has been valued as a whole and the accounts so kept that the public may know that the rate of fare paid yields no more than a fair return on the value of such property."

3. The finding of the fair value of the property for rate-making purposes is a prerequisite for the permanent solution of the electric railway question. "The rapid increase in the cost of labor, supplies and material during and subsequent to the war period seems to have served as a peculiarly vivid indication that the original cost is a primary factor in finding value for rate-making purposes."

4. "The valuation, when once fixed as the basis for the financial return of the company, should logically come to affect the amount of capitalization. No matter what may be the plan of operation or of public regulation under which the company is working, if its financial credit is to be strengthened through just and stable arrangements with a friendly public, it should, in the judgment of this

commission, voluntarily reduce any excessive capitalization to conform to such valuation as may have been determined upon."

5. "The electric railways should adopt the policy of setting aside a depreciation fund with which to take care of replacements and thus preserve the integrity of their investment. It would have a very wholesome effect upon credit. Such has not been the practice in the past."

6. Such rentals and power rates as would on investigation prove excessive should be reduced.

7. Serious co-operation should be effected in the protection and in the preservation of all corporate, financial and cost records with a view to their being available in connection with a fair valuation of the property. Without these data the public will tend to be suspicious of any appraisal which might be made, and "the failure of a company to preserve its records may in the end hurt its stockholders more than it may the public."

SELF-DECEPTION AND MUNICIPAL OWNERSHIP

The ELECTRIC RAILWAY JOURNAL circulates mostly in the electric railway family. The family is a place where there is generally plain talking, and I hope I may be pardoned if I do some plain talking here. In all candor, I ask whether the owners of the industry will now uphold these present public leaders of theirs and will now undertake seriously to follow the suggestions in the commission's report which have just been reviewed, or whether, by selective emphasis upon the features of that report which are more palatable, they will follow the illusory route of least resistance, the path of self-deception. Where is the sustained publicity within the industry for the ideas of voluntary reduction of excess capitalization, for valuation with original cost as a primary factor, or for reduction of excessive rail or power rentals? Where are the companies that are voluntarily undertaking to carry those ideas into effect?

Because of dangers incident to public ownership and management of street railways, I believe in trying to maintain them under private ownership and management, if private ownership and public service can be made compatible. Most of our city governments have failed so seriously and so often in smaller problems that it would be, indeed, optimistic to trust their average ability to suc-

ceed today with this formidable one. The experiment of private ownership must be given some further trial before I should be willing to see our American cities risk the dangers of political demoralization and of public inefficiency involved in public ownership and operation by their governments, as generally at present constituted; but if municipal ownership were to sweep the country tomorrow as a political epidemic, I should not be so concerned for the future of municipal government or of public urban transportation as I should be concerned by the reflection that a naturally indulgent American public has been forced to take away from this great American industry the ownership and operation of its own properties because its managers have been unable to handle its problems with sufficient fairness and ability to be allowed to hold them.

If those reforms which have been summarized above from the report of the Federal Electric Railways Commission should be applied spontaneously and persistently under the leadership of such men as seem now to be the public spokesmen of the electric railway industry, we may attain such a balance between private claim and public right as will prolong the life of the industry under private management. But if the public should, after such an effort at adjustment by the managements, still fail to receive adequate service at the lowest obtainable cost consistent with high efficiency, then municipal ownership would be the next logical step; and, if it comes at such a time, it would probably be effected with far less incidental injustice to the owners of the industry than would attend such a process of change today. Furthermore, if it comes under such conditions, it will be at least possible for us to know that it comes rather as the inevitable operation of a basic economic principle at work in connection with all public service than as a result of the inability of Americans to adjust their financial differences by dealing fairly with one another.

Summarizing the situation, I should say: Increases in fare have in many cases been, and in still other cases doubtless would be, justified. Much is to be expected from an honest and able administration of a well devised service-at-cost plan, if one can be evolved which will really insure efficiency. There are cities in which extensions of rapid transit and subway can be paid for, either

wholly or in part, out of special assessments upon enhanced property values, so that the carfares can remain low and so allow the cities to avoid congestion, while at the same time securing justice to the old investors in the property. In many cities the companies are unfairly burdened with obligations to pave and maintain streets and way-bearing structures—burdens which go beyond what should be called for by the companies' proportionate use of the highways; and these injustices should be removed.

Furthermore, to the extent that the railway properties through comprehensive regulation and control come in the future to be public instrumentalities, instead of free means of private profit, they should be correspondingly relieved from property and franchise taxation until their contribution in taxes comes to be only enough to reimburse the city for its actual costs primarily referable to the presence of the street railway.

But these forms of relief for the companies and these changes in the

technique of management or of regulation, approved in the commission's report, should, as was implied by the commission, not be attained, nor would their attainment permanently establish the credit of the industry as private enterprise, unless the managements in the industry will eradicate from it such conditions, where they exist, as now constitute injustice to the public interest, and will insure the public against future injustice.

It is a splendid challenge to American ability.

Transit Representatives Meet

The Association of Public Representatives of Urban Transit Hold a Conference at Cleveland at Which Various Topics Connected with Transportation Are Discussed. Particularly the Working Out of Service-at-Cost Contracts

AT THE call of President Culkins, the Public Representatives of Urban Transit met at the Hollenden House, Cleveland, on Tuesday, Jan. 25, to discuss intimately the problems that affect them—more particularly those that are arising in the working out of service-at-cost contracts. The meeting proved so interesting that the delegates were unable to accept the invitation of the Cleveland Railway to go over parts of its property. Those in attendance were the following: W. C. Culkins, Cincinnati; Charles R. Barnes, Rochester; Colonel J. L. Wickes, Baltimore; W. L. Sause, Youngstown; Judge Fielder Sanders, Cleveland—all of whom represent the cities named as street railway commissioners or directors; R. F. Kelker, Jr., Board of Supervising Engineers, Chicago Traction; Arthur F. Blaser, chief engineer to Judge Sanders; J. W. Leadley, manager Cleveland office Parsons, Klapp, Brinckerhoff & Douglas; Walter Jackson, Mount Vernon, N. Y., and a generous delegation from the Cleveland Railway, including J. J. Stanley, president, who acted as luncheon host; H. J. Davies, secretary and treasurer; Charles H. Clark, engineer maintenance-of-way, and Paul E. Wilson, assistant to the president. The presence of the Cleveland Railway men was particularly welcome because of their experiences with and viewpoint of service at cost based upon ten years of operation under the Tayler agreement.

THE RECENT FALL IN TRAFFIC OPERATING EXPENSES

The first subject taken up was that of recent reductions in riding and what means could be adopted to offset same, either in cutting costs or promoting voluntary traffic. Colonel Wickes noted that during the past month Baltimore travel had fallen 60,000 a day, chiefly in the movement to and from factories. Judge Sanders stated that Cleveland had already begun to cut off mileage on factory routes. Studies were also under way to do the same on residential lines. About two weeks were required to work up new schedules. At the end of 1920 daily car-miles were about 7.5 per cent in excess of the preceding year, but by Feb. 15 the standards of 1919 will be in force again. As to wages, there had

already been a cut of 10 per cent in the case of the trackmen and shopmen, who are unorganized. The unionized platform men, however, have a contract good to May 1 unless they choose to accept a lower rate—possibly a reduction of 20 per cent. At luncheon Mr. Stanley said that Cleveland had begun by cutting the salaries of the general officers first.

Discussing Rochester traffic, Mr. Barnes reported that although factory travel had dropped as the result of a thirty-day to sixty-day shutdown, the shopping and pleasure traffic had not yet suffered in the same degree. Mr. Sause added that Youngstown had reached the point of cutting out trippers.

There followed a general discussion of operating and total costs, including accident expenses. Mr. Culkins mentioned the remarkably low figure of Cincinnati, approximately 2 per cent of revenue during recent months, compared with about 8 per cent in Cleveland. Mr. Kelker pointed out the value of co-operating with the National Safety Council.

THROUGH ROUTES OR TURNBACKS

There was a divergence of opinion on the age-old subject of turning back from or going through the congested delivery districts. Some held the opinion that the cars should be turned back outside the district and let the passengers walk several blocks if necessary. Others held that through service, particularly where the loads on opposite sides balance, was preferable. Nevertheless, two firm deductions could be drawn from this discussion:

First, the longer the through line the greater the distortion of headways and consequent impairment of service and waste of mileage.

Second, the lack of flexibility of single-end cars when turnback points have to be changed and there is an absence of sufficient loops.

PAY-LEAVE AND STREET COLLECTORS SPEED LOADING

Mr. Culkins said that partial pay-leave operation at Cincinnati had greatly relieved congestion even though the company had not taken advantage of this innovation to secure higher schedule speeds. Judge Sanders noted

that in Cleveland the short riders had gradually acquired the habit of getting up to the farebox quickly instead of mauling their way through the whole length of the car when they wanted to get off. At one factory a man was stationed to sell the 1-cent transfers on the prepayment plan, thus speeding up pay-leave operation.

PERCENTAGE OF TICKETS SOLD—ONE FARE BEGINNINGS

With the present 6-cent cash and nine for 50-cents ticket fare 67 per cent of Cleveland fares are tickets. The highest Cleveland percentage, 92 per cent, was in the 3-cent days when tickets were sold five for 15 cents and the cash fare was either three pennies or 5 cents straight. Mr. Culkins reported that with 9-cent cash and 8½-cent tickets two to a strip the Cincinnati percentage was now 86 to 87 per cent; with 7-cent and 7½-cent fares it had been about 70 per cent. Rochester's four-strip ticket, said Mr. Barnes, covered 62 per cent of the rides. As for Chicago, the ticket percentage was negligible, said Mr. Kelker, although the cash fare on the surface lines is 7 cents while tickets are sold for 6.5 cents on the basis of ten for 65 cents and for 6 cents on the basis of fifty for \$3. There seemed to be a fear of losing tickets which kept the public from buying them, and very few bought tickets in lots of \$3.

Colonel Wickes brought up the question of what to do with annexed communities which lay claim to the prevailing flat fare. Judge Sanders observed that in Cleveland a beginning had been made in making the longer riders pay for the additional service. Southeast Cleveland was paying 8 cents and in the south end the fare was 5 plus 6 cents. Mr. Sause said that the village of Poland was now paying 5 cents in addition to the 9-cent fare in Youngstown itself. Not long ago, with the 8-cent fare in force, the Polanders were getting 8 miles, but they realized the injustice of paying no more than the people of Youngstown, whose ride was on the order of 3 miles.

SHOULD FARES BEGIN TO GO DOWN?

The need of electric railways for more revenue in contrast with the falling purchasing power of the street car user was naturally a matter of lively discussion. Mr. Stanley was most outspoken in his statement that he did not want to see the Cleveland fare go beyond 6 cents, although the balancing fund was rapidly diminishing. As the wages of the public were being cut it was essential that street railway men's wages would have to be cut too so that fares could be kept down instead of being forced up.

Mr. Stanley figured that the Cleveland system was carrying one and one-fourth times the population daily and that the average length of ride was 2.38 miles. Mr. Barnes placed Rochester's riding habit at practically unity.

ONE-WAY VERSUS TWO-WAY STREETS; NO PARKING

Colonel Wickes stated that because of the traffic saturation of certain Baltimore streets he had suggested to the railway that some streets be turned into one-way traffic for all vehicles, with one track reserved for local cars and the other for through cars. He had calculated that the express cars would attain 30 to 40 per cent greater speeds.

Mr. Kelker mentioned that Chicago was seriously

considering an ordinance which would prohibit parking in an area of 1¼ x ½ miles. He had proposed the segregation of certain streets for vehicular traffic and of others for car traffic. Mr. Culkins brought up the desirability of sometimes giving up one track on one-way streets.

In Cleveland, said Judge Sanders, automobile parking on the loading side of Euclid Avenue—the great east-west thoroughfare—had been abolished up to Twenty-second Street during the rush hours. Because of the peculiarities of the street layout downtown automobilists would find one-way streets extremely annoying. For this reason the Cleveland Automobile Club opposed the idea. The club had made an elaborate study of traffic conditions in other cities, which study was available on application.

As regards the number of people served where automobiles are most plentiful, it appears that in both Chicago and Baltimore the average number of occupants per machine was only two. Therefore, there could be no question about their wasteful use of street space, whether running or parked.

SERVICE-AT-COST AND REVENUE EXPERIENCES

From the intimate and highly valuable discussion which followed as to results with service-at-cost franchises it was obvious, as Mr. Culkins said, that the spirit of co-operation was more important than the letter of the contracts. In discussing fare increases made under the Cincinnati plan he said that every one-half-cent increase was supposed to bring \$55,000 a month more, but actually the increase averaged but \$18,000. The first fifteen days of January, 1921, excluding Jan. 1, compared with the first fifteen days of October, excluding Oct. 1, showed \$200 a day less with 9-cent cash and 8.5-cent tickets than with 8 cents cash flat.

Cincinnati's allowance for administering service at cost is \$17,000 per annum, and this comes out of the city's treasury. Rochester's \$30,000 is an operating charge. Cleveland's \$60,000 is also charged against the railway, but part of this covers checking services which the railway would require in any event.

It was Mr. Sause's experience that the operating allowance per car-mile was one of the most troublesome features of existing service-at-cost contracts. Too often expediency had to govern in seeking alterations in allowances for a matter that actually cannot be calculated far ahead. Mr. Culkins believed that the budget systems of Boston and Cincinnati were an improvement in this respect. Mr. Barnes urged that greater stress be placed upon relieving the railways from city taxes, where feasible, in preference to increasing the fare.

A most instructive feature of the meeting was Mr. Davies' analysis of the forthcoming annual report of the Cleveland Railway, which embodies a review of ten years of the Tayler plan of service at cost. His analysis and answers to the questions raised were much appreciated.

On the lines of the Interborough Rapid Transit Company there are eight stations built on curves, so that there is a space between the car platform and the station platform. From 1911 to 1919, inclusive, there have been 5,559 claims for accidents due to the existence of this space, and in the settlement of these claims the Interborough Rapid Transit Company has paid \$560,271.

Canadian Railway Men Meet at Ottawa

At Rousing Convention of Canadian Electric Railway Association Safety, Traffic Regulation, Safety Cars and Service at Cost Were Discussed—
G. Gordon Gale of Hull Was Elected President

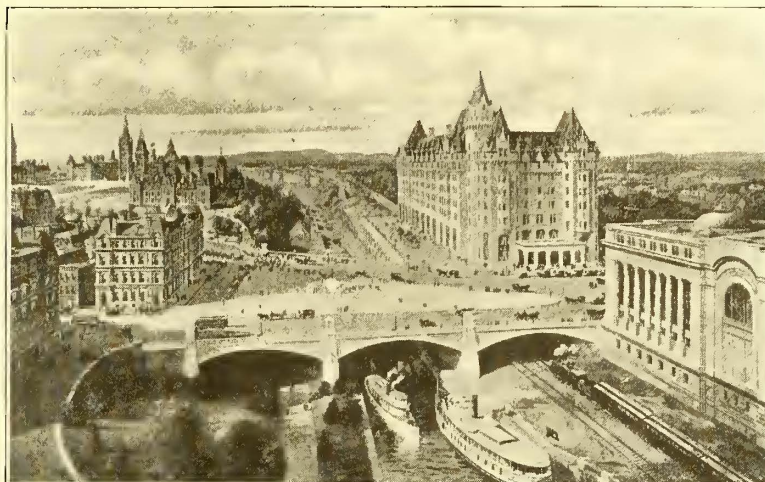
THE seventeenth annual convention of the Canadian Electric Railway Association was held at the Château Laurier, Ottawa, Ont., on Jan. 31 and Feb. 1. The attendance was more than 100. Arthur Gaboury, president of the association, presided, assisted by G. Gordon Gale, vice-president. The opening address was one of welcome by Hon. Frank Plant, Mayor of Ottawa. He described some of the features characterizing the city as the capital of the Dominion and referred humorously to its desire for municipalization of the street railways as a sign of progressiveness, or, in the minds of some people, as a sign of over-progressiveness. He showed a spirit of real interest in the traction problem.

A. Eastman, Kingsville, Ont., acting honorary secretary-treasurer, read the minutes of the preceding convention, referring particularly to changes in the constitution and by-laws. After the reading of the president's address, Mr. Eastman also read his report as treasurer, showing the association to be in flourishing financial condition. He also tendered his resignation.

PRESIDENTIAL ADDRESS

In his presidential address Mr. Gaboury, superintendent Montreal Tramways, welcomed the delegates to the seventeenth annual convention of the association and said that for the first time in its history it had invited others than its own immediate members to attend. He was pleased, he said, to note representatives from the municipally owned railways as well as from industries closely allied with the electric railway business. He then explained that at the last annual meeting and at meetings of the executive committee it had been decided to enlarge the association to embrace all electric railways, and that it was the hope of the members to make the association second to none on the continent.

He then said that the industry during the past few years had been called upon to face the most critical test in its existence, and now is the moment when "united we stand, divided we fall" is more applicable than ever. He then referred to the papers which had been scheduled for presentation at the meeting, mentioning each individually, and gave an explanation of the reasons which led up to the preparation of his own paper, which, he said, was being presented through the courtesy of a committee of the American Electric Railway Association.



CIVIC CENTER OF OTTAWA, WITH PARLIAMENT BUILDINGS AND POST OFFICE AT LEFT, UNION STATION AT RIGHT, CONVENTION HEADQUARTERS AT RIGHT CENTER

Traffic rules, he said, are above all necessary for the convenience of the traveling public and in consequence should help the quick movement of the street car and its passengers. In conclusion, he extended his thanks to the other officers and executive committee of the association for their cooperation during the year. Following the presentation of Mr. Gaboury's presidential address a nominating committee was ap-

pointed to report on Tuesday, as follows: W. J. Radford, Toronto; F. S. Livingston, Toronto; J. M. Ahearn, Ottawa; H. E. Weyman, Levis.

G. Gordon Gale then explained the changes, made and proposed, in the constitution and by-laws, caused mainly by the retirement last year of Acton Burrows from the post of honorary secretary-treasurer after fourteen years of service. There will now be an elected treasurer, a secretary to be appointed by the president and an auditor. There will, as before, be both honorary and active presidents and vice-presidents.

Mr. Gale then presented a set of "Proposed Rules for Installation and Maintenance of Electrical Supply and Signal Lines," prepared by the Hydro-Power Commission of Ontario and submitted for criticism. These were referred to a special committee to be appointed.

Mr. Eastman then read a large number of expressions of regret at inability to attend, showing improved interest in the meeting. He also reported that a number of manufacturers are joining the association, as they are privileged to do this year for the first time. These pay an annual fee of \$50.

The question of providing for individual membership was also raised, there being some demand for this grade. After discussion the matter was left to the executive committee for appropriate action.

Monday Afternoon Session

In opening the afternoon session President Gaboury introduced H. H. Couzens of the Toronto Transportation Commission as a representative of the municipally owned lines. Mr. Couzens deplored the antagonism which exists between those who advocate respectively public and private ownership and operation. There should be, he said, no differences of opinion at any rate between the men who operate the properties.

D. M. Campbell, of Donald M. Campbell Company, car builders, was then called upon as a representative of

the supply men. He expressed appreciation of the new relation of the supply interests to the C. E. R. A., and said that a meeting of their representatives would be held later in the day to make plans for future co-operation with the association.

A. B. Ingram of the Ontario Railway & Municipal Board then told of the work of this board, the rulings of which, he said, are not always popular. He stated further that there is a fine field ahead for the association and that the fact that the publicly owned roads

It will be seen that during the three months from Sept. 1 to Nov. 30 there has been a margin of revenue over expenses, although there is a considerable shortage resulting from previous operation at the lower rates of fare to be made up. It is hoped, general conditions permitting, that this shortage can be gradually made up without the necessity of any radical increase in the present rate of fare.

Supplementing the paper Colonel Hutcheson gave data showing the present distribution of the varieties of fares in Montreal. Only 3.74 per cent of the patrons pay cash; 76.21 per cent pay 6½ cents (four tickets for a quarter); 17.7 per cent use 6-cent tickets; and 2.35 per cent use school tickets (seven for a quarter). He also exhibited diagrams showing the income and itemized expense by months over the service-at-cost period. He said also, in answer to a question, that the company is having difficulty in raising money, but that by paying much more for it than the rate allowed by the franchise the urgent requirements are being met.

The paper brought out a lively discussion in which the leading spirit was Dr. L. A. Herdt, vice-chairman Montreal Tramways Commission. He gave the point of view of the public with respect to the service-at-cost franchise, stating that the question is now public operation versus private operation under public control. He said that in Quebec there are no publicly operated railways, and traced the history of the commission, which serves as a means of co-operation between public and railway and permits the operation of the property by well-trained railway men.

Referring to Colonel Hutcheson's compilations he pointed out that in ten years the average actual fare in Montreal had increased from 4.03 to 5.62 cents, or 40 per cent; the revenue per car-mile from 29.8 to 47.1 cents, or 60 per cent, and the operating ratio from 56.2 to 75 per cent, while the net earnings for fixed charges decreased from 1.76 per car-mile to 1.4 cents, or 20 per cent. He said that under the present arrangement schedules are much more flexible than under earlier franchises, dead mileage has been cut down and schedule speed increased from 7 to 10 m.p.h.

Further the number of passengers per car-mile has been increased from seven to 8.7 per car-mile, and in January and February, 1921, the income has been 57 cents per car-mile. These results are possible because the cars are found where and when they are needed, and because there is co-operation between the railway and the commission. Conditions are met as they arise.

As to depreciation and maintenance, Dr. Herdt said that the property is maintained in good condition, which is equivalent to allowing for depreciation. In answer to a question as to the company's incentive to keep up the property, he pointed out the company owns the property, hence wants to maintain it. The operating bonus is an incentive to efficient operation because the company must keep within the operating allowance to obtain it.

The practical working out of the plan is seen in the fact that whereas the city of Montreal appealed to the Quebec Public Utilities Commission against the earlier fare increases, this was not done when the last raise was made. The city has learned to trust the Tramway Commission.

In closing the discussion, in answer to a question, Colonel Hutcheson said that the tramways employees feel that the rental paid to the city ought to go to them. He also commented upon the remarkable make-up of

TABLE I—SHOWING FARES—MONTREAL TRAMWAYS

Period	Cash Fare (Cents)	Tickets Good 5 A.M. to Midnight	School Tickets Good 8 a.m. to 6 p.m.	Cash Fare After Midnight (Cents)
Feb. 9, 1918, to Oct. 3, 1918	5	6 for 25 cents 25 for \$1.00	10 for 25 cents†	10
Oct. 3, 1918, to Oct. 26, 1919	6	5 for 25 cents* 6 for 25 cents*	7 for 25 cents	15
Oct. 26, 1919, to Sept. 1, 1920	7	5 for 30 cents 44 for \$2.50	7 for 25 cents	15
Sept. 1, 1920, to date	7	4 for 25 cents 50 for \$3.00	7 for 25 cents	15

* These tickets were good between 5 a.m. and 8 a.m. and between 5 p.m. and 7 p.m., Sunday excepted.

† These tickets were good from 5 a.m. to midnight, Sundays excepted.

Note: Strip tickets sold on cars. Book tickets sold only at offices of company.

are joining augurs well for the future. There must be "give and take" between the privately and publicly owned railways.

MONTREAL SERVICE-AT-COST-PLAN

J. E. Hutcheson, general manager Montreal Tramways, then read a paper on the Montreal Tramways' service-at-cost contract, giving the results of two years' operation. He said in his introduction that the city of Montreal had increased in area from 9 square miles and a population of 216,000 in 1892 to 50.24 square miles and a population of 800,000 in 1917. During this time a number of small neighboring municipalities were annexed, and this brought demand for extensions and improved service from the tramways. As the city did not have a contract to call upon the company to build these extensions, negotiations were begun between the two, and in 1917 the Legislature appointed a commission of five to study the subject. This commission recommended service at cost, and a contract was made between

TABLE II—COST OF SERVICE DURING DIFFERENT FARE PERIODS

	1st Period	2nd Period	3rd Period	4th Period
	Feb. 10 to Sept. 30, 1918	Oct. 1, 1918, to Oct. 31, 1919	Nov. 1, 1919, to Aug. 31, 1920	Sept. 1 to Nov. 30, 1920
Length of period (mos.)	7*	13	10	3
Passenger earnings...	\$4,771,662	\$9,706,968	\$9,303,154	\$2,907,095
Gross earnings	4,873,931	9,892,525	9,491,085	2,988,859
Total charges	5,449,034	11,036,110	9,531,278	2,898,486
Balance	\$575,103	\$1,143,585	\$40,193	\$90,373
Revenue passengers carried	116,571,723	201,919,820	159,030,043	47,741,940
Car earnings per passenger	4 09c	4 80c	5 85c	6 09c
Cost of service per passenger	4 68c	5 49c	5 99c	6 07c

* Deficit.

the city and the company and became effective on Feb. 9, 1918, for a period of thirty-five years.*

Since the adoption of the contract there have been three fare changes. Colonel Hutcheson then presented a series of tables from which the two that accompany this article were compiled, showing the fares charged during the four periods, passenger earnings, revenue passenger, car earnings per passenger in each period.

* The terms of this franchise were described in a paper read by Mr. Hutcheson at the 1919 convention of the American Railway Association (see Report Number ELECTRIC RAILWAY JOURNAL, Oct. 11, 1919, page 24).

the Ottawa convention, comprising as it did representatives of municipal and provincial commissions, chiefs of police, supply men and other guests in addition to the railway men themselves.

The papers by Messrs. McCune and Weyman were then read by the authors, who illustrated them with lantern slides and motion pictures. Discussion was postponed to Tuesday.

WHY THE SAFETY CAR HAS SUCCEEDED

Mr. McCune prefaced his paper on the safety car by saying that the figures on this subject are of ample scope to enable a speaker to point out the numerous meritorious features which characterize safety-car operation and which have enabled rich financial returns to be obtained. Moreover, he can support his arguments with convincing data obtained from actual service in many cities. He defined as a "safety car" a car which is equipped with automatic laborless apparatus so interlocked that regardless of illness or distraction of the operator the power will be cut off instantaneously, the air brake and sander will be applied immediately thereafter and the doors will unlock for safe and easy exit of passengers.

Again, a car is a safety car only when the doors must be closed and the steps folded before it can start and when the air brake must be applied before the doors are opened and the step lowered in bringing the car to a service stop. This definition does not in itself specify the structural features of the car and does not preclude any car from becoming a safety car if the proper apparatus is applied. Mr. McCune said, however, that as the term "safety car" is generally used and as he used it in this paper it applies more especially to the car of the Birney type, which has been placed in service in large numbers within the past four years.

After describing briefly the general physical characteristics of the car, Mr. McCune said that at the end of 1916 there were some 400 safety cars in operation, and by the end of 1920 the number had increased to more than 3,000. This development was due to the following facts: About the time of the war the financial condition of the electric railway industry was impaired, due chiefly to the large use of the automobile, both by individuals and as a passenger-carrying bus. The situation was further complicated by the increases in cost of materials and labor. The effect was cumulative because the unprecedented increase in operating costs interfered with the securing of money for capital expenditures, thus managements were unable to make those improvements in service which would have resulted in an increase in the number of passengers carried. The situation thus resulting urgently required some relief, which was afforded in large measure by the adoption of the safety car.

Until it had been designed, the tendency in construction had been toward larger cars, the design of which was based primarily upon the necessities of rush-hour traffic. As early as 1914 it was recognized that the non-rush hour traffic constituted the larger part of the traffic of an electric railway, and that possibly an increase in net earnings would ensue if the car design applied more particularly to this class of service. Evidently the type of car especially suitable for this service is a small car of light weight. The savings possible then became immediately obvious. Moreover, it naturally followed that as the contemplated car would be small and light, it would be entirely practicable to entrust its operation

to one operator, who would materially increase its earning power on account of the reduction in platform expense.

A SUMMARY OF SAFETY-CAR DATA

Mr. McCune then went on to explain the details of the air-brake and safety-car control equipment, after which he summarized the report of the safety car operation committee of the American Electric Railway Transportation & Traffic Association, presented at the October, 1920, convention. This report showed that there were in service or on order for delivery before Oct. 1, 3,750 safety cars, the total number of companies using these cars being 340. Of companies replying to a questionnaire sent out by the committee, four used safety cars in cities having a population in excess of 250,000, thirty-four used them in cities of less than 100,000 population and eleven used them in cities of from 100,000 to 250,000. The committee's report stated that in average cases of small cities or of lines in cities of any size where traffic is light or limited in amount, an average saving in operating expense could be effected by substituting safety cars, car for car, for existing two-man cars, of approximately 45 per cent in trainmen's wages, 30 per cent in maintenance of cars, 25 per cent in accident loss and 30 per cent in power cost. For the average system these savings aggregate about 20 per cent of the operating expense. No increase in gross earnings is expected in this case.

As to the rate of increase of purchases of safety cars, Mr. McCune said that in 1916 8 per cent of all city surface cars purchased were safety cars, in 1917 the figure was 20 per cent and in 1918, the last year for which he had statistics at hand, it was 40 per cent. Returning to the T. & T. Association report, he quoted the statement that in medium-sized cities, where base headways are between five and twenty minutes, it is almost universally the case that gross earnings can be materially increased by more frequent headways. For the companies reporting, an average of 40½ per cent increase was made in car frequency with safety cars, compared to former two-man cars, resulting in a reduction in gross earnings per car-mile of 0.93 per cent. The committee assumed a hypothetical case and from it derived an increase in net earnings of 7 cents per mile from a change from two-man cars to safety cars. Taking the case where there is no increase in headway, the saving per safety car per year based on 50,000 car-miles per year would be \$2,500. Where the headway was increased the saving would be \$4,500 per year.

In conclusion Mr. McCune said that the committee's report did not mention one feature which seemed to him of considerable importance, namely, the effect of safety cars upon capital expenditure. Where cars are purchased to give improved service by means of a reduction in headway, it is quite possible that the number of safety cars necessary will be no greater than the number of double-truck cars that would be required. In this case the expenditure will be considerably less, thus not only making it easier to purchase the cars originally but also reducing the interest charge. He then quoted from the report of the committee the following:

In general, the committee concludes that the safety car merits the attention of the industries to a still greater extent than hitherto. Its growth in numbers in the past four years from 400 cars at the end of 1916 to 3,000 at the present time has been remarkable, and the committee feels warranted in predicting that its application will be still further expanded in the near future. Reports of its suc-

cessful operation and of its appreciation by the general public come from widely separated localities and justify the feeling that there are very few, if any, local questions affecting its adaptability. Its success, which may therefore be safely predicted, will be evidenced by lower operating costs and a lower operating ratio, more frequent service and increased satisfaction on the part of those who ride the cars.

ADAPTABILITY OF THE SAFETY CAR TO CANADIAN SEVERE WINTER CONDITIONS

A paper on the above subject was presented by H. E. Weyman, manager the Levis County Railway, Levis, Que., who said that the line is single track with turn-outs or passing points, all on narrow streets and located on one side. The traffic is 20 per cent city and 80 per cent suburban, and there are three divisions, all radiating from the ferry landing, one going west to Quebec Bridge and two going east on the same line for three-quarters of a mile, then one turning south, going uptown. Before reaching this junction point there is some 300 ft. of 13½ per cent grade, with two curves on it, and the main road crossing the track twice on the grade. This being a dangerous place when cars are following one another, they have to wait about 400 ft. from the grade until the one in front has negotiated it. The uptown line rises 300 ft. in 2 miles, with average grades of .6 per cent, the maximum being 11 per cent for 1,200 ft. The system has numerous curves; some say there is but 10 per cent tangent track. In addition to this the winter conditions are the most severe to be met anywhere, including very heavy snowstorms with high winds. Continuing, he said in part:

In winter the ferry is on half-hour service and in the rush hours this throws some 400 people at us each trip. To take care of this we put on extra safeties following the regular cars, called double-headers; these turn back at about half way on each division, leaving the regular car to run to the terminus. Formerly we operated double-truck, 40,000-lb., 140-hp. cars and no extras, and these, of course, operated all day and ran to the terminus. We also had some single-truck cars on our uptown line. Naturally the double-truck cars were responsible for very heavy peaks on the power system besides heavy maintenance of track and equipment. With the safeties we have lowered our peaks and cut everything else in half incidentally providing better accommodation and service.

We probably investigated this type of car and its characteristics more thoroughly than most companies do, especially as we were told repeatedly by both Canadian and American railway operators that it could not operate under our conditions. Finally we decided to stand by the principles of engineering and ordered twelve Birney cars, specially fitted up for our climatic conditions. These cars have been in operation twenty months now and prove to be equal, if not superior, under snow conditions to the double-truck cars previously used. Moreover, we no longer haul 140 hp., 40,000-lb. cars around for twenty hours per day, filled only for five or six hours per day. The safety has remarkable tractive effort, which, together with the quick acceleration, permits the car to operate better under bad rail conditions than any other car. This was demonstrated only this month when our double-truck freight car and the sweeper had trouble with the wheels spinning, while the safeties had no trouble. Some years ago we used, more or less, to permit our cars to buck the snow, with the result that our equipment was finally burnt out. After that we decided to fight the snow with snow equipment only and

soon found we were much in pocket. Naturally we do the same with the safeties, and although they have once or twice bucked the snow without trouble we do not permit it to be done if avoidable.

Our railway system is by no means an ideal one to show what the safety cars can do, but their showing on the uptown line might be of interest. From the center of uptown to the ferry is three to five minutes' walk, up or down the cliff, while it takes the cars fifteen minutes to arrive at the same point, which they do by a circuitous route. In spite of two raises in fare to 10 cents cash, and tickets 7½ cents each, and no increase in the headway, although three safeties replaced four old cars, giving a little faster schedule speed, we average 25 per cent increase in revenue passengers. When we put the safeties into operation we put in force regular inspections at 1,500 miles, special inspections at 10,000 miles, when oiling and greasing are attended to, besides other work, and a yearly overhaul of everything. We also have a special accounting system, which gives us separate figures for new and old passenger equipment, snow equipment and details of the various apparatus comprising the car equipment. During a period of twenty months we have the following figures:

	Safety Cars, Cents per Car-Mile	Old Cars, Cents per Car-Mile
Car body and truck	0.873	4.08
Electrical equipment	0.154	2.34
Air equipment	0.133	0.63
Total	1.16	7.05

The figures for the safeties include certain expenses due to defects in the trucks, which have since been corrected by the car builders at their expense, and we no longer have this abnormal expense. Car inspection is included in both instances.

Some idea of the difference in costs of equipment parts can be gained from the following:

	Old Motor	Safety Car Motor
Armature coils	\$40	\$31
Set of field coils	178	57
Commutator	60	43
Armature complete	260	200
Gear case	30	21
Car wheel	15	10
Gear	57	40
Normal horsepower	42 (500 volt)	25 (600 volt)
Continuous capacity	30 amp.	35 amp.
Continuous tractive effort	330 lb.	600 lb.

Tuesday Morning Session

Vice-President G. Gordon Gale presided at the Tuesday morning session. The first matter taken up was a report from the supply men, presented by Mr. Campbell, who said that they had met, and endeavored to formulate plans for co-operation with the association. On the suggestion of A. Eastman, acting honorary secretary, it was decided to appoint a committee of three to co-operate with the executive committee. [The manufacturers later selected Mr. Campbell; H. T. Gibbs, Canadian Westinghouse Company, and O. C. Rehfuss, Canadian Steel Foundries.]

Discussion of Monday's safety-car papers was then proceeded with. H. L. Andrews, General Electric Company, gave a digest of data from a canvass made by his company, which showed the following cost data per car-mile as to safety and double-truck cars respectively: Maintenance of way, 1.6 and 3.3 cents; maintenance of equipment, 1.7 and 3.6 cents; power, 1.9 and 3.8 cents; transportation, 8.4 and 13.9 cents; general, 2.4 and 3.2 cents; total, 16 and 27.8 cents. The total saving

averaged 43 per cent. Of thirty-seven companies reporting 25 per cent increase in gross receipts had resulted from 37 per cent increase in service. Accidents for the safety cars were 0.39 per 1,000 car-miles as compared with 0.59 for the larger cars. It was estimated that 3,500 safety cars are saving the industry \$12,000,000 annually.

Mr. Gale asked as to the continued durability of the safety cars under Canadian climatic conditions. Messrs. McCune and Weyman replied that experience had shown them capable of standing up in severe weather, without increase in weight. Mr. Gibbs, speaking from the standpoints of both car rider and manufacturer said that in Toronto the reduced headway with the safety cars is greatly appreciated. Only a week's publicity was necessary to convince the patrons of the necessity for forming queues. [Here another speaker remarked that if a private company asked the patrons to form queues of the length sometimes reached in Toronto on the municipal lines there would be a vigorous protest]. There street men are used to sell tickets, collect fares at the rear door, dispatch cars and form queues. Pay-enter collection is employed at the front door. A recent estimate of the cost of equipping the present rolling-stock in London, Ont., with complete safety devices, showed that this cost could be wiped out in a year through the results which would follow.

C. C. Curtis, Cape Breton Electric Company, said that the standard Birney car, slightly modified for the very severe climate had operated well during the past two years on his property, as had also a couple of older cars equipped with safety devices. In Halifax, twenty-four cars bought a year ago and operated on the belt line have pleased everyone concerned.

Speaking as a car builder of long experience, Mr. Campbell referred to the alternating extremes of lightness and heaviness to which car designers have gone. He noted the increasing weights of the safety car designs and predicted a continuance of this tendency. He thought Americans rather inclined to fads and did not expect the Canadians to "fall for" the safety car so speedily. He said they are not a panacea for all railway ills, and in this Messrs. Curtis and McCune concurred, the latter stating that 1-man double-truck cars undoubtedly have a place. Mr. Andrews said, however, that the Ft. Worth, Tex., cars weighing 12,500 lb. had been operating for four years at a maintenance cost of 1.9 cents per car-mile. The average reduction in equipment maintenance expense is 51 per cent. Present cars weigh 16,000 lb. but there is a tendency to lower the weight by the use of stronger materials.

PUBLICITY AND PUBLIC RELATIONS

The paper on publicity, prepared by A. W. McLimont, vice-president and general manager Winnipeg Electric Railway, was read in the author's absence by Mr. Eastman.

Mr. McLimont, speaking of publicity methods, pointed out that he believed it the duty of every street railway manager to let the public know the facts about any phases of the street railway business on which information is desired: the company's problems should be laid before its patrons, as one business man presents a mutual problem to another, to obtain assistance in its solution; that the public should know the reasons why they are requested to pay an increased fare; that the railway as a vendor of transportation plays as important a part in society as any manufacturer, and that trans-

portation must be sold even as a manufacturer sells his product. The public is square, he said, and once people are induced to think and talk about street railway problems, their opinion will become a powerful factor, and the civic authorities will then give the street railways a squarer deal.

The right public relation, he divided into five parts, namely (1) cleanliness of equipment; (2) keep faith with employees and treat them fair; (3) be truthful; (4) all members of the organization must be good community citizens and must be "boosters," always working for the public good whenever possible; (5) determine how best the railway can serve the public.

These rules require proper publicity, which can be accomplished by seeing that (1) any statements given out either to the public or the press are truthful; (2) practice what is preached because proper publicity and right public relations go hand in hand; (3) lay the problem of the industry before all who are interested if a square deal is to be eventually secured, so that where the public is told that revenues are inadequate and unfair taxes have to be met by the car rider, they will understand what is meant.

As a means of accomplishing this desirable relation the Winnipeg Electric Railway, he said, hired H. C. Howard as publicity agent on March 1, 1918, and charged him with the duty of establishing and maintaining friendly relations with newspaper editors and reporters through personal contact. It was also his duty to prepare briefs for presentation and distribution to interested persons and organizations, make up poster announcements for the cars, edit for publication every two weeks an official organ "The Public Service News" for distribution through "take one" boxes on the cars, and lay out newspaper advertisements.

Considerable progress has been made toward better newspaper relations and the close relations together with accurate and reliable news are appreciated and the papers generally treat the company fairly. "The Public Service News" now has a general circulation of 40,000, which includes a mailing list of about 1,000, and has proved a powerful influence in bettering public relations. This organ endeavors to put before the public the operating and other problems of the company.

Car window posters have also been used to announce charitable entertainments or special sporting or other events in which the railway is interested as well as a series of drawings regarding the "jay walker" and other safety first matters.

Mr. McLimont believed that newspaper advertisements properly written and attractively set up, although expensive, afforded the best medium for reaching the members of a community. As an instance of this he outlined the plan recently followed when the city of Winnipeg attempted to start court action to upset the act of the Manitoba Public Utilities Commission increasing fares. This campaign so influenced local public opinion that the Mayor for 1921 was elected on a platform favoring round table discussion of the street railway problem instead of litigation. Even before election the mayoralty candidate made it clear that he favored granting the street railway a fare that would insure adequate wages to employees and enable it to procure necessary working capital.

The success which has been attained through publicity, he said, is not however fully explained unless mention is made of the weekly meetings of the heads of departments. At these meetings everybody is made to feel as

free from restraint as possible, so that frank discussion can be held of the difficulties that occur in the various departments. These meetings have brought better co-operation among departments through the men becoming better acquainted personally and more or less familiar with the workings of outside departments. It is large through such means that the Winnipeg company was able to increase its fares three times in the past two years and to have the jitney competition which seriously threatened to upset the whole railway operation, abolished. Moreover, there has been no disagreement with the employees of sufficient importance to warrant a strike; the only strikes which have occurred were in sympathy with outside workers and were not entered into through disagreement with the company.

In closing his paper Mr. McLimont said he was not pessimistic of what the future has in store, for he believed that proper publicity coupled with a sincere desire to give efficient service would prevent the railway industry from going to the graveyard where obsolete and bankrupt transportation systems rust.

DISCUSSION ON PUBLICITY

The discussion was opened by Major F. D. Burpee, manager Ottawa Electric Railway. He referred to good public relations as the panacea for the troubles of the electric railway, in other words to the essentiality of good-will. Good advertising is the best means for inaugurating new ideas. In the past the public has been hostile to the electric railway on the assumption that the public was the "under dog." The facts must be presented, and in doing this the employees must play an important part.

Referring to Mr. McLimont's rather elaborate program Major Burpee said that all cannot do as much as this but all can do something. He then described the practices of the local company in furnishing employees with a periodical and also supplying the public with weekly leaflets. Several other speakers discussed the characteristics of good publicity, H. H. Couzens, Toronto Transportation Commission, stating that leaflets with special motives behind them are apt not to be successful. If the company can show the public that it wants to be fair the "thing can get over." The man in the street understands little of the railway business which must be explained to him from the ground up. The public judges the railway by its employees who must be carefully trained.

ACCIDENT PREVENTION IS EVERYBODY'S BUSINESS

The next paper, on accident prevention, was read by the author, R. Mayne-Reade, superintendent Quebec Railway, Light & Power Company.

Mr. Mayne-Reade in introducing his subject of safety first said that accident prevention is a duty of Christian honor not only because it seeks to save life and money and promote efficiency, but because it stimulates the fundamental spiritual idea of better human co-operation. The effort and money already spent on the safety first movement and the work of the National Safety Council, the Red Cross and other kindred organizations should have educated every man, woman, child, public utility and industrial corporation to understand that the gospel of self-preservation has become an established order in the routine of our daily life. Yet the newspapers show an appalling high toll of accidents.

It must be admitted that some progress has been made though there is an indifferent attitude, even among

educated business men toward the principles of safety first. With railway employees the subject sought has been to make the men realize that safety first is just as important to them as to their employer and to the community at any work they undertake, but experience has shown that owing to man's tendency to exercise what he calls personal liberty it is imperative that education and discipline must go hand in hand. Co-operation has been effected with municipal councils, public authorities, automobile clubs and individual owners of automobiles in the interests of safety. Rolling stock has been equipped with the latest safety devices and compensation laws have been enacted by the legislatures.

Ten years ago the steam railroads headed the list in the number of fatal accidents. Today it is the automobile that heads that list. This fact assuredly indicates that there is something radically wrong in the administration and regulation of the traffic laws. The missing statute is the drivers' license law providing for the mental and physical examination of applicants before licenses are granted to drive a car. In a city where the traffic laws are inadequate and where enforcement is unfair, the motorist or driver with influence can escape punishment and citizens do not take seriously the police or court and readily blame the traction companies for any kind of a collision with a street car. Often also they procure doubtful witnesses to substantiate their alleged claims, thereby increasing the financial burdens of the utilities. This class of drivers as well as the beginner and physically incompetent will be reached through the enactment of a driver's license law.

Every careful competent driver and all pedestrians should welcome such a law. Motormen would also come under the same requirements. The law should not only set the penalty, but require the judge to assess it on proof of guilt, and the penalty should be jail instead of a fine. Every city should have its own traffic court, so that more individual attention could be given to traffic problems.

Mr. Mayne-Reade also suggested that inasmuch as the government spent large amounts of money during the war for publicity to enlist men for army and raising of funds, it should enact a law calling on publishers of periodicals voluntarily to devote a definite amount of their space to accident prevention matter. He also suggested that every theater curtain, program, etc., as well as every business card, letterhead and postage stamp should carry the safety message; further, that provincial governments should add a safety section to their education department and that electric railways as a part of their safety campaign have an exhibit during their annual exhibition on both traffic and public safety.

MR. MORLEY DESCRIBES ONTARIO SAFETY WORK

H. B. Morley, general manager Ontario Safety League, who followed Mr. Mayne-Read, said that he could not see any just cause for pessimism in regard to the safety movement. Accident prevention, he said, is scarcely "news," but an accident is "news" and receives wide publicity. Each accident reported, however, acts as propaganda in the fight against other accidents and so the world will continue to learn by the mistakes of others. It is said that an accident is "an unexpected event, a mishap" but accidents do not happen, they are caused—the result of carelessness or thoughtlessness. This is why the lesson of the safety movement is prevention. Figures prove that some of the large indus-

tries have reduced accidents in their plants, 20, 25, 40, 50 and 60 per cent. The United States Steel Corporation estimates that during its last eight years of safety work it has saved 25,863 workers from serious injury and death. This is not theory or expectation; it is a cold fact of one industry.

The Ontario Safety League was organized on Jan. 1, 1914, with an executive committee composed of representatives from various bodies likely to be interested in this work and has grown rapidly. The keynote of its campaign has been the education of the rising generation, with the thought that children taught to be careful on the street and in the home will develop into careful men and women and through the pupils in the schools, lessons in prevention will be carried into thousands of homes. The League issues every fortnight thousands of bulletins for shop posting, dealing with accident and fire prevention. For six years it has conducted for the Ontario Motor League an annual prize competition on compositions about motor accidents among pupils of the schools. Addresses are also made in the schools and in all nearly 65,000 pupils in over 1,300 classrooms have been reached. Safety buttons, bulletins, blotters, pamphlets, "letters to parents" and motion pictures have been used with success. In addition, safety patrols have been organized.

A special series of electric railway bulletins prepared by a special committee is issued regularly. Through the Department of Highways for the Province, safety rules were given out with each automobile license in 1918, 1919 and 1920. A Canadian safety convention was held last year. This year a "safety week" in Ontario was conducted from Oct. 10-16. Sub-committees covered such subjects as publicity, motion pictures, bulletins, boy scouts, traffic, schools and colleges. It was a success, with notable accident reductions.

The electric railway can afford to be a big contributor to efficient safety work as it cannot conduct a safety campaign as successfully as can a citizens' committee. Accident problems are due almost entirely to: (1) Persons boarding or leaving cars, (2) collisions between cars or between cars and other vehicles; (3) accidents to pedestrians. Each can be reduced by safety education.

Safety education, as far as the electric railways and all other industries are concerned, must start at the top. The "Big Boss" must be sincere. The campaign also must be thorough. The great difficulty today is that we are "pikers" when it comes to spending money on accident prevention. A company may pay out \$100,000 in accident claims yet shrink from an expenditure of \$10,000 on prevention. As regards automobiles, every driver should have a license, given only after examination. This is the greatest piece of traffic safety legislation that could be passed today.

TRAFFIC REGULATIONS

In his paper on traffic regulations, which was read by title, President Gaboury gave an account of the work during 1919 and 1920 of the committee on code of traffic principles of the American Electric Railway Transportation and Traffic Association. Mr. Gaboury has been a member for both of these for years. The traffic rules which he then presented for adoption by the Canadian Association, he said, were identical with those presented to the National Traffic Officers of America and the same as approved by the Transportation & Traffic Association at its 1920 Atlantic City Convention except for a few minor changes to render them more adaptable

to Canadian cities. Mr. Gaboury appended to these rules a statement on courtesy and safety commandments. The latter follow:

Safety Commandments

Be Considerate

Be liberal towards others using the street.

Go Slow

Approaching children. They do the unexpected thing.

Passing vehicles.

Around corners.

Approaching cross walks.

Stop

Behind street cars taking on or discharging passengers.

Look Ahead

And keep on the alert for intersecting traffic.

Use tire chains on wet and slippery pavements.

Better be careful than sorry.

Safety Don'ts

Don't run fast into or across main highways.

Don't take blind curves too fast.

Don't forget that a car or a person may be just around the turn.

Don't pass street cars when passengers are boarding or leaving.

Don't forget that the other driver may be reckless or drunk.

Don't fail to look out for pedestrians.

Don't forget that children dash out suddenly and unexpectedly.

Don't take chances.

Don't drive into an uncertainty.

RESULTS OF THE ELECTION

President Gaboury resumed the chair at the close of the session and read the report of the nominating committee which was approved and the following were declared elected: Honorary president, T. A. Ahearn, president Ottawa Electric Railway; honorary vice-president, George Kidd, general manager British Columbia Electric Railway; president G. Gordon Gale, vice-president and general manager Hull Electric Company; vice-president, Major F. D. Burpee, Ottawa Electric Railway; members executive committee, R. M. Reede, superintendent city division Quebec Railway, Light & Power Company; H. H. Couzens, Toronto Transportation Commission; Edward P. Coleman, general manager Dominion Power & Transmission Company, Ltd., Hamilton; C. C. Curtis, local manager Cape Breton Electric Company, Sydney; C. L. Wilson, assistant manager Toronto & York Radial Railway, Toronto; A. W. McLimont, vice-president and general manager Winnipeg Electric Railway; treasurer, A. Gaboury, superintendent Montreal Tramways; auditor, H. E. Weyman, general manager Levis County Railway, Levis.

In closing the convention Mr. Gaboury turned the chair over to his successor, Mr. Gale, who spoke briefly and then called on John Murphy, Board of Railway Commissioners & Department of Railways & Canals, who complimented the convention on the splendid meeting and expressed his best wishes.

ENTERTAINMENT FEATURES

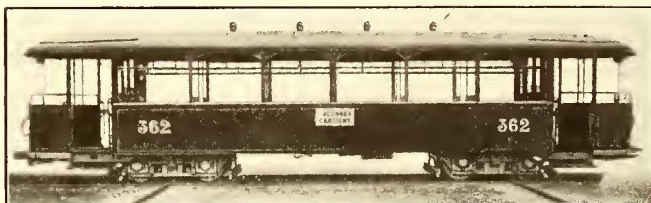
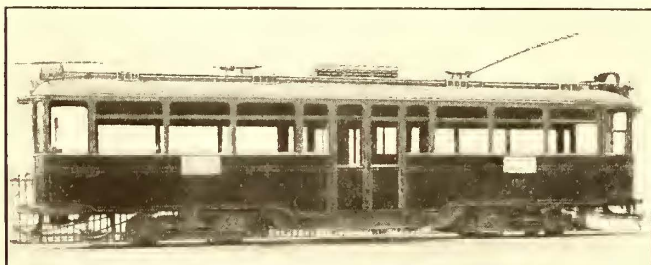
During the meeting informal get-together luncheons were held with excellent results in "breaking the ice," and on Monday evening there was a banquet at the Royal Ottawa Golf Club, Hull. As Hull is in Quebec a more comprehensive menu was possible for the dinner than on the Ontario side of the Ottawa River.

Colonel Hutcheson acted as toastmaster and in opening he proposed a toast to the King, which was received with enthusiasm. He then referred to his former long residence in Ottawa with appreciation, and called upon

Mr. Gaboury to propose a toast to the city. The latter was followed by Hon. Frank Plant, Mayor of Ottawa, who gave details of the scenic beauties of the city, its educational facilities and the Parliament buildings. He also expressed appreciation of its railway system.

T. Ahearn, president Ottawa Electric Railway, proposed a toast to the association, tracing briefly its history and referring to the early days of the local railway. Just thirty years before he had employed J. E. Hutcherson on the property and he said that great credit is due to the Colonel for the development of the property. Mr. Gale, vice-president of the association, responded, outlining the plans of the executive committee for the coming year.

Acton Burrows, honorary vice-president, was asked to propose a toast to "Our Guests," which he did with many witty sallies. Three guests responded to this toast, H. H. Couzens, for the commission representatives; Capt. Emilio Trudel, Chief of Police of Quebec, for the police department, and O. C. Rehfuss for the supply men. Mr. Couzens told briefly what in principle the Toronto Transportation Commission plans to do; Captain Trudel apotheosized Quebec and urged that the



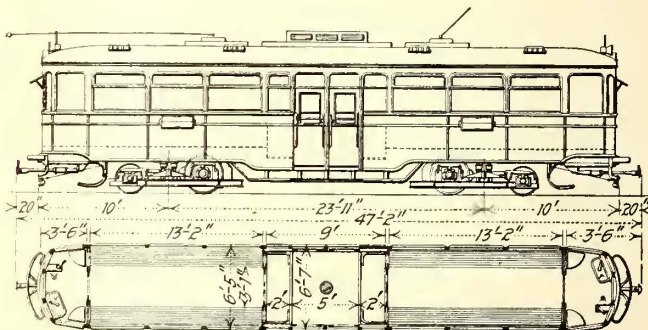
New Motor Cars and Trailers for Geneva

Swiss Tramway Will Try Cars of Types Novel to Them—
Trailer Was Designed for Lightness and Smooth
Riding Qualities—Electric Braking a
Feature of Motor Car

TWO years or more ago the Geneva (Switzerland) Electric Tramways Company ordered from local manufacturers twenty motor cars (ten single-truck and ten double-truck) and ten double-truck trailers. These are now nearly if not quite all delivered. As the cars differ in some respects from the types popular in this country and as they may be assumed to be typical of the latest tramway rolling-stock ideas on the Continent the following facts regarding the two double-truck types are given, based on an article in *Schweizerische Bauzeitung* for Nov. 27, 1920.

The motor car is of the center-entrance and exit type, which is uncommon in Switzerland. The body is of steel and it is divided into five compartments, separated by bulkheads with sliding doors. The central section contains a well extending across the body, with a step each to the forward and aft main compartments. This vestibule will accommodate eighteen persons standing. The main sections contain longitudinal seats, each section seating eighteen. At the extremities of the body are the motorman's compartments, the forward one being closed off in operation, while the rear one is left open to increase the carrying capacity.

The car is mounted on maximum-traction trucks and is driven by two 50-hp. motors, with a 5.42 to 1 gear



NEW MOTOR CAR AND TRAILER FOR GENEVA, SWITZERLAND

Above at left, motor car; below at left, trailer; at right, plan and elevation of motor car

1921 convention be held there, and Mr. Rehfuss outlined the labor shortage problem from the standpoint of the manufacturer.

The last toast was to the press, proposed by Major F. D. Burpee and responded to by H. H. Norris, managing editor *ELECTRIC RAILWAY JOURNAL*, and E. W. Harrold, city editor *Ottawa Citizen*. Major Burdick expressed the debt of the industry to the press, while the editors explained the relation of their profession to the electric railway. During the dinner the guests were entertained by vocal and instrumental music of very high grade.

Before the meeting broke up Mr. Gaboury paid a tribute to the toastmaster, who responded by telling how he had endeavored to build up the Montreal property, which had only been possible through the co-operation of Mr. Gaboury, Mr. Blair, Mr. Graves, Mr. Bird and their associates.

On Tuesday afternoon the convention attendants visited the Ottawa Car Manufacturing Company's works to inspect its new safety cars, and the shops of the local company. Some also went through the new Parliament buildings.

ratio. The motor is equipped with ball bearings. The car length over buffers is 47 ft. 3 in. and its weight, empty, is about 22 tons. It is provided with air brakes and with positions on the controller for producing electric braking also. The starting resistors are mounted centrally on the roof.

The trailers are of a new type, designed for use on suburban lines to have a large capacity (thirty-four seats and thirty standing places plus fifteen on each platform). The over-all length is 42 ft. 7 in. and the weight, empty, is 11.6 tons. Like the motor car, the body is of steel construction. Special attention was given, in the design of the trailer trucks, to the producing of easy-riding qualities. This was accomplished through the use of lateral leaf and helical springs.

The Central Electric Railway Accountants' Association, at its recent convention at Dayton, Ohio, was entertained at luncheon by the Ohmer Fare Register Company. The twenty-five or more members in attendance stopped en route to the factory for a brief reception at the home of John F. Ohmer. The same hosts also provided theater parties for the evening.

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

The Chairman of the Publicity Committee of the Association Urges Indorsement by Industry of Broad Findings of Commission—Views Are Expressed by Executives in Texas and Ohio—B. C. Cobb Gives the Views of a "Car Rider"

THE program for the Chicago conference on Feb. 10 shows that the afternoon session is to be devoted to the consideration of the report of the Federal Electric Railways Commission and the report of the special committee on public utilities of the Chamber of Commerce of the United States. President Gadsden in a special letter to member companies has urged the association to take action with respect to the conclusions and recommendations contained in these reports and has expressed his opinion that nothing that the association can do will be more helpful than to place itself squarely upon record before the public in this matter. Mr. Gadsden personally is on record as believing that the industry should make a public announcement that it accepts these reports in principle.

Last week's issue contained expressions of opinion on this subject from the chairman of the Committee of One Hundred, two railway executives and one public utility commissioner. Views from several others appear below.



Barron Collier, chairman of the committee on publicity of the American Electric Railway Association, says:

"As an advertising man who is vitally interested in creating public good will for the electric railway industry, I hope that the American Electric Railway Association will indorse the broad general principles of the reports of the Federal Electric Railways Commission and the Chamber of Commerce of the United States.

"These reports contain very helpful material for electric railway operators, and I believe that the broad findings of the commission are such as to warrant their indorsement by the industry.

"My particular interest in seeing the reports indorsed is that of again carrying to the public conviction of our honesty of purpose. At the outset of these hearings we told the public and the press that we were anxious to have a fair and impartial investigation of our case and that we were willing to stand on the findings of any fair jury. We were extremely fortunate in obtaining the services of men of the highest character on both the federal commission and the Chamber of Commerce committee, and I think it can be truthfully said that they made very full inquiries and, in their judgment, rendered fair reports.

"Meantime the press and public, convinced of our sincerity in urging these investigations, followed the activities of both the commission and the committee with sympathetic interest. It now behooves us to reassure the public that we were sincere in our expressed desire for an impartial investigation of the industry."

COL. J. F. STRICKLAND is president of the Dallas Railway and a member of the Committee of One Hundred. He has taken an active part in the development of electric railways in Texas and writes under date of Jan. 27:

"Referring to the article on page 136 of the issue of Jan. 15, headed: 'Consideration of Federal Report Urgent,' in which reference is made to the letter recently sent out to all executives of member companies of the American Electric Railway Association by President P. H. Gadsden, I am struck with the importance of some decisive handling of the matter by the association at its midwinter meeting in Chicago in February.

"I am thoroughly in accord with most of the conclusions reached by the Federal Electric Railways Commission and also by the special committee of the Chamber of Commerce of the United States, and I feel that it is up to the executives of street railways forcibly to bring to the attention of the public the findings of these two important bodies. If we do not avail ourselves of the opportunity of bringing to public notice in every way possible the present status of the street railway business as set forth in these reports we are certainly unmindful of the great effort, as well as the time and money, expended in developing for public information the complete story of street railway operations.

"I trust, therefore, that the association at its meeting in February will recognize the importance of the matter and will accordingly go on record in no unmistakable way."



NORMAN McD. CRAWFORD, vice-president and treasurer of the Columbus Railway, Power & Light Company, Columbus, Ohio, was another member of the Committee of One Hundred who was asked to give his views on the subject. Mr. Crawford said:

"I regret that I must plead guilty of at least one fault pointed out so forcefully and clearly in the interview with President Gadsden, recently published in your journal, and I confess that personally I have treated as of local importance only many of our problems which should have been recognized as of interest to the industry as a whole.

"In the short time allowed me, I have not been able thoroughly to consider the findings reached and the recommendations made by the report of the Federal Electric Railways Commission and the public utilities committee of the United States Chamber of Commerce. I have, however, abiding confidence in the personnel of the committee appointed by President Gadsden to report its recommendations relating to the reports above mentioned, and I feel that as suggested the electric railway

interests of the United States will be advanced and broadened not only from the viewpoint of the industry but also from the viewpoint of the public at large who are our patrons if the association at its midwinter meeting treats this problem fearlessly, fairly, frankly.

"It is axiomatic that adequate electric railway service is a public convenience and necessity, and because it holds the most important and constructive relation to the best interests and upbuilding of the community this form of transportation should not be discontinued or impaired. It is also axiomatic that unless the public authorities allow such reasonable return upon the investment as will attract capital and provide for the continuance of the service operation in such cases must cease. In cases of discontinuance transportation could only be provided by the questionable method of municipal control, which has recently (particularly in the case of Seattle) proved itself to be such an utter failure. It would then appear that the public ultimately pays for adequate transportation, whether by means of increased fares or by means of increased taxation, in cases where the operation is taken over and conducted by the method of municipal control.

"Personally I do not have the fullest confidence in the remedy applied by a service-at-cost method, although in many instances this method has provided at least temporary relief for the operating company. It is therefore to be hoped that full and frank discussion of the reports, as suggested by President Gadsden, may result in a united effort which should undoubtedly tend to solve the problems in hand."



JOHN J. STANLEY, *president Cleveland Railway and past-president American Electric Railway Association*, is strongly for indorsement. His position is defined in the following statement:

"Whatever the objections of our member companies to any of the opinions and conclusions in the reports of the Federal Electric Railways Commission and the special committee of the Chamber of Commerce of the United States, indorsement by the Association of these reports would define the attitude of our industry toward the public and itself as no purely local discussion can define it. Personally, I feel that such action taken by the association cannot be but wise, even though it creates some inconsistencies in the positions of some member companies. I do not fear the latter.

"The great need of the public utilities as I see it is a removal of the distrust, dislike and disinterest which exist with so many of our customers. If indorsement of these reports will help change this attitude of the public we serve I am for indorsement, being more concerned with the remedy than with its application."

THE American Institute of Electrical Engineers has been designated as sponsor for the rating of electrical machinery by the American Engineering Standards Committee, and the responsibility for the work has already been officially accepted by the Institute. A sectional committee has been formed, which is rapidly pushing the work so as to prepare for the next meeting of the rating committee of the International Electro-technical Commission, at which the fundamental basis of rating will be discussed. At the last meeting of the rating committee, held in Brussels in March, 1920, the American delegates presented a proposal for a system of rating based upon the "hot-spot" principle.

A Car Rider's Reply

Readjustment of Securities to Accord with the Value of Company's Property Would Not Only Often Inflict a Great Hardship on Stockholders but Would Accomplish No Useful Purpose

BY B. C. COBB

Vice-President Hodenpyl, Hardy & Company, Inc.

I LIVE in a large city, am engaged in business and am a car rider. My office is located several miles from my home, and it is almost always my daily habit to ride to and from my office on the cars, usually during the morning and evening rush hours. My opportunity therefore for observing transportation problems along with car riders' demands and complaints has been quite considerable.

I went to work at the age of eighteen. My first job was with a transportation company. I continued in this line of work for several years and became acquainted to some extent with the many difficult operating and financial problems with which most transportation companies have to contend. Perhaps my views at that time were biased, perhaps I was all too sympathetic with the trials and burdens of the company, and perhaps I was at times unmindful of the public and its desire to be served. I could not, however, have erred to any great extent, for our chief was a stickler for good service and a martinet in discipline. He believed in a fair service for a fair charge; he believed in a fair wage for a fair day's work; he expected to pay and expected to receive; he believed in fair pay for a satisfactory service rendered. One thing he always preached, and that was that a property is entitled to a compensatory return on the investment necessary to render service, *i. e.*, a fair return on a fair valuation.

I remained in the transportation business for some years, only leaving the service because I thought I saw greater opportunity for advancement and the acquirement of worldly possessions in other lines of business. I have, however, retained my love for transportation work, which most railway men do, and I have always been interested in transportation problems.

I was therefore much interested the other day in reading in the *ELECTRIC RAILWAY JOURNAL* of Jan. 1 an interview with Philip H. Gadsden under the caption "Ask the Car Rider." It was a very good article in many ways and I think Mr. Gadsden's thought was and is to impress the public with the dire necessities of the street railway industry and the importance of re-establishing its credit in order to be able to continue serving.

I commend Mr. Gadsden's views in these particulars and I agree with him that unless the credit of the electric railway industry is re-established it cannot continue. I do not, however, agree with some of Mr. Gadsden's spoken thoughts and written views on the so-called service-at-cost franchise, particularly his views as to making the securities at present outstanding on a property fit a valuation made. Mr. Gadsden correctly states that the basic principle of a service-at-cost franchise is the value of the property in question. The valuation of a property surely is an adjunct, and a most important one, in working out a service-at-cost franchise, for unless a valuation is made there will be no way of determining the proper amount which a company is entitled to earn.

Where Mr. Gadsden and I disagree is on his advocating that once a valuation is found then the securities

outstanding should be made to conform to such valuation. He does not say this should be done in every case, but I am satisfied that most people reading the article will gather that impression. My thought therefore is to correct it, because I think it would be a catastrophe to the industry and the last straw to break its back should such an impression become nation wide and such action be insisted upon by the authorities and people interested.

NO DIRECT CONNECTION BETWEEN CAPITALIZATION AND SERVICE AT COST

To readjust the securities of a company to fit the physical value of the property would not only be in most instances a difficult job but in a great many instances absolutely impossible except by putting the company through the hands of a receiver. I do not say that it may not be advisable in some cases to re-establish the financial stack-up, or rather readjust the outstanding securities, of a company, but I do say, and without fear of controversion, that this is not an essential of a service-at-cost franchise. The essential things in a service-at-cost franchise are:

1. A fair valuation of the property in question, not only its physical but all other values.
2. A fair return on the valuation so found.

The securities outstanding have very little, if anything, to do with the matter, and I therefore think it is a great mistake to lead people so to think. A property may have bonds, preferred stock and common stock issued, and in considerable excess of the actual value of a property—all without working a hardship upon the car rider, the public or the stockholder. For example, let us assume, and such an assumption is an actual condition existing today in many cities of the country, a company capitalized as follows:

Six per cent bonds outstanding	\$4,000,000	
Six per cent preferred stock outstanding	2,000,000	
Common stock outstanding	3,000,000	
<hr/>		
Total capitalization	\$9,000,000	
Actual valuation found by inventory and appraisal	7,000,000	
Rate of return allowed	8 per cent	
This would mean that a property capitalized and valued as above would be allowed after providing for operating expenses, taxes and depreciation, to earn annually		
	560,000	
It would mean that after paying—		
Interest on bonds	\$240,000	
Dividends on preferred stock	120,000	360,000
<hr/>		
there would be left for the common stock	200,000	
or, if it were all declared out in dividends, a return on the common stock of	6 ² / ₃ per cent	

Here would be a case where the outstanding securities exceeded the valuation found by \$2,000,000. What good, I ask, would it do to make the securities conform to the valuation? None at all as I see it, and if it were done it might and probably would work a great injustice and hardship to many stockholders interested.

MAY PUT BLAME ON WATERED STOCK

Mr. Gadsden wants to "come clean," and that is what he probably had in mind when advocating a readjustment in securities. He wants the public to feel and the car riders to know that the companies want to meet it and them more than half way in order that the credit of the industry may be re-established and the companies thereby enabled to render the service which they should render. This is very commendable, but the fault I find with such teaching is that many people will draw the

wrong conclusion and begin again to think that the main trouble, and practically the only trouble, with the electric railway industry is that it is overcapitalized, and that the thing which has broken it down is watered stocks and inflated securities.

I am a stockholder in a number of railway companies and other public utilities and I do not believe and do not think the public generally has now any such view of the situation. It has been educated and truthfully taught in the past few years that this is not so, and I as a car rider and a stockholder feel that it is a serious mistake to undo such teachings.

The truth of the matter is that the electric railways and other public utilities have broken down during the past four or five years of strenuous life because of the many heavy burdens placed upon them in the shape of increased operating expenses, increased taxes and increased cost of money, without being allowed to earn an adequate and compensatory return upon the value of the properties. It is just as plain as a pikestaff, and no one need get out a pair of binoculars to see this very clearly. It is therefore idle to talk about watered stocks and inflated securities, for they have nothing whatever to do with the case. There can be no such thing, because in these days and in this age a public utility company will not be allowed to earn except upon its value ascertained, and it is a sure thing that, this value being once obtained, a company will not be allowed to earn an excessive return upon it. It therefore follows that what it does earn can without detriment to any one—car rider, public or any one else—be distributed by the directors or the stockholders as they may see fit.

FAIR RATE OF RETURN ON FAIR VALUATION

It is all right for the utilities to "come clean" and if it is necessary for any of them to "clean house" they should do it. The public and the car rider, however, should also "come clean" and not allow the political agitator or sensational newspaper to lead them astray. They should learn that unless a company is allowed to earn, and to earn on a full and proper value and not a depreciated value, it cannot serve. They should go further and insist that the authorities allow the utilities to earn. If they do not it will not be the utilities only that will suffer, for the public itself will reap the harvest in inadequate service rendered, stagnant industries and depreciated values of all kinds.

The car rider, while he may many times have just cause for complaint, is not usually unreasonable unless led astray by demagogic teachings. He is more interested generally in the character of the service rendered than in the dividends a company may be paying, and nine times out of ten will be a defender and proud of the company rendering the service if it is the kind of service he desires.

The problem as I see it is to tell the public the needs and necessities and to get the rate-making authorities having these matters in charge to allow the public utilities to earn a proper rate of return so that they may perform and function in the satisfactory way the public wants them to perform and function.

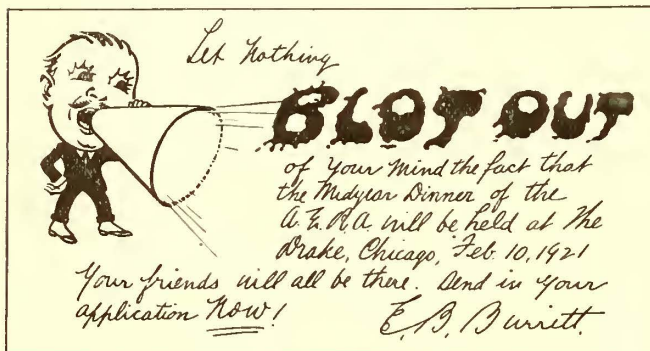
A fair rate of return upon a fair valuation should be the slogan of the utility man. If he departs very far from this path or this line of thought, or if he mixes up the matter of readjusting securities with this sort of doctrine, he is very apt to make the situation complex not only for himself but also for the people desiring service.

Association News

Get Aboard the Special for Chicago

THE midyear conference committee on transportation for New York and vicinity, of which Carl H. Beck, Westinghouse Electric & Manufacturing Company, is chairman, reports that enough reservations have been received practically to fill two special cars. These cars will be attached to the "Broadway Limited," leaving New York Feb. 8 for Chicago, via the Pennsylvania Railroad. All delegates from New York, Philadelphia, Washington and Pittsburgh leaving for Chicago on Feb. 8 are urged by the committee to travel on this train.

The Pennsylvania Railroad will reserve as many as five cars for members if notified in advance. Accommodations can be secured by application to E. B. Burritt, secretary American Electric Railway Association, in accordance with the schedule published in this paper Jan. 15, page 146.



Committee on Schedules Meets

THE committee on economics of schedules held its initial meeting at association headquarters on Jan. 24. Among those present were Chairman Edward Dana, Boston (Mass.) Elevated Railway; H. C. Moser, Fifth Avenue Coach Company, New York; J. A. Stoll, United Railways & Electric Company, Baltimore, Md.; Samuel Riddle, Louisville (Ky.) Railway; Donald Goodrich, Twin City Rapid Transit Company, Minneapolis; A. G. Neal, Washington Railway & Electric Company, Washington, D. C., and J. M. Campbell, Atlantic City & Shore Railroad, Atlantic City, N. J. The full list of members of this committee was printed in the issue of this paper for Jan. 22, page 189.

The committee decided that the subcommittee plan of making out the report would be followed. A joint data sheet will be issued shortly requesting information as to what constitutes car-hours and man-hours in schedules, for the purpose of properly defining the various subdivisions that are naturally made of these two important traffic statistical units. The subcommittee to develop proper definitions of car-hours and man-hours, together with their subdivisions, consists of Messrs. Neal, Stoll and Dana. Consideration of variable running time, looking toward definite recommendations, is in the hands of another subcommittee composed of Messrs. Moser, Campbell and Riddle.

Messrs. Goodrich, Sullivan and Ives constitute a subcommittee to prepare a summary of recent methods

that have been developed for improving the handling of traffic in congested centers.

It is expected that the committee will meet again early in March.

Educational Plans at Hampton

THE feature of the meeting of the Newport News & Hampton company section held at Hampton, Va., on Jan. 21 was a discussion of the practicability of operating a night school in connection with the section work. Such work has been conducted by the section before with satisfactory results. Discussion at the Jan. 21 meeting brought out the fact that the secretary of the local industrial Y. M. C. A., who had spoken at the preceding meeting, had offered his co-operation in this work and the members of the section felt that this would be of great help to them.

The membership committee reported a membership of ninety-nine, and the executive council in its report stated that progress has been made in the endeavor to obtain suitable quarters for a general reading room and meeting place for the section.

To lighten the serious discussion several entertainers were introduced, and they furnished stories and music which doubly insured the success of the meeting.

Letter to the Editors

Problems Ahead for Trolley Bus

NEW YORK CITY, Jan. 31, 1921.

To the Editors:

The article on the trackless trolley by H. L. Andrews in your issue for Dec. 4 was very interesting. Probably Mr. Andrews, as well as many others of your readers, knows that a trackless trolley line was built and operated in Greenwich, Conn., before there were any trolleys run on tracks, but it is not my purpose to speak on the American history of such projects.

It is to the road conditions that I wish to call attention, because Mr. Andrews devotes but two short paragraphs to these. To a large extent road conditions will govern the usefulness of the trackless trolley, and the places where trolley extensions are desired are usually those where there are either no roads or very poor ones. In most instances it will be necessary to build suitable roads before the trolley bus can be operated. Good roads now cost almost as much per foot as good tracks, and upkeep of roads is a problem in costs which keeps our highway engineers awake o' nights.

The proper location of the overhead wire is another problem. If it is put at the side of the street, near curbs, there will be interference with parked vehicles. Some provision must then be made for the bus to turn out of the way without losing its trolley-wire connection. For general work a center location would be best. Vehicles can observe the rules of the road better with a center location, and considerable traffic difficulty might easily arise with a bus moving along the left-hand side of a road or street against the traffic which follows the American rule: "Keep to the right."

Before the trackless trolley scheme is put out as a definite proposition in this country, the problems above noted will doubtless need to be worked up in greater detail.

"ENGINEER."

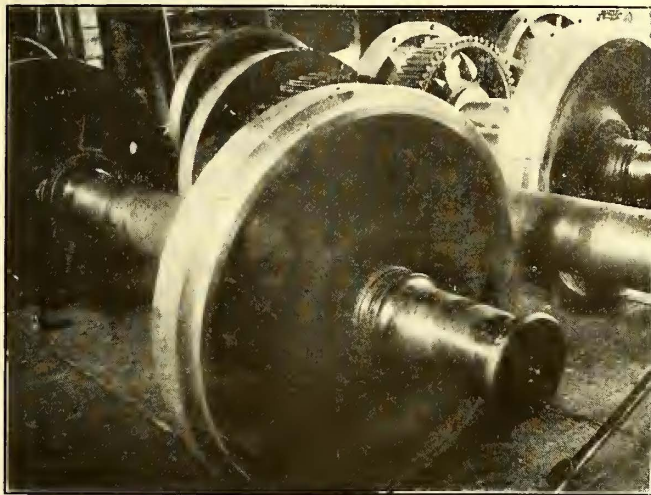
Shop Notes from Vancouver

With Special Reference to the Practice of Turning Down Worn Steel Wheels to Form Centers for Tired Wheels—Preference Shown for Steel Wheels on British Columbia Electric Railway

THE British Columbia Electric Railway has extensive shops located at Vancouver and New Westminster, where more than 400 passenger and express motor cars, 500 freight and other cars and seventeen locomotives are maintained.

Routine inspections and light overhaul are given the cars in accordance with the usual practice and a general overhaul is given them at wheel-turning time; that is, every thirteen or fourteen months.

In the city service both cast-iron and steel wheels are used. The preference is for the steel wheels, which are first allowed to wear down to a given diameter and are then turned off to form centers for tired wheels.



WORN INTERURBAN STEEL WHEELS TURNED DOWN TO FORM CENTERS FOR TIRED WHEELS

The tires are shrunk on and, of course, the centers last indefinitely.

The steel wheel, A. E. R. A. standard Section B, begins its career with a diameter of 33 in. It is worn down to $29\frac{1}{4}$ or $29\frac{3}{8}$ in., and is then turned to 29 in. in the form shown in an accompanying illustration. The tire, $34\frac{3}{8}$ in. in diameter, is then shrunk on. It is a three-wear tire and is used until it has come down to $31\frac{1}{2}$ in. The original wheels are of Midvale make. The tires in unfinished form are admitted to Canada free of duty.

Some mileages regarding these wheels are as follows: A recent average of 350 solid wheels showed a life of about 195,130 miles, ranging between a maximum of 320,000 and a minimum of 119,800 miles. They were then available as centers for the tired wheels. The tires had an additional life of 176,000 miles each. The average mileage between turnings over a long period has been about 65,000 miles.

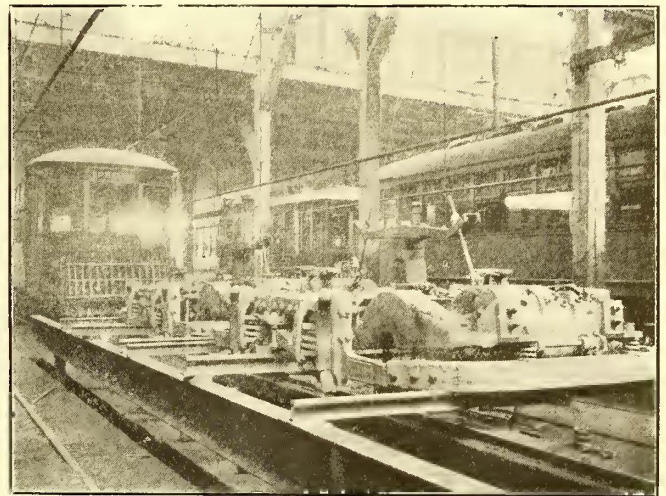
The best record for cast-iron wheels is about 116,000 miles, but the range was wide, indicating a very irregular life, and the average was only 46,140 miles. Davis wheels are being tried out in Victoria, where the electric railway lines are also operated by the British Columbia Electric Railway, as there are no facilities for tire turning at this point.

The preference of the company for steel wheels is

due to the following experiences: It was found that the cast-iron wheels, unless ground, are more noisy and are hard on axles and bearings. They tend to skid, and have to be scrapped when flats are produced. Chipping of flanges and treads also causes shopping of cars at odd or unscheduled times, an expensive operation. It is found that cars with iron wheels are shopped five times as against twice for those with steel wheels.

As to relative costs, based on recent prices, the cast-iron wheels cost most per thousand car-miles, the steel wheels slightly less and the tired wheels much less, or respectively 43.8, 42.1 and 30 cents per thousand car-miles. The 1920 costs for new wheels were \$27, \$54 and \$30 respectively, and the scrap values \$7, nothing and 95 cents.

The original stock of rolled wheels which now furnishes the centers for the tired wheels was purchased in 1910 and 1911. By 1917 the rolled steel wheels had increased in cost to \$63 each. After this year the



YOKE FOR HOLDING UPPER HALVES OF MOTOR CASES IN POSITION DURING OVERHAUL

company purchased few new rolled wheels. In that year the 33-in. cast-iron wheels were costing \$19 each, with \$4.50 scrap value.

On the interurban cars only the steel or steel-tired wheels are used. The solid wheels wear from 150,000 to 276,600 miles and the tires give 112,700 miles additional life each. The American Electric Railway Association standard A wheel is used in this service. The tire fastening is the well-known Midvale bolted type.

Wheel changing in this shop has been made a subject of special practice until it is now possible to change a pair of wheels in from twenty minutes to a half hour.

Among the original "stunts" which have been developed in the Vancouver shops, one shown in the second illustration is of interest. This consists of holding up the upper halves of the motor shells during overhaul by means of a yoke. The yoke is simply a channel-iron blocked up at a suitable height from the truck center plate. The ends of the yoke are bent up at an angle of 30 deg. or so, suitable for connection by means of bolts and nuts with the bales on the motor cases.

One of the latest trolley bus services to be inaugurated is that in York, England, which was installed just before Christmas. The route lies through one of the congested sections of the city and serves a populous suburb. The buses have been well patronized.

Recent Happenings in Great Britain

Interesting Review Is Presented of Social and Economic Conditions at End of Year

(From Our Regular Correspondent)

The year which at the time of writing has just expired has not been a favorable one in Great Britain either for industry in general or for the tramway industry in particular. In every direction there has been the same tale of increasing cost of living, increasing cost of all sorts of materials, and ever rising wages, coupled with a reduction in working hours and output. In one industry or another we never seem to have been clear of strikes or threats to strike.

THE building trade has been peculiarly hopeless, because in spite of a famine in houses and of a smaller number of men being employed in the industry than before the war the trade unions concerned have steadily refused to let into their ranks large numbers of ex-service men who are out of employment. Near the end of the year the government promised to take drastic action, but in January matters were still in suspense.

In consequence of high wages, reduced output and a falling demand for many articles owing to price, unemployment began to get serious during December and the outlook for the winter was bad. Organized utility works, principally road-making, have been put in hand to afford relief.

There are, however, some encouraging features. The settlements arrived at with the railway men and the coal miners promise to obviate strikes, and the output of coal has already begun to increase. The railways, however, are still working at a loss.

HOPE SEEN IN INCREASED PRODUCTION

In connection with manufacturing some people in a position to judge see a ray of light in the direction of increased output. It is said that many of the workmen are less averse to piecework than they have hitherto been. If piecework is largely adopted the "go easy" trouble will disappear, and the hope is that while the men may make even higher wages than before, production will be so augmented that the price of the finished articles will come down. But in the meantime steel, for example, can be imported from the United States and from Belgium at much lower prices than those for the British-made article.

Manufacturing and contracting work for tramway purposes has naturally been in a depressed condition. Practically no track extensions are being carried out and renewals of track and plant are kept down as much as possible in the hope of lower prices in the future. In the tramway industry itself the year has seen further increases of wages and of fares.

In January a national demand for more wages was still unsettled. The tramway authorities believe that in many cases they have reached the limit in fares—that is to say, further increases would so reduce the number of passengers that no increased revenue would be obtained. Accordingly they say they cannot pay higher wages, and they point out that at present there is

an average loss on working of about 3d. per mile run. Unfortunately in the case of drivers and conductors the nature of the work precludes any possibility of "increase of output." The financial future of the industry is very uncertain.

The tramway men's wages dispute continued during December. As previously mentioned the employers had refused to concede the demand for an increase of 12s. per week and they declined a proposal by the men for arbitration on the ground that if an award of an increase were given they could not pay it. In the middle of December the Ministry of Labor intervened in the hope of bringing about a settlement. The employers, however, stood firm, and the Minister thereupon decided to set up a court of inquiry under Part II of the industrial courts act of 1919. The concurrence of the parties is not necessary for the holding of such an inquiry, and the finding of the court has no binding force on the parties. The idea is that an impartial and just decision will commend itself to the public.

In the present case, however, soon after the decision to institute the court was announced, both employers and employed agreed to be represented before it. It was not till Jan. 8 that the constitution of the court was announced. It has five members, including representatives of employers and employed. The court is instructed to inquire into the causes and circumstances of the dispute and to report thereon to the Minister of Labor. At that time of writing the sittings of the court had not begun.

NEW BILL NEEDED

Shortly before the parliamentary session closed at Christmas the government withdrew its electricity bill, which had long been pending, as its compulsory powers in connection with the formation and functions of district electricity boards had excited much opposition. Instead the government intends to promote in the coming session a smaller bill containing powers which the Electricity Commissioners (established under the existing act) consider urgently necessary. The bill will confer on the local joint electricity authorities (which are voluntary, not compulsory bodies) powers to borrow money and raise capital. Provision is made for revision of maximum charges every three years instead of five. It is further proposed that owners of large railway and tramway

generating stations shall be entitled to dispose of surplus power for general public purposes.

Discipline has become slack in many cases compared with pre-war days. There is, however, at least one heroic municipal tramway committee left in the country—namely, that of Newcastle—which was not afraid to assert itself. The Newcastle tramway employees took a ballot, the result of which was a decision not to work on Christmas Day. The tramway committee, on its part, held that the public convenience demanded that a service should be maintained. It offered the men double pay for the day and it told the public that the service would be run as usual. When the day came out of 950 men only 237 failed to put in an appearance for work and the cars were taken out in the ordinary way.

The committee followed up its energetic and successful action by deciding on Christmas morning that the men who had not reported for duty should be suspended till the following Thursday (Christmas was on a Saturday), when a final decision would be made. The peculiar fact was ascertained that many men who voted in the ballot for taking the holiday actually reported for duty, while others who voted for working did not report for duty because of loyalty to their trade union. When the tramway committee met again on the following Thursday a deputation from the men appealed for the reinstatement of the 237 who had been suspended. The committee thereafter passed a resolution instructing the general manager to reinstate the men and to inform them that the committee trusted that it would not become necessary in future to deal more drastically with such serious breaches of discipline. Over half of the men who were suspended had been only two years or less in the service of Newcastle tramways.

Another example of the enforcement of discipline by a municipal tramway authority comes from Edinburgh. It may be recalled that some time ago the tramway conductors in the city determined to refuse to allow any standing passengers inside the cars. A strike took place and twenty-one men who persisted in this course were dismissed. The matter came up for review before the Town Council on Dec. 22, when an appeal for the reinstatement of the men was circulated by their trade union. By forty-six votes to four the Town Council confirmed the view of the tramway committee that the men dismissed should not be reinstated. The chairman of the committee said that since the Town Council took over the undertaking from the tramway company which had previously worked it that working conditions of the employees had been vastly improved. The position taken by the men was an attempt to defy the committee and the management and to control the undertaking.

News of the Electric Railways

FINANCIAL AND CORPORATE • TRAFFIC AND TRANSPORTATION

PERSONAL MENTION

Toledo Grant in Effect

Seven-Year War Ended with Acceptance of Service-at-Cost Plan of Operation

Acceptance of the service-at-cost ordinance at Toledo, Ohio, was filed with the city clerk at 11:59 o'clock on Monday night, Jan. 31, and Toledo began its twenty-fifth-year experience with the Milner franchise plan. The only portion of the ordinance which has not been complied with by the Toledo Railways & Light Company is the section which provides that the property shall be turned over to the Community Traction Company "free of all mortgage encumbrances."

In lieu of releasing the first mortgage on the property at this time, which would have required the raising of an additional \$1,900,000 in cash by the Doherty interests, an agreement between the city of Toledo and the Cities Service Company, the Doherty holding corporation, was executed by which the city sinking fund trustees shall have possession of the \$8,000,000 of the company's bonds and the 6 per cent revenue accruing from the operation of the lines until the money to release the mortgage shall have been raised and the lien discharged.

The time limit for the accomplishment of this financing is set as Dec. 2, 1921. If, by that time, the company has not raised the necessary cash, the ordinance may become ineffective and the company will forfeit \$500,000 in cash, which will have accrued to the bonds. If that much has not been received into the fund the Cities Service Company agrees to make up the balance to \$500,000.

On Monday afternoon the officials and directors of the Community Traction Company met and elected permanent officers. Frank R. Coates was chosen president and general manager. He is the only official permitted to serve both companies by the terms of the ordinance.

Joseph Enright was made superintendent of roadways and equipment and Albert Swartz, superintendent of transportation. Arthur P. Nicklett was made secretary, treasurer, purchasing agent and auditor, and Vincent J. Waltz, claims attorney. T. H. Fair, vice-president, and F. L. Blackburn, assistant secretary-treasurer, are both with the New York office of the Doherty interests. The directors are Frank R. Coates, Albert Swartz, Henry Friede, C. T. Munz, Joseph Enright and W. L. Milner, representing the city.

The new rates of fare went into effect with the midnight line-up on Monday night. They are 6 cents for fare

and 1 cent for transfer. Tokens are still being issued at a rate of five for 30 cents.

Interurbans entering the city will continue to charge 7 cents for the city fare until new contracts are made. These will have to be negotiated between the commissioner, the railway and the interurban lines. They are subject to arbitration also.

The new commissioner at Toledo will make a study of the system here and proceed to establish minor changes in service looking to economy in operation.

Car Jumps Bridge Into River

A car of the Intertate Consolidated Railroad, Attleboro, Mass., jumped the rails on Lebanon bridge near Attleboro recently and, held by the resistance box, balanced over thirty ft. of water in



CAR SUSPENDED OVER RIVER

Ten-Mile River. Motorman Percy Titus was trapped in the vestibule and after smashing the door and window at the end of the car nearest the water crawled into the car. Conductor Robert Pardington, climbed into the rear vestibule high in the air, smashed the door and helped the panic-stricken passengers down to the bridge floor, 8 ft. below. Although the ten passengers were thrown to the lower end of the car, no one was seriously injured.

A combination of slippery rails and a bad curve is believed to have been the cause of the car jumping the track and crashing through the bridge railing and the forward end plunging into the water.

The accompanying illustration is published through the courtesy of the Boston Post.

Municipal Line Starts

First Section of Detroit's New System Has Been Placed in Service—Fare Five Cents

Regular service was started over 13 miles of track of the municipal railway lines at Detroit, Mich., on Charlevoix and St. Jean Avenues at 4:30 a.m. on Feb. 1. The Charlevoix cars run from Alter Road to Bellevue Avenue and the St. Jean cars run from Montclair and Harper Avenues to St. Jean and Kercheval.

Every detail incident to a regular operation of the first two of the municipal lines has been worked out by Joseph S. Goodwin, general manager of the Detroit Municipal Railway. A 5-cent fare is being collected and five-minute service will be given until checkers determine just what service is adequate. Eighteen of the twenty-five cars now on hand are being used.

The beginning of service was marked by little ceremony. Following an inspection trip made over the lines a few days after their completion Mayor Couzens expressed his satisfaction with the progress made and the work done. Other city officials also made the trip over the completed sections with the Mayor.

Connections are made with the Detroit United Railway's lines at the Mack-St. Jean intersection and at the intersection at St. Jean and Kercheval Avenues, but no transfer arrangements have been made with the Detroit United Railway. Passengers riding over both lines will have to pay two fares, the 5-cent fare on the municipal line and the 6-cent fare to the Detroit United Railway. Transfers from one municipal line to the other will be issued free.

The cars being operated on the city lines are of the one-man safety type. To permit this an ordinance passed several years ago prohibiting their use in the city of Detroit was amended by the City Council. The Detroit Federation of Labor is opposed to the operation of one-man cars on the grounds that they are unsuitable for local traffic and reduce the chances for employment. This argument relative to the matter of employment was also advanced in opposition to the use of the one-man cars when the original ordinance was passed.

About forty operators for the city cars have been trained in the operation of the safety cars during the past few weeks. The men, several of whom are former Detroit United Railway employees, are provided with uniforms similar to those worn by the Detroit City Firemen.

Chicago Traction Tangle Gets Worse

Resolution Before City Council Would Abrogate 1907 Ordinances—Mayor Informs B. J. Arnold Contracts Have Been Voided

The political squabble over the traction situation in Chicago is becoming more complicated. Realizing that the Mayor's plan for people's ownership and 5-cent fares will require several years to consummate, the local transportation committee started on some short-cuts to secure a 5-cent fare while waiting for people's ownership. It decided to recommend to the City Council that the traction ordinances be voted null and void. The Council postponed action on the resolution for one week.

THE court now has before it the question of whether or not the contract has been violated by the companies, but has not handed down its decision. Despite the fact that neither the court nor Council has acted, Mayor Thompson notified B. J. Arnold, chairman of the Board of Supervising Engineers, that the city has cancelled the contracts. At the same time the city is demanding that certain provisions of the contracts be rigidly enforced, so there is a good deal of anxiety as to where cancellation of the franchises would lead.

PROGRAM NOT CUMULATIVE

The 1907 ordinances provide that the companies shall build 23 miles of extensions each year, on order of the City Council. Under this provision, the companies have built 233 miles of track in thirteen years, or 17.9 miles a year. It was established some time ago that if it was a physical impossibility for the companies to build the full 23 miles in any one year, the requirement of the ordinance should not be cumulative.

This matter was recently brought to an issue by the insistence of various Aldermen that further line extensions be made. They were told by the law department of the city that in view of the controversy over the status of the ordinances, the companies would ignore any order of the City Council on any matter pertaining to rate of fare, service or extensions, and that they would have greater success in securing the extensions demanded if they would vote the present contracts abrogated and then appeal to the new public utilities commission for these extensions. Under this arrangement, the extensions which might be called for would not be limited to 23 miles in any one year and it is said that with the probability of a hand-picked commission, yet to be appointed, it is likely that orders would be issued favorable to the wishes of the city administration.

CONTRACTS DECLARED VOID

Consequently, the local transportation committee proceeded immediately, at the request of Chester E. Cleveland, special assistant corporation counsel on traction matters, to approve an ordinance declaring the contracts with the Chicago Surface Lines "cancelled, annulled, abrogated and terminated in their entirety because of the repudiation thereof and a refusal to keep, live up to and perform the same in essential particulars by the said companies."

The proposed ordinance also directs the city law department to proceed immediately under the public utilities act to request the commission for an order directing the surface lines to construct the extensions within a definite time limit. At this time Mr. Cleveland read a letter to the local transportation committee which Mayor Thompson had addressed a few days before to Mr. Arnold.

In this letter the Mayor informed Mr. Arnold that "The City of Chicago has elected to and has cancelled, annulled, abrogated and terminated said contract-ordinances in their entirety" because the various companies have repudiated the contract-ordinances in essential particulars. "Therefore, there is no authority under and by which said Board of Supervising Engineers can or does exist or act; and anyone pretending to act as a member of said Board will do so in violation of law."

Some of the members of the committee expressed a good deal of surprise as to when the cancellation took place, inasmuch as no formal action to this effect has been taken by the Council, the Circuit Court of Cook County in which the matter is pending, or the Illinois Public Utilities Commission. Mr. Cleveland, however, explained that the cancellation was just the gradual result of the repudiation of the contracts by the companies and that any definite date might be taken as the date of the filing of the city's bill in the Circuit Court requesting an actual cancellation order.

NO VIOLATIONS, SAY COMPANIES

The position taken by the companies is that there has been no violation of the contracts, since the Supreme Court of Illinois has held this to be the case, in upholding the orders of the Public Utilities Commission. If the city passes the ordinance abrogating the contracts and an order is secured from the commission for considerable extensions and improvements, it is probable that the companies will be forced to appeal to the courts because of their financial inability to carry out the order, and raising the question as to the reasonability of the proposed extensions.

While contending that the contracts are abrogated, Mr. Cleveland has been very insistent that the Board of Supervising Engineers should prevent the use of any money taken from the renewal and depreciation reserve fund created by the 1907 ordinances, for the purchase of new equipment in accord with a recent order of the Illinois com-

mission. Some abstracts from a recent letter written to Mr. Cleveland by Mr. Arnold throw light on this dual situation. He writes:

It seems to me that it is for the Board of Supervising Engineers to insist upon the terms of the ordinances except as they may be modified under the law as determined by the courts. While the law is being determined it is the duty of the board to respect all orders of the courts, or of the commission subject to the courts, taking such care as it legally can, however, that this shall be without prejudice to the rights of the public and of all the interests entrusted to the Board. The one thing that the board should not do, as it seems to me, is to furnish, by its failure to perform its duties, any justification whatever to the traction companies for claiming that they are thereby excused from complying with their obligations. I find myself unable to ignore the fact that notwithstanding your confident assurance as to the ultimate establishment of your contentions (in the case before the Circuit Court of Cook County) the traction companies are in fact now operating under the ordinances, as modified by various orders of the State Public Utilities Commission, and claim the right to continue so to do.

In a letter to Mr. Arnold under date of Jan. 5, 1921, Mr. Cleveland stated that "assuming the ordinances still to be in force, we maintain that upon you, as chairman of the Board of Supervising Engineers, rests the positive duty of seeing to it that no part of the renewal and depreciation reserve fund is diverted to any purpose other than that for which it has been, or is, created under the ordinances."

EXPENSE ACCOUNT ASKED

After reminding Mr. Cleveland of what action had been taken by the Board to safeguard the proper uses of the surplus money of this fund, Mr. Arnold suggested to the city representative that he inform the chairman of the board how he can perform what Mr. Cleveland considers "the positive duty, etc.," in regard to the use of this fund, as noted above. Mr. Arnold continued:

In particular I would like to have you inform me what steps, if any, you think I can take as chairman of the Board of Supervising Engineers, to prevent the companies from complying with the order of the commission with respect to the special equipment fund mentioned, and under what authority you think I could take such steps. Why don't you prevent them from doing this, while your litigation is pending? Are you not simply trying to shift to me the dilemma which really confronts you? If the ordinances are not in effect, how is the city now concerned with the renewal and depreciation reserve fund? If the ordinances are in effect, why does not the city enforce its contract rights as to the maintenance and use of these funds? The Board of Supervising Engineers is merely certifying to the facts which the ordinances require it to certify; and it is safeguarding these certificates to the full limit of its ability. It permits no money to be paid out of the renewal and depreciation reserve funds for new cars, or any other expenditures that do not constitute renewals under the explicit provisions of the ordinances quoted in your letter."

For the second time in three weeks the City Council on Jan. 28 served Mayor Thompson's traction commission with a demand for an itemized report of its expenditures, which totaled \$180,000. The report made by this commission was reviewed in the *ELECTRIC RAILWAY JOURNAL* for Jan. 15, page 150, and commented upon in the issue of Jan. 22, page 167. Several of the Aldermen expressed evident disapproval of the amount of money expended, considering the character of the report turned in. Besides asking for an item-

ized statement of expenditures, the Council order directs the commission to report its expenditures monthly hereafter. The commission still has \$70,000 left in the fund appropriated for its use.

No Fraud in Seattle Deal— Rescinding Proposed

In its findings to the Superior Court regarding the \$15,000,000 deal whereby the city of Seattle, Wash., acquired the railway lines of the Puget Sound Traction, Light & Power Company, the King County Grand Jury on Feb. 1 stated it found no evidence of corruption in connection with the matter but that the lines were worth only \$5,000,000 at the time of purchase and that the city is entitled to equitable relief and the Council should take steps to obtain it. No indictments have been returned.

Mayor Caldwell's special investigator, Wilmon Tucker, in recommendations to the City Council concurred in by the Mayor, states that the traction company was guilty of constructive if not actual fraud with reference to the value of the property. He also states that the contract is impossible of performance and that the city is under no obligations to enhance the value of bonds issued by the city in payment of the railway by furnishing additional funds or security in an endeavor to carry out the contract.

Mr. Tucker advises that the city make an offer to rescind and tender back all property and ask for the return of the bonds, stating that if the tender is not accepted the city should bring action in equity to rescind the sale. He also says that if the Council will not agree to such action, the tax payers should institute legal proceedings to relieve them from unjust burdens.

Wages of Executives Cut in Cleveland

Wages and salaries of all officers and employees of the Cleveland (Ohio) Railway, with the exception of conductors and motormen, were reduced 10 per cent on Feb. 1. In the order announcing the reduction it was stated that "There will probably be a further reduction later on, unless conditions change materially." The 10 per cent reduction included the pay of John J. Stanley, president of the company, who has been getting \$30,000 a year.

Wages of track repair laborers were reduced in an order issued on Jan. 3. Company officials announce that when the present wage agreement with the trainmen's union expires on May 1 the conductors and motormen will also have to accept a reduction of at least 10 per cent.

The men now get 75 cents an hour after the first year's service. Officials of the union have so far said nothing for publication regarding the proposed reduction, but have intimated that a strike is quite probable if the company attempts to carry out its announcement.

Governor Miller's Message Provokes Comment

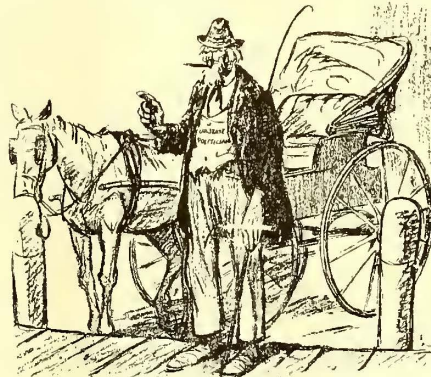
New York Executive Removes Causes of Early Criticism in Talks to the Newspapers

Few purely local state papers have caused greater commotion in public and political circles than the message of Governor Miller of New York to the Legislature in regard to the public utilities. It has caused rifts in the ranks of Republicans. It has encouraged hope with the Democrats that they may again elect a Democratic Mayor in New York despite the incubus of the Hylan administration. It has been the subject of column after column of editorial comment.

MR. LA GUARDIA, the Republican President of the Board of Aldermen of New York, was stunned by the message. He interpreted the Governor's remarks to mean that all jurisdiction and control or say in traction matters would be taken from the City of New York except to put out money for new subways. He said that no matter what increased fares the

John H. Delaney, Transit Construction Commissioner, commenting on Governor Miller's message, said that only the outworn over-capitalized surface lines that are paralleled by the city-owned rapid transit line were drifting toward disaster. If the public did not patronize such lines after public money has been invested to provide better service there was no public obligation, according to Mr. Delaney, to provide dividends or speculative profits on the uncontrolled securities of such lines.

Frank Hedley, president of the Interborough, did not deem it proper for him to comment on the Governor's plan. On the other hand, Lindley M. Garrison, receiver of the Brooklyn Rapid Transit Company, said that it seemed to him that the only hope for a proper solution of the traction problem lay along the lines of the Governor's message. He said that the only opposition to the sound and sensible method advocated by the Governor would come from those who sought personal and partisan interests rather than approved a just and proper solution of the matter. Later Mr. Hedley stated the case of the Interborough from the standpoint of the situation which now confronts that company and James L. Quackenbush, counsel for the company, prepared for



NEW YORK "WORLD'S" REACTION
TO MESSAGE

surface lines obtained, they could not operate successfully. He characterized as flippant and entirely unbecoming the Governor's statement that there was a lot of loose talk about home rule.

City Comptroller Craig characterized Mr. Miller's proposed solution of the fare question as a step backward fifty years. He said that the people of New York City would never tolerate the administration and control of an investment of approximately \$400,000,000 of their own money in the subways by any public body or commission that was not directly responsible to the City of New York.

James J. Walker, Democratic leader in the Senate, looked upon the statements in the Governor's message as the alibi of the Interborough for an 8-cent fare. He said that the writer of the message was either the editor of the *Subway Sun* or the editor of the *Subway Sun* helped to write the message.

On the other hand Majority Leader Senator Lusk in answering Mr. Walker said that the Governor approached the problem courageously from the viewpoint of the man who wanted to accomplish something of practical benefit to the people. Assemblyman Simon Adler, majority leader, was also reported as saying that the Governor's message pointed out the way for the solution of the railway problem in the city of New York.



EVENING "POST'S" IDEA WAS KILLING
THE PATIENT WITH KINDNESS

the *Herald* a summary of the company's case from the point of view of law and equity.

On Jan. 25 Governor Miller amplified his message to the Legislature. He characterized as a state of mind verging on insanity the views of some legislators that they will only vote for the plan if it provides a fare not to exceed 5 cents and municipal control. He said that the fare question was only inci-

dental. The real question was one of public service. The solution of the traction problem transcended the fare question. With regard to the claim that his recommendations usurped powers from the city, the Governor explained that the city never had power over public utilities except that delegated by the State. The interpretation was correct that his recommendations meant that, while he believed in municipal ownership as the ultimate solution, he did not believe in municipal operation. The Governor also explained that it was his purpose to appoint to the proposed new commission residents of New York City. He further elucidated his message by saying that the city should have representatives on the directorates of the corporations.

The *Times*, *Herald*, *Journal of Commerce*, *Commercial* and the *New York Tribune*, among the morning papers, are sympathetic with the message, although the *Tribune* is against the retention of a flat fare. The *World* and *American* oppose the Governor's message. The *World* does so, largely, because of the idea that the home rule principle would be violated and the *American* because of its avowed opposition to all corporation interests. Among the influential evening papers the *Post* was at first inclined to align itself against the Governor, but has since expressed the opinion that remarks made by the chief executive subsequent to the presentation of the formal message have done much to clear up some points in that document which it regarded as obscure.

The message was debated at a public meeting on Feb. 2 by Henry H. Curran, president of Manhattan; Job E. Hedges, receiver New York Railways; Oliver C. Semple, and Edward M. Bassett, respectively former assistant counsel and public service commissioner of the First District Commission. Mr. Curran conceded that the Governor is the only public official who has really tried to find a solution of the traction tangle. He approved the creation of a new state commission to get the facts and recommend remedies, but insisted that any changes in fares or contracts must be approved by the Board of Estimate. Such an investigation he believed would develop a plan based on a 5-cent fare, but if a square deal demanded an increase in fare the people must be shown.

Mr. Hedges defended the Miller plan. "The question," he argued "is whether a city administration vocally and visibly incompetent shall be left to the dickering and bickerings which for three years have not advanced one single constructive thought on this subject." At the conclusion of his talk there was a demand by the audience for an extension of the time allowance. Mr. Hedges' address was replete with epigrams. Some of them follow: "Regulation presupposes something to regulate, but if nothing is done transit in New York soon will be only a memory." "Buses are only a temporary anæsthetic." "If I have been sick for three years and a

New York doctor does nothing I feel I have a right to call in an Albany doctor who at least agrees to make a diagnosis." "The plea for home rule is like an alibi when your wife asks you where you have been last night and you don't remember."

Mr. Semple said that the state has power over all streets for the benefit of the public and held that the transit tangle should be taken up by business men. The Board of Estimate, he said, had acted like a lot of fellows who never had a real job in their lives.

Mr. Bassett held that there was not the seriousness in the situation today to demand state interference there was when the original subways were laid out.

Addresses were permitted from the floor and were about equally divided for and against the plan. The chief points made in opposition were that the capitalization of the companies included watered stock, higher fares would be a hardship to poor people and there should be home rule on the question.

Wage Cut in Cleveland

Railway There Makes Definite Announcement of 20 per Cent Decrease in Pay of Trainmen

A 20 per cent reduction in wages for all motormen and conductors, to take effect May 1, when the present wage agreement expires, was announced on Feb. 1 by George L. Radcliffe, vice-president and general manager of the Cleveland Railway. This means a cut from 75 cents to 60 cents an hour.

In addition to the proposed cut in wages, the company announces the discontinuance of special compensation agreements entered into after recommendations by the War Labor Board in 1918. These agreements provided for time and one-half for overtime, excess time for spread runs, eight-hour straight runs on Sunday, ten hours' pay for eight hours' work on night cars, etc.

The proposed reduction would save car riders in the neighborhood of \$1,500,000 a year according to Traction Commissioner Fielder Sanders. Mr. Sanders said that if the reduction went into effect on May 1, it would be reasonable to expect decrease in fare after the wage decrease had been in effect long enough to increase the interest fund.

Fred Telschow, president of the local union said: "I have nothing to say until May 1." Identical comment was made by W. M. Rea, secretary of the union.

The bulletin which was issued by the company as a notice of the proposed cut follows:

Effective on May 1, 1921, and continuing thereafter until further notice, there will be a reduction of fifteen (15) cents an hour in the wages of all motormen and conductors employed by this company.

On that date the recommendations of the War Labor Board relative to time and one-half for overtime, excess time for spread runs, eight-hour straight runs on Sunday, ten hours' pay for eight hours' work on night cars, etc., which have been effective since July 31, 1918, will be discontinued.

The minimum day of six (6) hours will remain as at present.

Approximately 3,400 motormen and conductors are employed by the company. The average monthly pay roll for 1920 was \$555,324. Under a 20 per cent reduction the average monthly pay roll under similar conditions would amount to about \$444,260. This would be an average monthly saving to car riders of \$111,064.

Paul Wilson, assistant secretary of the company, said:

The interest fund in December was \$39,000. Revenue has been falling off rapidly. It is a case of either cutting expenses or cutting service. The service is not any more than adequate now. The company decided to cut expenses.

The present fare of 6 cents is as high as it can be made without amending the Tayler grant. No one wants to see the fare go up if it can be reasonably kept down. Without amending the Tayler grant the interest fund would be wiped out and the city would lose regulatory control of the company.

Wages of all other employees from the president down have been cut correspondingly, effective today. Wages of the motormen and conductors are fixed at their present scale until May 1 by agreement. It would be unfair to the rest of the employees if we did not reduce the wages of these 3,400 train men at that time.

The contract between the company and the union provides that once a year either party may submit proposed changes to the other. It also provides for arbitration in case of a dispute.

Wages of trainmen have increased from a maximum of 33 cents an hour in April, 1916, to 75 cents an hour at present. On May 1, 1916, the union signed a two-year contract with the company providing a maximum of 35 cents an hour, an increase of 5 cents.

In January, 1918, the company offered a voluntary increase of 6 cents an hour, which would have made the maximum wage 41 cents. This the union refused, and on May 1, 1918, it made a demand for 60 cents an hour. This the company refused and the men struck.

The War Labor Board arbitrated this strike after one hearing in Chicago and two in Washington and set the wage at a maximum of 48 cents an hour. The settlement was made in August, 1918, retroactive to May 1. The board at this time also made provisions of time and a half for overtime and recommended special compensation, etc.

In May, 1919, the union did not ask for an increase in wages. There had been a temporary slump in business conditions for a few months following the armistice. In June, 1919, following an increase granted to workers on the Detroit United Railway the Cleveland union demanded a raise. After a strike of three days Governor H. L. Davis, then Mayor of Cleveland, offered his services and settled the dispute, the company granting the men a raise to 60 cents after City Council had promised the company to increase the dividend rate from 6 to 7 per cent. The dividend increase, after being authorized by Council, went to a referendum vote of the citizens and was rejected.

In May, 1920, the men demanded an increase to \$1 an hour. Mayor W. S. Fitzgerald tendered his services in the dispute which followed this demand, and the men accepted an increase to 75 cents.

Strike Follows Reduction in Wages

Trainmen in the employ of the United Traction Company, Albany, N. Y., went on strike on Jan. 29 in protest against the reduction in wages announced by the company. As noted in the *ELECTRIC RAILWAY JOURNAL* for Jan. 29, pages 235 and 244, the United Traction Company has just received permission to charge an 8-cent fare in Albany, but the Public Service Commission denied the company's right to do so in Troy, where there is a provision in the charter which prevents an increase. Several days ago the company notified its men that the cut in wages would be effective with the putting into effect of the increased fare in Albany, although in Rensselaer the city fare is cut down to 5 cents, where it has been 7 cents heretofore. In Troy the union men voted to a man to strike to retain the 60-cent an hour schedule of pay and the Albany union followed a night or two later. The Public Service Commission of the Second District of New York has issued an order requiring the company to appear before it and show cause why service is not at present operating.

News Notes

Newspaper Runs Series on Railway Problem.—The Grand Rapids *News* is running a series of articles on the transportation problems affecting Grand Rapids. The *News* has called upon city officials and others who have made a study of the bus question to express their views so the public may benefit thereby. One article written by City Commissioner Shaw outlined in detail the service-at-cost plan now under consideration by the City Commission. This proposal was reviewed in the *ELECTRIC RAILWAY JOURNAL* for Jan. 29.

Homes Ready for Employees.—Work on the construction of bungalows under the employees' housing program outlined by the Los Angeles (Cal.) Railway is nearing completion, and it is expected that they will be available for use at an early date. In the Jan. 10 issue of *Two Bells*, the official publication of the Los Angeles Railway, it states that so far sixty families have been accommodated under this housing plan. In the majority of these instances the employees have had a home selected and the railway has financed the purchase.

Wage Question Discussed in Brooklyn.—The question of wages in the future has been discussed in a general way by the management of the Brooklyn (N. Y.) Rapid Transit Company with the employees' representatives and the rep-

resentatives were told that there was no suggestion at this time of an immediate reduction in wages by the company. The entire matter was discussed informally and in a general way, and amounted to nothing more than an interchange of views on the question of wage readjustments throughout the country.

Electrification Being Considered.—George W. Lee, chairman of the operating board, states that the Ontario Government is seriously considering the electrification of the Temiskaming & Northern Ontario Railway. Reports secured from experts show the cost would be about \$9,000,000, but the results would warrant the expenditure. One of the main benefits would be the making of the line self-sustaining in regard to motive power, through eliminating the necessity of the heavy importation of coal. The road is more than 300 miles long.

Trackless Trolley for Erie.—A. R. Myers, general manager of the Buffalo & Lake Erie Traction Company, has agreed to apply to the city authorities of Erie, Pa., for a franchise to operate a trackless trolley upon certain streets of the city. It was declared at the conference between representatives of the railway and the municipal authorities of Erie that the General Electric Company now is experimenting upon the car at its Schenectady plant and that as soon as negotiations can be completed, several of the cars will be brought to Erie. It is proposed to try out the system in Liberty Boulevard between Second and Thirty-second Streets.

Track Being Torn Up in Blue Island.—The Chicago & Interurban Traction Company is tearing up 1 mile of single track on Canal Street, Blue Island, Ill., extending from the main line at Western Avenue to Calumet Grove. This line was built to serve the picnic grounds at Calumet Grove, at one time a very popular place. In recent years, however, the only business done by the company on the line to the park was on Sundays in the summer. A twenty-minute service has been given seven days a week, using one car. The annual loss on operation was about \$8,000. Permission to discontinue service and dismantle the line was granted by the Illinois Public Utilities Commission just before the close of the year 1920.

Chicago Newspapers Raise Pertinent Question.—In the controversy in Chicago and Illinois over the abolition of the Public Utilities Commission and the restoration of 5-cent fares two Chicago newspapers have raised a very pertinent question. They point out that the campaign fight was waged on the platform that Governor Lowden's commission was wrong in raising fares above 5 cents. But if it was wrong, they now ask, why does not Governor Small's commission order the fares reduced to 5 cents as soon as the appointments are made. They say that

this would be a very speedy way to restore 5-cent fares while it may take several years to complete the Mayor's plan for a people's ownership and a 5-cent fare.

Transportation Difficulties in California.—A recent issue of the San Francisco *Chronicle* forecasts trouble in the present California Legislature between railway and motor transport interests. H. C. Donoho, the writer of the article, states that the fight will center about efforts to impose additional taxes on auto stages and motor trucks. How extensively the auto as a facility in transportation has progressed in California is shown in a photo which accompanies the account. It is a view of the Los Angeles passenger depot for auto stages where 600 buses each day arrive and leave for points as far north as San Francisco and as far south as El Centro. All steam railroads and electric interurban lines operating in California openly advocate legislative measures that will put an end to all unfair transportation competition.

A Penny a Day to Keep Poverty Away.—Employees of the Toledo Railway & Light Company, Toledo, Ohio, have evolved a plan to help many of their fellow workers put on short time or laid off during the period when closed factories have caused a decrease in both power and railway service. The workers have agreed to donate 1 cent out of each dollar they receive into a fund to be administered by a committee of both employees and officers and the company agrees to match the money of the men. With a monthly payroll of nearly \$300,000 this will give a fund of \$6,000 a month for the support of men whose families are in need. Very few cases of need have arisen in the ranks of the rail-light employees, but the fund is started in order to prevent any of the men from appealing to the city for help. The city has opened centers for the free distribution of food.

A New Offer to Miami.—Attorney Crate D. Bowen, representing the Miami (Fla.) Traction Company, which has not been operating since the fire which destroyed its powerhouse last fall, appeared before the City Council and suggested that the city consider the possibility of purchasing the rails, equipment and franchise of the company. The Council did not take any action, in fact the attorney did not ask any, merely suggesting consideration of such a proposition, but many hold that the company has forfeited franchise rights and that all the city should buy is the rails and equipment. The need for railway service is stressed by business men everywhere. The jitneys that have sprung up are inadequate and unsatisfactory. No action will be taken, it is believed (since the voting in of a commission form of government) until the new government is framed and the new commissioners come into power. Mention of this prospective sale was made in the *ELECTRIC RAILWAY JOURNAL*, issue of Jan. 1.

Financial and Corporate

Preferred Dividends Paid

Washington Railway & Electric Company Shows Improved Earnings Under 8-Cent Fare

The report of the president to the stockholders of the Washington Railway & Electric Company, Washington, D.C., covering the operations of that company and its subsidiaries for the year 1920, reviews the fare situation. On Jan. 6, 1920, the company petitioned the Public Utilities Commission of the District of Columbia for a further increase in fare from 7 cents cash with four tickets for 25 cents, the rate then prevailing. This petition was not acted upon until April 15, but relief was granted effective May 1. The 7-cent cash fare was increased to 8 cents and the ticket rate of four rides for 25 cents was made four rides for 30 cents.

NEW RATES HELP COMPANY

Under the new rates the financial condition of the company improved so that it was possible on Aug. 20 to pay the cumulative dividend of 2.5 per cent due on the preferred stock for the period Dec. 1, 1919, to June 1, 1920. On Dec. 1, 1920, the preferred dividends for the six months just then ended were also paid, thus paying in full to date all preferred dividends due. No dividends, however, were paid on the common stock during the year.

The better showing made, of course, is due largely to the higher rate of fare effective May 1, last. It is also due, in a considerable degree, to increased efficiency and operating economies, for early in the year certain lines were rerouted. This not only saved in car mileage but greatly reduced the congestion at some of the most important loading points, thereby permitting a more regular and expeditious movement of cars. The company has also proceeded in a small way with the operation of one-man safety cars, a type of car which seems to be well adapted to operation on some of the lines.

It is also proceeding with the conversion of open cars to modern trailer cars of the general appearance of the most recent equipment purchased. The operation of such trains is proving economical and will be further tried out during the coming year.

There has also been a considerable improvement in the accident situation. During the year the number of accidents was reduced 22 per cent and the number of claims presented was reduced 30 per cent.

During the year 2.65 miles or 4.2 per cent of underground trolley trackage was rebuilt. The largest job was on the Connecticut Avenue line extending

from Dupont Circle to Eighteenth and Columbia Road. The cost of such reconstruction work was at the rate of approximately \$134,000 per mile of single track. This is 2.5 to 3 times more than the pre-war cost of similar work.

The total amount spent for maintenance and improvement of way and structures was \$1,136,277. During the year 112,913,416 passengers were carried, of whom 25,130,632 were handled on transfers. As compared with the previous year, the number of revenue passengers decreased 4,408,575 or 4.78 per cent.

Refunding Provision Proposed

A bill has been introduced in the present session of the Legislature at Olympia, Wash., by Senator Fred W. Hastings of King County providing for the refunding of utility bonds. The measure says:

Sec. 1. Cities and towns are hereby authorized to refund public utility bonds issued according to law in such manner, for such time and upon such terms and rates of interest as the legislative authority of such city or town may deem advisable. The rate of interest upon such refunding bonds shall not, however, exceed the maximum rate authorized by law at the time of such redemption for utility bonds, and where said bonds so refunded constitute a general obligation of such city or town, said refunding bonds shall not be deemed the creation of a new or an additional indebtedness of such city or town.

Mayor Hugh M. Caldwell is opposed to the passage of any such measure. He states that it would enhance the value of the \$15,000,000 of bonds issued by the city for the purchase of the local railway from the Puget Sound Traction, Light & Power Company by making it possible for the city to pay the principal from some source other than the earnings of the road.

Mayor Caldwell in session with members of the City Council finally succeeded in having it agreed to recommend that a provision be written into the bill that bonds issued prior to passage of the act should not be so refunded. This would eliminate the railway bond issue.

Assistant Corporation Counsel Evans, in discussing the bill, said:

The bill was prepared so as to permit the city of Seattle to refund any installment of the special fund railway bonds at maturity that it may not be able to meet from the earnings of the system. The outstanding bonds would be surrendered for cancellation and new special fund utility bonds can be issued to replace them. The terms of the new bonds may be fixed by the City Council, except that they will have to be made payable solely from the earnings of the street cars.

The refunding bonds would not constitute a general obligation any more than in my judgment do the existing bonds. The bill if passed would have the effect of permitting the city a longer time in which to meet the purchase price of the street car system should that be found necessary. These refunding bonds would bear an attractive interest rate and would be sold if necessary on the open market.

Default Narrowly Averted

Financial Difficulties of Company at Albany Due to Cost Increase Compared with Income

The intercorporate relations of the United Traction Company, Albany, N. Y., the Hudson Valley Railway and the Delaware & Hudson Company received considerable attention at the hands of the Public Service Commission for the Second District of New York in the decision by that body on Jan. 21 in the matter of fares, referred to at length in the *ELECTRIC RAILWAY JOURNAL* for Jan. 29.

The commission says that in view of the financial condition of the Hudson Valley Railway there has been during the whole period since the Hudson Valley securities were acquired a strong possibility that much of the indebtedness of that company will never be paid. The process of one company borrowing from the other is characterized as a movement in a circle: The Hudson Valley Railway borrowed money from the United Traction Company to meet its obligations, including interest due that company; the traction company in turn used the interest received from the Hudson Valley to pay dividends on stock owned by the Delaware & Hudson Company and then borrowed from the Delaware & Hudson Company to loan to the Hudson Valley Company.

The commission says, however, that from any evidence at hand the conclusion is inescapable that the United Traction Company's present troubles, while they may have been somewhat aggravated by improper or mistaken management in the past, are fundamentally due to an increase in operating costs out of all proportion to the increase in revenue from passenger traffic.

In referring to the purchase of the Hudson Valley Railway by the United Traction Company the commission said:

The most that can be said therefore, of the Hudson Valley purchase as affecting the United Traction Company's financial condition today is that if the Hudson Valley purchase had not been made and the traction company had continued to pay dividends only at the old rate on the old capital stock the traction company would be not quite so far behind, but would be in just exactly as much need as it is today of increased revenue to meet current costs of operation.

Of course, if the Hudson Valley Company failed to meet its obligations and the Delaware & Hudson Company should try to collect its loans from the United Traction Company, that would be a different story, but the facts are so clear that there is not the slightest prospect that the Delaware & Hudson Company could make the United Traction Company riders pay the Hudson Valley losses in any such fashion. It is fair to say that there is no evidence of any attempt by the company to charge Hudson Valley losses directly or indirectly to United Traction operations. The difference between the increase during 1918 in loans from the United Traction Company to the Hudson Valley Company, \$1,841,683, and the increase in loans from the Delaware & Hudson Company to the United Traction Company, \$2,132,241, is \$291,149 which is about offset by the increase in "construction work in progress," \$149,532, and in corporate deficit, \$132,734. Those two items together amount to \$282,266. In other words, the Delaware & Hudson Company may be said to have financed the traction company's maintenance work and its net losses, in addition to carrying the Hudson Valley.

Merger Proposed

Interstate Public Service Proposes to Take Over Louisville & Southern Indiana Traction Company

Stockholders of the Louisville & Southern Indiana Traction Company will meet in Indianapolis, Ind., shortly, to consider and vote on a proposal to ratify the action of the company directors in entering into a contract for the sale of all the property and assets of the company to the Interstate Public Service Company. Stockholders of the Louisville & Northern Railway & Lighting Company will take similar action. The Interstate company, it is understood, owns a majority of the stock in the other two companies, either directly or through its officers and directors.

The Louisville & Southern Indiana Company took over the property of the Rapid Transit Company, organized twenty years ago, to build an interurban road between Jeffersonville and New Albany, Ind. Later the Louisville & Southern Indiana obtained entrance into Louisville by way of the Big Four bridge at Jeffersonville, building approaches on each side of the river. Then the Louisville & Northern company was organized and built lines out to Charlestown and Sellersburg. At the latter city it connected with the Indianapolis & Louisville Traction Company, which built south from Seymour, where it connected with the Indianapolis, Columbus & Southern, the pioneer interurban of Indiana. The Louisville & Northern also obtained entrance into Louisville bridge by way of the Kentucky & Indiana bridge at New Albany.

The Interstate Public Service Company was organized later as a holding company. Besides the two interurbans, it has bought the Indianapolis & Louisville and leased the Indianapolis, Columbus & Southern for a long period, giving unified service between these cities and Indianapolis. The company owns a water power plant at Williams, Lawrence County, and soon will obtain power from a hydro-electric plant at Keokuk, Ia. It owns the controlling interest in the United Gas & Electric Company, supplying Jeffersonville, New Albany and Corydon, Ind., with gas and electricity, and also owns public utility plants in many other towns of Southern Ind. Harry Reid, president of the company, is moving from Louisville to Indianapolis, the headquarters of the company.

New Officers for Interurban

F. E. Myers, Ashland, who has been president of the Cleveland, Southwestern & Columbus Railway, Willoughby, Ohio, for many years, has resigned to give practically his entire attention to his business at Ashland, including the Ashland Pump & Hay Tool Works and the Faultless Rubber Company, while four prominent Cleveland bankers have been elected to the board of directors.

The reorganized directorate consists

of F. E. Myers, chairman; Warren Bicknell, who represents the Union Trust Company; L. J. Wolf, P. A. Myers, E. B. Greene, vice-president the Cleveland Trust Company; Judge W. B. Thompson of Lorain; Otto Miller of Hayden, Miller & Company; H. C. Robinson, vice-president of the Guardian Savings & Trust Company; J. O. Wilson, F. L. Fuller, F. T. Pomeroy, L. M. Coe, North Olmsted; W. E. Haines, secretary of the Ohio Farmers' Insurance Company of Le Roy, and E. F. Schneider.

The directors elected L. J. Wolf, first vice-president; J. O. Wilson, second vice-president and treasurer, and F. T. Pomeroy, third vice-president and secretary. A committee was appointed to elect a president and a report is expected within a few days.

Members of the executive committee are Warren Bicknell, L. J. Wolf and F. T. Pomeroy with F. E. Myers, chairman of the board, and the president when elected as ex-officio members.

I. R. T. Fails to Earn Cost of Service

The comparative income statement of the Interborough Rapid Transit Company for the month of December, 1920, shows a deficit of \$301,403. Compared with the deficit of a year ago this figure is alarming. If this be true of the one-month showing it is doubly alarming in the six months' statement. Since July, 1920, operations show a loss of \$2,682,760 which is a greater figure than shown in the report of the company for the fiscal year ended June 30 last. At that time the deficit was recorded as \$2,235,835. Although the gross operating revenues have increased during the last six months the steady rise in operating expenses has offset this increase by 7 per cent.

City Would Audit Books at New Orleans

Paul Malony, Commissioner of Public Utilities of the city of New Orleans, has asked an audit of the books of the New Orleans Railway & Light Company, and to this end has requested Gov. John M. Parker to assign the state auditor of public accounts to the task.

The purpose of the audit is to give the public and the city some information about the disposition of the 2 extra cents, in the 8-cent fare which the company was permitted to charge for a period of six months ending in April, with the explicit stipulation that the 2 cents were to go to the payment of wages and taxes.

The railway is now delinquent in both the city and state taxes for 1920. Its failure to pay the city taxes of \$600,000, on the grounds that it did not have the money is the reason given by the city for the step to be taken to examine the books.

\$8,439,400 of Securities Sold by Utility to Its Customers in 1920

Complete figures of the local or customer-ownership sales of securities at the properties of Standard Gas & Electric Company Chicago, Ill., during 1920 show a total par value of \$8,439,400 thus distributed. Of this amount \$6,343,050 was represented by the preferred stocks of the various subsidiaries and \$2,096,350 by round notes and other securities of Byllesby companies. Preferred stock sales were much greater than during any year since the customer-ownership plan of financing was inaugurated. About 25 per cent of the investors in such securities were purchased on the partial payment plan.

SUMMARY OF EARNINGS OF INTERBOROUGH RAPID TRANSIT COMPANY

Month Ended Dec. 31	1920	1919	Percentage Change Over 1919
Gross operating revenue.....	\$4,980,072	\$4,668,268	6.7
Operating expenses.....	3,235,854	2,855,951	13.3
Net operating revenue.....	\$1,744,218	\$1,812,317	-3.8
Total taxes.....	220,831	228,556	-3.4
Income from operation.....	\$1,523,387	\$1,583,761	-3.8
Non-operating income.....	55,093	53,988	3.9
Gross income.....	\$1,579,480	\$1,637,749	-3.6
Interest, rentals, etc., including Manhattan guarantee.....	1,880,883	1,659,919	13.3
Net corporate income (exclusive of accruals under the provisions of Contract No. 3 and related Certificates which under these agreements with the City are payable from future earnings).....	*\$301,403	*\$22,170	-1260.1
Operating ratio (per cent).....	65.0	61.2	3.8
Passengers carried (revenue).....	90,522,590	84,771,977	6.8
Six Months Ended Dec. 31	1920	1919	Percentage Change Over 1919
Gross operating revenue.....	\$26,969,396	\$24,200,226	11.4
Operating expenses.....	18,034,299	15,175,220	18.9
Net operating revenue.....	\$8,935,097	\$9,025,006	-1.0
Total taxes.....	1,311,268	1,297,516	1.1
Income from operation.....	\$7,623,828	\$7,727,489	-1.3
Non-operating income.....	316,253	271,929	16.3
Gross income.....	\$7,940,082	\$7,999,419	-0.7
Interest, rentals, etc., including Manhattan guarantee.....	10,622,842	9,919,785	7.1
Net corporate income (exclusive of accruals under the provisions of Contract No. 3 and related Certificates which under these agreements with the City are payable from future earnings).....	*\$2,682,760	*\$1,920,366	-39.7
Operating ratio (per cent).....	66.9	62.7	4.2
Passengers carried (revenue).....	496,595,522	445,396,934	11.5
* Deficit.			

Ohio Electric Collateral Sold for \$25,000

A lot of securities including collateral notes, coupons overdue and bonds and stocks of the Ohio Electric Railway and bonds of the Columbus Interurban Terminal Company and the Columbus, Newark & Zanesville Electric Railway and all equity in collateral pledged by the Ohio syndicate was sold at auction at Philadelphia, Pa., on Jan. 12 for \$25,000.

Letters were received on Jan. 7 by members of the participating syndicate in the Ohio Electric Railway system advising them that the securities owned by the syndicate would be sold at auction on Jan. 12. The collateral was sold to raise funds to pay off the indebtedness of the syndicate, the securities having been put up as collateral against the notes of the syndicate.

It is understood that the indebtedness of the syndicate is about \$3,500,000.

The letters notifying the syndicate members of the proposed sale came from Erwin & Company, Philadelphia, the syndicate managers.

Financial News Notes

\$11,215 Lost at Henderson.—In the annual report to the Common Council of the city of Henderson the Henderson (Ky.) Traction Company reports a loss of \$11,215 for the year 1920. The present fare is 7 cents, with four tickets for 25 cents. The company asks in its report some method of relief in order to operate.

Preferred Stock Quickly Sold.—The syndicate of banking houses headed by Nesbitt, Thomson & Company, which took the issue of \$3,000,000 of 7 per cent cumulative preferred stock of the Winnipeg (Man.) Electric Railway, have announced the closing of the subscription lists. This is the first large public utility issue sold in Canada since the war.

Discontinuance of Puyallup Line Allowed.—By order of the Public Service Commission the Puget Sound Electric Railway, Tacoma, Wash., is permitted to discontinue service on the old Puyallup line from Summit to Fruitland. It is stated that revenues on the line during the trial period of three months ended Dec. 31 were only \$141.11, as against expenses of \$499.10, exclusive of depreciation.

Earnings Increase Under Eight-Cent Fare.—The revenue of the New Orleans Railway & Light Company, New Orleans, La., under the 8-cent fare for the months of October, November and

December increased \$321,000. Increases in wages for the same period were approximately \$42,000. The number of passengers during this interval fell off monthly about 7 per cent. A complete survey of the company's earnings now being made will soon be ready for submission to Commissioner Maloney.

Increase in Capital Asked.—The Bristol & Plainville Tramway, operating about 15 miles of electric railway in Bristol, Plainville and Terryville, Conn., and supplying industries with electric power, has petitioned the State Legislature for permission to increase its capital stock from \$1,000,000 to \$5,000,000. The additional capital will provide for business expansion as conditions warrant it, especially for the distribution of electric power. Not all the proposed increase will be used at once.

Property Sold For Taxes.—Harry Reinhard, North Adams, Mass., a real estate and insurance dealer, was the purchaser of real estate owned by the Berkshire Street Railway in Williamstown at public auction for \$1,475. The sale was held to satisfy unpaid taxes for the past three years, totaling \$1,216.39. The sale of personal property owned by the company in Williamstown was postponed. Mr. Reinhard purchased the Hoosac Valley park property of the Berkshire company at a tax auction sale held on Aug. 21 last.

Franchise Declared Forfeited.—The Board of Estimate of New York City has declared forfeited the franchise of New York & North Shore Traction Company, which formerly operated on the north shore of Long Island in the Borough of Queens. The franchises were forfeited on the ground that the company ceased operation of the lines last May, and also owes the city a large sum of money for franchise taxes. The company is now in the hands of receivers, appointed by Judge Chatfield of the Federal court in Brooklyn.

Citizens Plan to Continue Line.—The Stoughton Railway Corporation, operating between Stoughton and Randolph, Mass., which was to have discontinued service on Jan. 22, has been taken over by business men in the vicinity of Randolph and Stoughton and operation of cars is assured. The holder of the mortgage on the property was the highest bidder for the equipment at foreclosure. Temporary officers have been elected. The line was formerly known as the Norfolk & Bristol Street Railway, a Massachusetts corporation, which was sold at public auction on Oct. 23 last.

Effort Made to Amend Valuation Act.—Senator Mackay has introduced a bill in the New Jersey Legislature providing for a court of review of the valuation of the electric railways that are being appraised under an act of last year. That measure placed these valuations under control of a special com-

mission independent of the utilities board. This commission consists of the Governor, the State Comptroller and the State Treasurer, but Governor Edwards, declaring the act was a political measure, refused to serve and State Comptroller N. A. K. Bugbee and State Treasurer William T. Read are acting as the commission.

A Finite Court.—Some elementary facts in regard to the methods of foreclosure and sale and the winding up of receivership are stated by Judge Julius M. Mayer of the Federal court at New York in answer to Senator Harris of Brooklyn. Legislators of that borough recently decided among themselves that it was about time the receivership of the Brooklyn Rapid Transit Company was ended and sought to confer with the court about the matter. The court explained that there was a multiplicity of claims against the company; that the only thing the court could do to hasten the time for ending the receivership was to dispose of all matters ready for its consideration; that it was doing this, and that "I cannot, therefore answer your query any more definitely." An inquiry into the affairs of the company by Congress has since been proposed.

Removing Prohibition to Merger.—By a vote of thirteen to one on Jan. 26 the District of Columbia Committee of the House of Representatives instructed Representative Gould, New York, to draft and report favorably to the House a bill removing the statutory prohibition against the consolidation of the Washington Railway & Electric Company and the Potomac Electric Power Company. A committee of five was also authorized to draw up a bill looking toward the merger of the Washington Railway & Electric Company and the Capital Traction Company. It was pointed out that it would be unfair to the Capital Traction Company to ask it to put its property into the pool if the Washington Railway & Electric Company were allowed to hold out of the merger its most valuable asset, the Potomac Electric Power Company.

Personal Claimants Question Validity of Bonds.—Charges that the first and second mortgage bonds of the Kansas City (Mo.) Railways, amounting to \$32,903,000, are invalid and void because they were issued in violation of a constitutional statute of the state, which prohibits a mortgaged indebtedness in excess of the capital stock, have been made in an answering petition filed in the United States district clerk's office by sixty-two personal injury claimants of the railway. The petition was filed by Harry G. Kyle, attorney for personal injury claimants. It was in answer to the intervening petition and bill to foreclose filed two months ago, following the admission of insolvency of the railway by the Continental & Commerce Trust & Savings Bank and Edward F. Swinney, trustee.

Traffic and Transportation

Would Restrain City

Louisville Railway Seeks Injunction to Prevent Interference with Increase in Fare to 7 Cents

The Louisville (Ky.) Railway on Jan. 27 filed with the United States District Court at Louisville a petition for an injunction to restrain the city authorities from interfering with the collection by the company of a 7-cent fare. This action followed closely the rejection by the City Council of an ordinance granting the railway an increase in rates. If the injunction is granted the company states its intention immediately to begin charging the 7-cent fare, with free transfers. The fare is now 5 cents.

DEMAND SUIT BE SPEEDED

Efforts are being made by representatives of both the city and the railway to have the suit heard as soon as possible by Federal Judge Walter Evans. Mayor Smith personally has favored the increase in fare, and has so stated in the press. However, the City Council has refused to grant the increase, although the Board of Aldermen has voted in favor of it. The Board of Trade and a number of civic organizations favored the higher-fare plan. Sixty-odd labor union locals and a number of welfare and suburban organizations opposed it.

James P. Barnes, president of the railway, outlined the attitude of the management as follows:

The officers and directors of the Louisville Railway believe that company to be under a three-fold obligation:

First—To render adequate service to the public of Louisville.

Second—To maintain an adequate living wage scale for its employees.

Third—To pay a reasonable rate of return to the investors in securities upon the amount invested in property used in the service of the company.

We believe also that the company has the right to command means of carrying out these obligations by a sufficient charge for service rendered. In this belief the company is seeking relief in the federal courts under that clause of the United States Constitution which insures to the citizens of this country that their property shall not be taken from them without due process of law. At the present time the net earnings on the investment in the property of the Louisville Railway are less than $3\frac{1}{2}$ per cent per annum, which is far below the legal interest rate and which in recent court decisions has been held confiscatory.

COURT ONLY RECOURSE LEFT

In the month of December an advertisement was published over the signature of the president of this company announcing that one of two courses must be followed—either relief or retrenchment. Relief through the city's co-operation was refused by the rejection in the Board of Councilmen of the Wilson ordinance. We are, therefore, faced with the alternative of seeking relief through the courts or at once entering upon a program of retrenchment.

We have chosen the alternative of seeking relief through the courts in order that the public may be spared the inconvenience and annoyance incident to curtailment of service which would otherwise be necessary.

The grounds given for asking for the injunction is that the operation of the

car lines in Louisville under a 5-cent fare franchise does not yield sufficient revenue to meet the expenses of the company.

The railway company also sets forth claims that the rate-making power still exists in the city and contends that it is entitled to the reasonable exercise of this power, which again does not extend to the point of confiscation. In its petition the plaintiff traces out the legal and corporate history of the street car enterprise in Louisville. Specifically, the plaintiff claims it is operating under two classes of franchises, those granted to it direct by the city of Louisville and those purchased by it from the various street car companies that formerly operated in Louisville.

The Mayor at first refused to comment on the city's action. The city attorney on the other hand indicated that he would have a statement to make as soon as the suit was filed by the company.

Fast Through Service Between Indianapolis and Fort Wayne

At a conference of officials of the Union Traction Company of Indiana and the Indiana Service Corporation at Muncie recently it was decided to establish three new trains between Fort Wayne and Indianapolis. This fast through service via Anderson and Peru was inaugurated on Jan. 16. Through the newspapers the public was invited to submit names for the new trains, but on Jan. 15 no selection had been made, though probably a hundred names had been submitted.

Two trains will be operated through Muncie and the third by way of Peru. The first of the new trains will leave Fort Wayne at 6:30 a.m. and will arrive in Muncie at 8:30 o'clock and in Indianapolis at 10:15. On the return trip it will leave Indianapolis at 5 p.m., arriving in Fort Wayne at 9 p.m.

The second train will leave Indianapolis at 7 a.m. and arrive at 11:10 a.m. in Fort Wayne. On the return trip it will leave Fort Wayne at 5:30 p.m., reaching Indianapolis at 9:30 p.m. These trains will make only county seat stops.

The third train, which now leaves Indianapolis at 7 o'clock in the morning and is run to Bluffton, will go to Fort Wayne, arriving there at 11:50 a.m. The car will leave Fort Wayne at noon and arrive in Indianapolis at 4:15 p.m. This car will be operated on regular limited time.

The Union Traction Company of Indiana and the Indiana Service Corporation are jointly inaugurating this service to compete with the service of the steam railroads between Indianapolis and Fort Wayne.

Joint Use Ordered

Commission Order Expected to Relieve Congestion in Milwaukee—Rentals a Problem

The Wisconsin Railroad Commission has directed the joint use of tracks on Wells Street in the City of Milwaukee by the Milwaukee Electric Railway & Light Company, the Milwaukee Northern Railway and the Chicago, North Shore & Milwaukee Railroad. The commission retains jurisdiction and will settle the compensation to be paid by the companies for the use of the tracks. Thirty days are given to appeal.

The order is expected to permit the routing of one or more of the lines of the Milwaukee Electric Railway & Light Company over Wells Street below Eleventh Street, thus relieving traffic congestion on Grand Avenue and its continuation, Wisconsin Street, the main business street of the city. Wells Street parallels Grand Avenue.

The Railroad Commission's order is similar to the one it issued on Dec. 1, 1913 (13 W. R. C. R. 268, 299). At the time, however, it embodied in it a provision under which the companies concerned were authorized to examine each other's books and records for the purpose of verifying the accuracy of statements rendered or claims made pursuant to the terms of the agreement. This provision resulted in prolonged litigation. Finally, some months ago, the courts held that the commission had exceeded its powers in that respect. The commission thereupon once more considered the matter and issued the present order. The new order omits that portion of the previous order relating to the examination of books and records.

When the matter was under consideration in 1913 the Milwaukee Electric Railway & Light Company was granted permission by the City Council to extend its tracks on Wells Street from Eleventh Street down. This was done at a considerable expense, but because of the ensuing litigation the tracks have lain idle ever since. Between Sixth and Second Streets on Wells Street there are tracks of the Milwaukee Northern and the Chicago, North Shore & Milwaukee roads.

Mayor Hoan of Milwaukee has urged upon the Railroad Commission the need of withdrawing some of the railway traffic from Grand Avenue and from Wisconsin Street, pointing out that, due in a large measure to the increased use of automobiles, congestion on this thoroughfare has been greatly intensified within the past few years until it has become a constant menace to life and limb.

The Railroad Commission is asked to enter an order for the proposed rerouting. Immediate rerouting of street cars is also urged in a letter to the Railroad Commission by the Milwaukee Safety Commission. On the other hand, Grand Avenue merchants, who opposed taking cars off Grand Avenue when the matter was considered some years ago, are expected to take the same stand at this time.

Flexible Fares Criticised

City Club of New York Opposed to Flexible Rate of Fare Dependent on Cost of Service

The City Club of New York has issued a comprehensive report on flexible fares for street railways. This report, which represents an exhaustive study of the flexible fare idea by the club's committee on public service, points out that Governor Miller's traction program, while it calls for a uniform fare throughout the city at any given time, is based upon the idea that the fare will fluctuate from time to time according to the cost of the service.

THE report traces the spread of the service-at-cost idea in recent years as a means of giving relief to hard-pressed traction companies in many cities. It declares that flexible fares cannot be applied in any community except where all traction lines are combined and operated as a unit and that the thirty-five operating companies and receiverships in New York City create a competitive condition that makes the flexible fare plan impossible.

For example if the fare on the surface lines was more than on the subway competition would immediately assume much importance and subway traffic would be increased at the expense of the surface lines. The non-paying surface lines would be worse off by the very fare increases destined for their relief. The same would be true if the B. R. T. subways charged one rate of fare and the Interborough another. The report says that such a consolidation could not be effected by voluntary agreement except at a prohibitive cost. No group of security holders will consent to give up the advantages they hold, and so a voluntary consolidation would have to be based on giving every group whatever it asks as the price of its consent to go into the combination.

FLEXIBLE FARE OPPOSED

The report says that the Governor's proposed commission will be in a position to surrender public rights only. It will not be able to bring about a surrender of private rights except by negotiations and persuasion.

Even if all the transit lines could be consolidated, the adoption of the flexible fare scheme would involve issues of grave moment to the city, says the report. One of these, is the question of the social importance of cheap transit. The city's policy, as embodied in the subway contracts, included low fares as a means of spreading out population and relieving conditions from which New York has suffered for more than half a century. The city has already pledged hundreds of millions of dollars to the maintenance of this policy. The flexible fare scheme would reverse it, and would allow the fares to be increased to any point which might be necessary to make the transit lines self-sustaining regardless of the effect of the high fares on the community's welfare. The flexible fare scheme would make fare-fixing a fiscal matter pure and simple, and divorce it entirely from any general consideration of municipal policy with respect to community development. Under such a plan the railway companies would be entirely re-

lieved of their obligation to provide the service at reasonable rates to the public; they would lose their character as public utilities and become private enterprises privileged to use the streets to exploit for private gain the transportation needs of the public up to the full amount of the return upon the investment fixed in the contracts.

WATER STILL PRESENT

The report calls attention to the fact that in a service-at-cost plant, a valuation would have to be agreed upon. The difficulties of getting a figure accepted that would be fair to the public are as great as the difficulties affecting a voluntary consolidation of the existing diverse interests without excessive cost. Generally, the companies have taken on obligations which make it impossible for them voluntarily to accept a valuation that would be fair to the public, and the flexible fare or service-at-cost will necessarily be a failure unless the valuation is in fact conservative and accepted as such by the public.

Governor Miller states that already the water has been squeezed out of the traction securities, continues the report. He refers to their market value. But the incorporation of the flexible fare plan would relieve the companies of their franchise obligations and give them the right to charge at all times adequate fares to yield a full return upon the value of their property. This would in itself restore the franchise values. The franchises would no longer be liabilities, but of great value with their perpetual rights freed from contractual restrictions. It is of vast importance, therefore, that the value of the properties should be fixed under the existing franchises, before the flexible fare scheme is embodied in the law of the state.

CLUB AT ODDS WITH GOVERNOR

The most important general objection to service-at-cost arrangement, says the report, is the difficulty of preserving proper incentives to economy and efficiency in operation. The private owners supply the management, at a fixed rate of profit. If the management is good the profit is just the same as if it is bad. The various schemes so far devised for overcoming this difficulty and restoring the incentive have not worked out in practice, and this particular trouble remains the despair of the whole flexible fare program.

With respect to the transit commission, the club takes issue with the Governor on the question of home rule. The club maintains that transit is pri-

marily a local problem and that no plan formulated by such a commission as the Governor proposes should take effect until after it has received the approval of the Board of Estimate or else of the voters of the city at a referendum election.

Jitneys Return at Davenport

Men Unemployed Again Start Cars After City Council Nullifies Previous Regulations

The jitney bus menace, serious several years ago and since then eliminated both by law and by business conditions, has returned again to trouble the Tri-City Railway and has assumed such proportions that B. J. Denman, president of that company, has threatened to run the cars into the carhouses if the authorities do not take some action to curb the competition of the jitneys.

UNEMPLOYED RUN AUTOS

It has not been any act of the traction lines which brought about the present development of the bus lines. Factory shut-downs and lack of work, coupled with the antagonism of the City Council to the utility corporation, are responsible.

Laboring men laid off who had bought autos during the recent years of prosperity got the idea of turning their machines into an earning agency. Then along came the present City Council and rescinded an ordinance passed several years ago which placed such a heavy bond on the jitneys that they were forced out of business. This ordinance had also prescribed continuous operation, following of certain definite routes, a uniform fare of 7 cents and other requirements.

The traction lines charge a cash fare of 9 cents and the jitneys charge 10 cents. No bond protects the passenger in case of accident. The jitneys time their arrival at loading points and pick up passengers waiting for street cars.

Several buses are now operating between Davenport and Rock Island in defiance of an order of the Illinois Public Utility Commission. The Tri-City Railway has placed its case in Illinois in the hands of Attorney C. J. Searle, Rock Island, and will shortly commence action for compliance with the commission's order.

RADICALS IN POWER

In Davenport action is uncertain as little relief can be expected of the present councilmen and the only manner in which a show-down can be forced is through such a threat as President Denman has made. Taxes of the Tri-City Railway of Iowa, if apportioned to the number of street cars in operation, would mean a monthly tax of \$40 on each car. The jitneys are taking a large amount of business from these cars, are running over paving which the traction lines have laid, are charging a higher fare, operating only during the traffic peaks and without bonds, and are paying an annual license fee of only \$10.

Separate Cars for Women Again Urged

Trolley cars for the exclusive use of women during rush hours are provided in a bill introduced by Senator George M. Reischmann and Assemblyman John O. Gempler of New York. The measure authorizes the Public Service Commission to designate a minimum number of cars for such use.

Under the public-be-pleased policy of William G. McAdoo as president of the Hudson & Manhattan Railroad separate cars for women were operated on that road for a time, but were dispensed with after the experiment had proved them impracticable. The use of such cars on the lines in New York was also urged before the Public Service Commission but that body decided against them on the basis of the testimony presented.

Higher Fare Trend Continues

Only Thirty-four Cities with 25,000 or More Population Retain Five-Cent Charge

The upward movement of rates of fare continues, as shown by statistics compiled by the information bureau of the American Electric Railway Association giving the rates in effect on Dec. 31, 1920, in the 288 cities of the United States having a population of 25,000 or more.

Since the statement showing the rates in effect on Dec. 1 nine cities have been added to the forty-eight which were then in a 10-cent base rate, making a total of fifty-seven; cities in the 9-cent group have increased from two to four; the 8-cent cities decreased from twenty-eight to twenty-three; 7-cent cities increased from eighty-four to eighty-nine; 6-cent cities increased from fifty-six to sixty-one; and the number of 5-cent cities decreased from fifty-two to thirty-four. Five 8-cent fare cities have increased their rates since December, placing them in the higher fare groups, which explains the decrease shown in 8-cent fare cities.

At the close of 1917 there were 263 cities having a 5-cent fare; in 1918, 123; in 1919, eighty-three; and at the close of 1920 only thirty-four. In 1917 there were no cities charging a 7-cent fare; in 1918 there were thirty-three; in 1919, sixty-four, and at the end of 1920, eighty-nine. During 1917 and 1918 no city in the United States was on a

10-cent base rate; in 1919 there were twenty-five, and at the close of 1920, fifty-seven.

The comparison also shows a marked decrease in the number of cities operating under zone systems during the past year.

The accompanying summary shows the rates in effect during the four years, 1917 to 1920, and the fare situation in each city during this period.

City Restrained by Duluth Street Railway

Judge Page Morris in Federal Court at Duluth, Minn., on Feb. 1, granted the application of the Duluth Street Railway for a temporary restraining order to prevent the city of Duluth from acting on the resolution adopted an hour earlier by the City Council authorizing the City Attorney to take legal action to force better electric railway service by the railway. The restraining order is returnable on Feb. 3 at which time arguments will be presented for and against the temporary injunction. The claim of the railway is that the injunction is necessary to protect the rights of the company. On Jan. 10 the City Council adopted a resolution directing the city attorney to proceed by mandamus action in District Court.

The company, in its latest move, contends that the city is acting in violation of its franchise contracts when it attempts to regulate the operation of cars. The company, in a complaint filed in the Federal Court, also raises the question of expense, pointing out that operating expenses under the increased service would be advanced approximately \$340,000 a year over what the company has been spending.

Nashville Survey Begun

Work was begun on Jan. 24 by Ross W. Harris, Madison, Wis., on a traffic survey of the city railway conditions in Nashville along lines similar to the survey which Mr. Harris made in 1920 of railway conditions in Memphis. Mr. Harris was retained for the work in Nashville by the city of Nashville and the Nashville Railway & Light Company. The survey at Nashville was ordered by the Tennessee Railroad & Public Utilities Commission. The fact that the survey would be made was referred to in the ELECTRIC RAILWAY JOURNAL of Jan. 29, page 246.

Transportation News Notes

Mayor Seeks Nickel Fare.—Mayor Benjamin Bosse of Evansville, Ind., in his annual message to the City Council, recently asked that the city be authorized to appeal to the Indiana Public Service Commission for a reduction in the fare charged on the city lines to 5 cents. The Evansville Railways, a subsidiary of the Evansville & Ohio Valley Railway, is now charging a 6-cent fare. The members of the City Council have assured Mayor Bosse that they will back up his demand to the Public Service Commission.

New Express and Freight Rates Filed.—The Puget Sound Electric Railway, Seattle, Wash., which owns and operates the Seattle-Everett interurban, recently filed with the Public Service Commission new express rates, effective on Feb. 10. W. H. Somers, traffic manager of the company states the new rates makes some reductions and some increases, but mainly establishes three basic classes. Rates in some of these classes will include points within a 10-mile radius from Seattle; a second class will include points within a 20-mile radius and the last class within a 30-mile radius. The highest increase sought is on first and second class express rates to Everett. Rates on first class commodities, now 71-cents a hundred pounds, will be raised to 80 cents. Rates on commodities carrying a second class charge will be raised from 55 to 60 cents a hundred pounds.

Fare Increase Refused.—The State Board of Public Utility Commissioners has denied the application of the New Jersey & Pennsylvania Traction Company, Trenton, N. J., for an increase of 1 cent in each of the four zones between Trenton and Princeton. The company now collects 7 cents in each zone. The commission permitted the company to put into effect a 40 per cent increase in commodity freight rates and a 20 per cent increase in package express tariffs. In refusing the fare advance the board said: "It seems the passenger rates as proposed will result in a loss of passenger traffic to such an extent as to negative the increase in revenue if the proposed rate is allowed. It is apparent that the immediate result of each of the past increases in passenger fare has been a material falling off in number of passengers carried. Such an increase in passenger rates as petitioner now desires would not in our judgment improve the present financial condition of the company and would not give the company a fair and reasonable return on the value of its property used and useful in the public interest."

SUMMARY OF RATES OF FARE IN EFFECT AT THE CLOSE OF THE YEARS 1917, 1918, 1919 AND 1920, IN THE 288 CITIES OF THE UNITED STATES HAVING A POPULATION OF 25,000 OR MORE

Rate of Fare	1917 Number of Cities	1918 Number of Cities	1919 Number of Cities	1920 Number of Cities
10-cent cash fare.....	..	..	25	57
9-cent cash fare.....	..	12	12	23
8-cent cash fare.....	..	33	64	89
7-cent cash fare.....	25	78	73	61
6-cent cash fare.....	1	13	4	2
Central area zone system with outlying "copper" zones.....	1	8	4	1
5-cent fare with charge for transfers.....	4	6	14	11
Uniform rate zone systems.....	5	27	20	18
5-cent reduced rate tickets abolished.....	*264	123	83	34
Original 5-cent fare (no increase).....				
Total.....	300	300	300	300

Note—The difference between the above total of 300 and the 288 cities is accounted for by the fact that in the following cities more than one company operates: New York, N. Y., eight companies; Chicago, Ill., two companies; Tacoma, Wash., two companies — total twelve companies. * Includes 4-cent fare in Cleveland.

Personal Mention

The "Aisne" Marks the Passing of Hog Island

Hog Island, where the American International Shipbuilding Corporation built 122 ships for Uncle Sam, was a wonderful achievement. Today it lies idle, a monument to human and national energy, its future uncertain. In a way, it seems to symbolize the waste of energy which was one of the great but necessary features of the world war.

There, along the shore of the Delaware River, stand great gaunt structures, ways for the fabrication of fifty ships at a time. A little further down the river project a dozen or so outfitting piers. Huge plants housing machinery and stores stand back ready to feed the construction. A wonderful machine, which performed its service well. Will it ever perform again? This questionnaire remains unanswered.

These remarks are inspired by a recent memorable and enjoyable visit to Hog Island. Electric railway men all know "Matt" Brush, of former Boston Elevated Railway fame, who stepped in as president of the American International at a critical period and succeeded in engineering record shipbuilding.

Mr. Brush has just turned over his responsibilities to the Shipping Board. But he had one last ship to test. The *Aisne*, United States Army Transport, the one hundred and twenty-second and last ship to be launched at Hog Island, had to have her trial run and "Matt" and his coworkers made this the occasion for a fine party. However significant this trip of the last ship may have been, the party was no funeral.

Landlubbers (railway friends of "Matt") whose principal business is piloting street cars, saw no reason to be sorrowful but found ways of making themselves happy aboard the new craft. Maybe they were fearful for the time when an unfeeling public might let their rail systems of transportation lie, unappreciative of the past service rendered and existing intrinsic value, and were taking one final opportunity for a good time and to forget troubles at home.

B. A. Enloe Is Chairman of Tennessee Commission

The State Railroad & Public Utilities Commission of Tennessee has organized for the ensuing two years by electing B. A. Enloe chairman. Julian Campbell, new Republican member from Columbia, Tenn., who had been previously sworn in to succeed George Welch, par-

ticipated in the organization. Mr. Enloe is a former member of Congress. He has been editor of daily papers in both Louisville and Nashville.

Transportation Chair Filled

S. W. Dudley, Westinghouse Air Brake Engineer, Named to Stratheona Professorship at Yale University

Samuel W. Dudley, well known as an authority in both steam and electric railway circles on matters pertaining to train and traction control, retired on Feb. 1 as chief engineer of the Westinghouse Air Brake Company to accept a professorship in Mechanical Engineering in the Sheffield Scientific School, Yale University. This is one of the professorships supported by a bequest



S. W. DUDLEY

of \$600,000 from the late Lord Stratheona, Canadian railway pioneer, in an effort to establish at Yale a department devoted to instruction in the economic as well as the physical agencies of transportation. In taking a broad conception of this problem, Yale has decided to correlate all the different phases under one department, rather than to deal with the various aspects under separate heads.

Starting in with the Westinghouse Air Brake Company as a special apprentice, Mr. Dudley spent the summer of that year and the next in the pattern and foundry shops and the test department, later returning to school to complete a post-graduate course. He then became attached to the office of the late Walter V. Turner, then mechanical engineer of the Westinghouse Air Brake Company. Here he had his first opportunity to deal with problems of train control in a thoroughly practical manner, being assigned as a member of the party in charge of the first road test

of the type "R" triple valve between Pittsburgh and Fairchance on the Pennsylvania Railroad. Later he acted as engineer's assistant during a series of important demonstrations of the "ET" equipment and the type "R" passenger triple valve on the New York Central. He was charged with the responsibility of preparing much of the data relating to these demonstrations, which resulted in the development of the high emergency retained features which were added to the type "R" triple valve to complete type "L," later adopted for the motor cars of the New York Central's electrified zones.

In 1906 Mr. Dudley was assigned to the New York office to follow the installation, operation and maintenance of the new air brake equipment that was placed in service on electric locomotives and motor cars during the inauguration of the New York Central's terminal electrification. A year later he was called back to Wilmerding to take charge of the publicity department where he remained until 1909. He was then appointed assistant mechanical engineer.

Another promotion came in 1910, when he was made assistant chief engineer. In 1914 he was advanced to the position of chief engineer. For the past fifteen years Mr. Dudley's name has been before readers of the technical press in connection with articles devoted to air brake problems of universal interest in the transportation field.

Mr. Dudley is a member of the American Society of Mechanical Engineers, American Electric Railway Association, Engineers Society of Western Pennsylvania, the New York Railroad Club, and the Air Brake Association. He is a graduate of the Sheffield Scientific School, Yale, class of 1900.

Chairman of Illinois Commission Resigns

James H. Wilkerson, chairman of the Illinois Public Utility Commission, has resigned and will resume his law practice. This leaves only Commissioner Shaw and Dempcey, Commissioner Lucey having resigned to resume his law practice also and Commissioner Funk to go to Congress.

W. E. Cann, Toledo Commissioner

Wilfred E. Cann, for the past nine years assistant to the general manager of the Detroit (Mich.) United Railway, has been named Street Railway Commissioner of Toledo, Ohio. Mr. Cann was chosen for this position by the board of control, consisting of Henry C. Truesdall, W. W. Knight and D. H. Goodwillie. He was selected from among forty applicants who came forward as candidates for the position. His appointment took effect at midnight on Jan. 31, when the property of the Toledo Railways & Light Company was taken over by the Community Traction Company.

G. M. Cox Leaves Railway Field

George M. Cox, who resigned recently as treasurer of the Middlesex & Boston Street Railway, Newtonville, Mass., has joined the Boston Consolidated Gas Company, Boston, as assistant treasurer. Mr. Cox has been succeeded as treasurer of the Middlesex & Boston by Frank Frykstrand, formerly assistant treasurer. John A. Campbell has been promoted to assistant treasurer of the railway to succeed Mr. Frykstrand. Mr. Campbell has been in the employ of the Middlesex & Boston for the past fourteen years, having charge of the payroll department. Mr. Cox was born in Waltham, Mass., in 1866. He was graduated from the Pierce Grammar School in West Newton, in 1880 and from the Newton High School in 1884. He entered the employ of the Boston Suburban Electric Companies in 1902 as a bookkeeper. Two years later he was made chief clerk of the company and on Nov. 23, 1905, he was elected by the board of directors as assistant treasurer of the company's subsidiaries. He was later made treasurer of the Middlesex & Boston. For a number of years he has been a prominent member of the New England Street Railway Club.

G. S. Williams, Manager

George S. Williams is now general manager of the Androscoggin Electric Company, Lewiston, Me. In the issue of Jan. 8 it was stated that O. D. Mudgett had succeeded Frederick D. Gordon as general manager of the Lewiston property. Mr. Mudgett continues as superintendent of the power and light division of the company. The list of officials of the railway as at present constituted follows: Harvey D. Eaton, president; Walter S. Wyman, treasurer; George S. Williams, general manager; O. D. Mudgett, superintendent, power and light division; P. E. Weymouth, superintendent, railway division (Portland-Lewiston interurban).

F. E. Myers, Ashland, who has been president of the Cleveland, Southwestern & Columbus Railway, Willoughby, Ohio, for many years, has resigned to give practically his entire attention to his business at Ashland, including the Ashland Pump & Hay Tool Works and the Faultless Rubber Company.

Edward A. Boyd has been appointed master mechanic of the Bamberger Electric Railroad, Salt Lake City, Utah, to succeed M. L. Allen, who has been assigned to other duties. Mr. Boyd will make his headquarters at the railway's North Salt Lake shops, where he will direct the building of a number of passenger, express and freight cars. For six years Mr. Boyd was foreman of shops for the Utah-Idaho Central Railroad in Ogden. He has had considerable experience in the maintenance of electrical equipment, having had a number of years' service with the Sacramento Northern Railroad, Chico, Cal. He also served at one time or another with the Central California Traction Company

and the San Francisco-Oakland Terminal Railways.

George N. Brown, formerly electrical engineer of the New York State Railways, Syracuse-Utica Lines, has been appointed district manager of the New York office of the Pittsburgh Transformer Company. Shortly after his graduation from Cornell University in 1908 Mr. Brown started railway work as inspector of car equipment with the Utica & Mohawk Valley Railway. In November, 1910, he became connected with the Boston & Maine Railroad, and took part in the Hoosac Tunnel electrification. He later served as switchboard operator in the North Adams power plant. In May, 1912, he became assistant engineer of the three lines which now form the Syracuse-Utica Division of the New York State Railways. He was later promoted to electrical engineer. Subsequently he became district manager for the Buffalo office of the Schiefer Electric Company, Rochester, N. Y.

W. B. Donaldson, purchasing agent, Seattle Division, Puget Sound Power & Light Company, Seattle, Wash., has been elected president of the Seattle Purchasing Agents' Association. Mr. Donaldson was born in Pittsburgh, Pa., in June, 1883. Going West in 1906 he entered the employ of the Seattle-Tacoma Power Company as a clerk. He was later transferred to the purchasing department, and in May, 1909, was appointed purchasing agent. This position he held until the consolidation of the Seattle-Tacoma Power Company and the Seattle Electric Company in April, 1912. He occupied the position of chief clerk in the purchasing department of the Puget Sound Traction, Light & Power Company until April, 1914, when he was advanced to assistant purchasing agent. The following year he was promoted to purchasing agent.

Frantz Herwig, director of the newly established Wisconsin Public Utilities Bureau, is by profession a newspaper man. Mr. Herwig attended the University of Michigan, but left college to enter the advertising department of the old Milwaukee *Daily News*. He was subsequently connected in various reportorial and editorial capacities with almost every newspaper in Milwaukee. His last newspaper work was on the Milwaukee *Sentinel* as director of the promotion department. He left the *Sentinel* to become executive secretary of the Milwaukee Pension Laws Commission and served in that capacity until called to his present post. Mr. Herwig's knowledge of the newspaper man's point of view and his acquaintance with the needs of the papers throughout Wisconsin will be a great asset to the holder of the position that he has just been called upon to fill. The bulletins so far issued by the Wisconsin Bureau have been well received by the press of the State. In some cases the matter used has been given front page display.

Obituary

John I. Stack, president of the Escanaba (Mich.) Traction Company, is dead.

Frederick H. Dunkak, a roadmaster of the Brooklyn (N. Y.) Rapid Transit Company, died suddenly from an attack of heart disease on Jan. 1. Mr. Dunkak was born in New York City. He had been in the employ of the B. R. T. for nearly twenty-five years. For twelve years he served as an assistant roadmaster. Four years ago he was promoted to roadmaster on the surface lines.

William M. Coleman, vice-president, secretary and general counsel of the Republic Railway & Light Company and secretary and general counsel of the Pennsylvania-Ohio Electric Company, Youngstown, Ohio, died suddenly on Jan. 21 in a hotel in Washington, D. C. Mr. Coleman was vice-president of the Central States Electric Corporation, New York City, and a director of the Peerless Motorcar Company.

Elmo Snider, foreman of air brake inspectors of the Brooklyn Rapid Transit Railroad, was one of the victims of a recent hotel fire in Hoboken where twelve people lost their lives. Mr. Snider had been in the employ of the Brooklyn Rapid Transit since October, 1903, when he entered the services of the company as air brake man at the 39th Street shop. During the next nine years he performed the duties of assistant foreman and foreman of air brakes at the Fresh Pond shops and at 36th Street shop. Prior to entering the employ of the Brooklyn Rapid Transit Mr. Snider spent several years with the New York Aid Brake Company overhauling and manufacturing air brake appliances in the company's factory.

William B. Strang, president of the Missouri & Kansas Interurban Railway, Kansas City, Kans., died at Excelsior Springs, Kan., on Jan. 13. Mr. Strang began his career as a railroad builder when he was fifteen years old. With his father he built sections of the Chicago, Burlington & Quincy, Baltimore & Ohio, Missouri Pacific and the Santa Fe Railroads from Santa Fe, N. M., to the Kansas line. In the construction of the Santa Fe line he superintended the building of the roadbed through the mountains, a hazardous task. He also built part of the Kansas City Southern and the Kansas City, Fort Scott & Memphis systems. In 1900 Mr. Strang began the construction of the Detroit, Toledo & Shore Line Railroad between Toledo and Detroit. In 1905 work was begun on the Missouri & Kansas Interurban Railway from Kansas City to Olathe. One of the first self-propelled cars in the world was perfected by Mr. Strang and operated on the Missouri & Kansas line.

Manufactures and the Markets

DISCUSSIONS OF MARKET AND TRADE CONDITIONS FOR THE MANUFACTURER,

SALESMAN AND PURCHASING AGENT

ROLLING STOCK PURCHASES

BUSINESS ANNOUNCEMENTS

Crossarm Prices Lower

Buying Uneven in Several Sections of Country, but Stocks in Jobbers' Yards Satisfactory

Conditions in cross-arm buying seem to be rather uneven. Price reductions of about 15 per cent, effective Feb. 1, are reported from the East and Middle West, but no reduction from the South to date. Buying in the New York district is on a pretty fair basis, several satisfactory orders recently having been placed. Mid-West demand is only fair, while from the Atlanta territory the movement is quite slow. Stocks in jobbers' yards are reported good in all sections.

New prices for fir arms, two-pin, 3½ in. x 4½ in. x 3 ft., are quoted in New York at \$61.13 per 100 in less than 1,000-lineal-ft. lots, and \$54.34 in 1,000-ft. to 3,000-ft. lots. These in Chicago are \$56.70 and \$50.40. The N. E. L. A. fir arm, four-pin, 3½ in. x 4½ in. x 5 ft. 7 in., is quoted in New York at \$138.26 and \$122.91 and in Chicago \$128.25 and \$114, same quantities. The four-pin, 3½-in. x 4½-in. x 5-ft. arm is \$90.56 in New York and \$84 in Chicago, 1,000-ft. to 3,000-ft. lots.

From Atlanta, in lots of 1,000 lineal feet and over, two-pin, 4-ft. fir arms are quoted at \$62; four-pin, 5-ft. arms at \$104; N. E. L. A. arms, two-pin, 3-ft., at \$106, and four-pin, 5-ft., at \$157.

Quiet Market for Stranded Steel Wire

Railways Not Even Buying for Necessary Repair—Hope of Lower Prices a Factor

Buying of stranded steel wire by electric railways is now and has been for the past couple of months of the very lightest character. Not even the minimum amount necessary to make current repairs to suspension wire, guy wire, etc., is being purchased, some manufacturers state, and it is certain that traction companies are making no effort to stock ahead. The quiet market for steel wire seems to be caused by a combination of circumstances, among which are a general depression of industry, money tightness and hope of possible lower prices.

Shipments of common sizes can be made by some manufacturers from stock, but one of the largest makers, at least, has no surplus stock as yet and is quoting thirty to sixty days on new orders. This rather surprising condition is caused by the large number of back orders which piled up and which even until well into the fourth quarter

of 1920 were far ahead of mill capacity. As few if any new orders are coming in and as production in this instance is on a full time basis it is thought that stocks of the finished product should appear by about the first of March.

The price situation, it seems, is a bit complicated. Railways appear to expect lower prices. Some manufacturers assert this hope is not justified under present labor and material costs. Producers are just beginning to reap the benefit of lower raw material cost.

Wages, too, have been reduced in only some departments. Nevertheless, in view of the continuing trend in those directions it appears logical to believe

that the ultimate price tendency is downward. In fact one of the important producers has already led the way with a slight reduction in stranded steel wire since the first of the year.

Manufacturers in this line are generally optimistic regarding the swing of business to better buying, though when the turn will come appears uncertain. Railways have not covered their needs as to steel wire for necessary repairs, let alone for extensions that may be made in the spring; stocks do not apparently exist in the hands of any consumer and consequently the potential market should undoubtedly be large.

Are Electric Railways Unfair in Awaiting Price Declines?

Equipment Manufacturers Feel that They Have a Grievance Against Traction Companies for Their Policy of Curtailing Buying to Await Lower Prices

Some of the large manufacturers of electric railway equipment feel that they have a just grievance against the traction companies in respect to the latter's curtailment of buying in the hope that lower prices of material may prevail. It is quite generally admitted that buying in this field is lighter right now than even the depression of business and tightness of money can account for. The answer is that purchasing departments are awaiting lower prices, although their equipment needs are piling up. This leads to moot questions, such as whether prices in certain lines can come down at this time, and just at what point prices are low enough to justify buying.

Manufacturers do not deny that the curtailing of buying on a declining market is sound business sense, as they themselves have followed the same policy in purchasing raw material. Their grievance is that railway purchasing departments in expecting lower prices often do not take into consideration all the factors. These on the manufacturers' side include high money rates, fixed taxes, wage contracts which often prevent lower labor costs, stocks of material bought at high prices to cover future needs, the amount of raw material reductions and the fact that less demand and lower production entail greater overhead expense.

It is a self-evident fact that the sooner prices in the electric railway field or any other line reach a rock-bottom basis, fairly arrived at under existing labor, material, transportation and other costs, the sooner a return to normal business will be reached. Equip-

ment manufacturers in many cases have recognized this fact by passing lowered costs, squarely on to the consumer. But, according to the vice-president of a large manufacturing concern supplying traction companies with a staple article, "give the purchasing agent an inch and he'll want an ell." In other words, where prices have been reduced, buyers sometimes expect a decrease that would be greater than all the previous increases while prices were rising.

It is well to remember at this time that where an article has increased in price 100 per cent, it then requires but a 50 per cent drop to reach the former price. The executive of the above-mentioned company voices this point by a concrete example. For purposes of illustration the cost of the company's product before the war is placed at \$40 and the profit received is represented by x. In 1920 the cost had mounted to \$80, but the profit per unit remained at x. If the margin of profit had been increased proportionately with costs, the gain per unit should now stand at 2x. Yet electric railways, he states, complain because in view of lowered costs, the margin of profit is not now cut to less than x.

It seems that here is a basis for misunderstanding at least, if nothing else. Manufacturers and purchasing departments can profitably clear this up, on the one hand by a frank statement as to the reasons why prices may or may not come down and on the other by a willingness to meet manufacturers half way in the one matter of price reductions.

Market for Trolley Wire Remains Quiet

Firmer Tone to Copper Would Precipitate Buying of Raw and Finished Product, It Is Thought

The market for bare copper as well as composition trolley wire is comparatively quiet. Until a firm tone develops to the copper market this condition is likely to maintain. Some wire manufacturers, recognizing the unusual opportunity presented to buy copper at its present low price of 12.75 cents spot, are stocking to cover their future needs. Others report they have not the money to buy and are unable to carry the interest charges on a tied-up investment such as a large stock of copper would represent.

When the price of copper eventually starts to move upward, however, it is probable that all consumers by some means or other will attempt to cover their copper needs as far ahead as possible. This would in turn undoubtedly have a salutary effect upon buyers of trolley wire, who would naturally desire to get in on the ground floor too.

This may account for the slight improvement in buying that is noted by a couple of producers since the first of the year. By far the great majority of utilities, however, are not financially able to stock ahead on any material that they use. Hence the greater part of the present light demand is accounted for by actual repair needs.

Prices of trolley wire have followed a gradually descending curve from their peak, commensurate with the reductions that have come about in raw material, and in some cases labor costs. Price reductions have been made as recently as within the last two weeks,

and quotations are very generally shaded for advantageous orders. The current bare base price averages about 15 to 16 cents per pound although several producers refuse to quote a base price under present unsettled market conditions.

Deliveries are entirely favorable, for although no stocks of the finished product are carried in this field, except by some makers of more or less special wire, mills now are able to speed up if necessary. In general, orders can be filled in two to three weeks. The outlook for good buying during the present year, despite the present slow market, is held to be favorable by manufacturers, though the present slackness, it is stated, may continue for some little time.

Carbon Brush Demand Is Mostly for Maintenance

Increasing Tendency Noted for Traction Interests to Order Brushes in Small Amounts and for Quick Delivery

While the market for carbon brushes for strictly maintenance work is holding up about on a normal plane, buying for new motors and generators has fallen off. The curtailment of production in the automobile manufacturing field has reacted on the brush producer, since a large volume of brush business is done for the automobile trade. This, of course, releases production capacity for the making of brushes for the strictly electrical market, so that shipment is short.

Motor production in itself has suffered a recession, both in fractional sizes and in integral sizes for industrial work. There have been somewhat fewer brushes needed for maintenance also of the industrial sizes because of

curtailed operation in the mills of many of the larger industries of the country.

These factors help shipments, one and two weeks being the average length of time quoted for the filling of orders, while other quotations will take up to six weeks. Where it is necessary to fill a rush order, a small quantity of brushes can be put out in two days. Brushes for safety cars can be gotten out in up to three weeks' time while for the larger types of cars from four to six weeks is quoted. It is of interest to note the large number of orders manufacturers are getting for single sets of brushes for one car motor and compare this method of buying to that normally in vogue.

And this comes right down to what seems to be more and more of a tendency today. Too many of these rush orders for overnight shipment are coming in to the manufacturers. The practice seems to be developing into one of waiting until the last minute and then ordering only a minimum number of pieces. Traction companies are particularly in the limelight in this connection, and they are the consumers which heretofore have been noted for keeping good stocks of brushes—at least to cover all emergencies. Of course, the financial condition of most roads is such as to require the limiting of future buying, but it would seem that purchases could be kept out of the rush class for this type of maintenance material, which is bound to wear out. The reaction comes, of course, on the producing abilities of the manufacturer.

Although stocks of foreign brushes are kept in this country, there is little stocking done by domestic manufacturers because of the great number of sizes, qualities and duties required by motor and generator manufacturers.

NEW YORK METAL MARKET PRICES

	Jan. 5, 1921	Feb. 3, 1921
Copper ingots, cents per lb.	12.75 to 13.00	12.75
Copper wire base, cents per lb.	16.25	15.75
Lead, cents per lb.	4.75	4.75
Nickel, cents per lb.	43.00	43.00
Zinc, cents per lb.	6.00	5.50
Tin, cents per lb.	36.75	32.25
Aluminum, 98 to 99 per cent, cents per lb.	28.30	28.00

OLD METAL PRICES—NEW YORK

	Jan. 5, 1921	Feb. 3, 1921
Heavy copper, cents per lb.	10.00 to 10.50	11.00 to 11.25
Light copper, cents per lb.	8.00 to 8.25	8.50 to 8.75
Heavy brass, cents per lb.	6.00 to 6.50	6.00 to 6.50
Zinc, old scrap, cents per lb.	3.00 to 3.25	3.00 to 3.25
Yellow brass, cents per lb.	4.00 to 4.50	4.00 to 4.50
Lead, heavy, cents per lb.	3.50 to 3.75	4.00 to 4.25
Steel car axles, Chicago, per net ton.	17.00 to 18.00	16.50 to 17.00
Old car wheels, Chicago, per gross ton.	21.00 to 22.00	21.00 to 22.00
Steel rails (short) Chicago, per gross ton.	16.50 to 17.00	16.00 to 17.00
Steel rails (reolling), Chicago, gross ton.	17.00 to 18.00	16.00 to 17.00
Machine shop turnings, Chicago, net ton.	6.00 to 6.50	7.00 to 7.50

ELECTRIC RAILWAY MATERIAL PRICES

	Jan. 5, 1921	Feb. 3, 1921	Jan. 5, 1921	Feb. 3, 1921	
Rubber-covered wire base, New York, cents per lb.	18.00	18.00	Galvanized wire, ordinary, Pittsburgh, cents per lb.	3.95	3.95
Weatherproof wire base, New York, cents per lb.	19.00 to 20.00	18.00	Car window glass (single strength), first three brackets, A quality, New York, discount*	77%	77%
Standard Bessemer Steel Rails, per gross ton.	45.00 to 51.00	45.00	Car window glass (single strength), first three brackets, B quality, New York, discount.	77%	77%
Standard open hearth rails, per gross ton.	47.00 to 53.00	47.00	Car window glass (double strength), all sizes, A quality, New York, discount.	79%	79%
T-rail, high (Shanghai), per gross ton, f.o.b. mill.	73.00	.....	Waste, wool white (according to grade), cents per lb.	13 to 19	11 to 17
Rails, girder (grooved), per gross ton, f.o.b. mill.	88.00	.....	Waste cotton (100 lb. bale), cents per lb.	11 to 15	11 to 13½
Wire nails, Pittsburgh, cents per lb.	3.25	3.25	Asphalt, hot (150 tons minimum), per ton delivered.	40.00	40.00
Railroad spikes, drive, Pittsburgh base, cents per lb.	3.65 to 4.00	3.65 to 4.00	Asphalt, cold (150 tons minimum, pkgs. weighed in), per ton.	36.00	36.00
Tie plates (flat type), cents per lb.	2.75	2.75	Asphalt, filler, per ton.	36.00	36.00
Tie plates (brace type), cents per lb.	2.75	2.75	Cement, New York, per bbl.	4.50	4.10
Tie rods, Pittsburgh base, cents per lb.	6.00	6.00	Linseed oil (raw, 5 bbl. lots), New York, per gal.	.83	.77
Fish plates, cents per lb.	2.75	2.75	Linseed oil (boiled, 5 bbl. lots), New York, per gal.	.85	.79
Angle bars, cents per lb.	2.75	2.75	White lead (100 lb. keg), New York, cents per lb.	.14	.13
Rail bolts and nuts, Pittsburgh base, cents per lb.	5.50	5.50	Turpentine (bbl. lots), New York, per gal.	.75	.70
Steel bars, Pittsburgh, cents per lb.	4.75	2.35			
Sheet iron, black (24 gage), Pittsburgh, cents per lb.	4.20	4.20			
Sheet iron, galvanized (24 gage), Pittsburgh, cents per lb.	5.25	5.25			
Galvanized barbed wire, Pittsburgh, cents per lb.	4.10	4.10			

* These prices are f.o.b. works, with boxing charges extra.

Rolling Stock

The Chicago Surface Lines, after receiving bids on fifty new motor cars of the specifications published in *ELECTRIC RAILWAY JOURNAL* for Dec. 18, on page 1271, has decided not to purchase them. Instead, bids have been asked on fifty trailers in addition to the fifty now being built in the company's West Side shop. The specifications for these new cars were incorporated into a sample car which was fully described on page 110 of the July 17, 1920, issue. The fifty motor cars were intended for hauling the trailers now being built in all-day train service. It is planned to use the present Pullman-type motor cars for hauling trailers in rush hour service only. Bids on the fifty trailers will be opened Feb. 8, a very short time having been allowed for considering the specifications.

The Los Angeles (Cal.) Railway, in its program for this year has included the lengthening of eighty-nine cars, giving larger loading platforms. Their length will be increased from 34 ft. 1½ in. to 44 ft. 7 in. This alteration will allow for one extra "walk-over" seat at each end of the car. Another thirty-four cars of the interurban type are to be equipped with folding doors on the ends in place of the drop bars and curtains that have been in use. Work on the 123 cars will be distributed through the greater part of 1921 as only a few of the cars can be placed in the shops at a time, owing to the heavy demands of travel.

The London & Port Stanley Railway, a municipally owned line running from London, Ontario, Canada, to Lake Erie, will add an 80-ton electric locomotive and several passenger cars to its equipment this year.

Track and Roadway

Frontier Electric Railway, Buffalo, New York.—The Aldermen of North Tonawanda, N. Y., have approved the application of the Frontier Electric Railway for an extension of time for beginning and completing its proposed freight line between Buffalo and Niagara Falls. Under the new requirements the line must be started on or before Dec. 31, 1923, and finished by Aug. 1, 1927. Inability to finance the line at this time is the reason given by officials for not undertaking the work just now. The Pennsylvania and Lackawanna Railroads are interested in the project as they will use the line for the transportation of freight between Buffalo and Niagara Falls.

El Paso (Tex.) Electric Railway.—The El Paso Electric Railway has many improvements under consideration for 1921. The plan will cover the installation of a new turbine in the power station, the purchase of additional safety cars, additional double track and turn-outs on the street railway sys-

tem, additional equipment in both power station and carhouse; also additional transformers, meters and customers' services.

Houston (Tex.) Electric Company.—The Houston Electric Company is planning the following construction program for 1921: Rebuilding eight pit tracks and three repair tracks at Milby Street carhouse, rebuilding two additional storage tracks each 400 ft. long at the Milby Street carhouse, double tracking Harrisburg Road and Lorraine Street, a distance of approximately 3,400 ft. in paved construction, using 103-lb. rail, thermit joints, cypress ties, concrete foundation and brick pavement; rebuilding ballasted track on Palmer and Engelke Streets, approximately 3,000 ft., using 70-lb. A.S.C.E. rail; double tracking Fairview Avenue and Taft Avenue approximately 1,200 ft. ballasted construction, using 70-lb. A.S.C.E. rail; installing 300 ft. siding on Lorraine Street in paved construction; extending siding No. 3 on Clark Street 800 ft. long, ballasted construction, using 70-lb. rail; extending No. 2 siding on Fairview Avenue 400 ft. long, ballasted construction, using 70-lb. A.S.C.E. rail; lowering track on Washington Avenue to new city grade approximately 3,000 ft. and installing Nos. 1 and 2 sidings in paved construction, using 103-lb. rail, brick pavement and concrete substructure; double tracking Fannin Street from Franklin to Texas in paved construction with necessary special work, using 122-lb. rail, thermit joints, brick pavement and concrete substructure.

Power Houses, Shops and Buildings

Jamestown (N. Y.) Street Railway.—The Jamestown Street Railway has filed plans for the immediate construction of a modern two-story office building on the site of the building recently destroyed by fire in West Third Street.

Texas Electric Railway, Dallas, Tex.—The passenger station of the Texas Electric Railway at Sherman, Tex., was damaged recently by fire to the extent of about \$1,500. The fire started in a storage room from cause undetermined. The loss was covered by insurance.

Trade Notes

The Inland Wire & Cable Company, Cleveland, is planning to erect a new plant, 100 ft. x 350 ft., one-story, at Hammond, Ind., to cost about \$100,000.

The Arthur Power-saving Recorder Company, New Haven, Conn., has received an order for 700 recorders from the Rhode Island Company, Providence, R. I.

Leon Chapuis, 36 Boulevard de Magenta, Paris, France, distributor of traction material, advises the receipt of a large order for electric railway supplies for use in the devastated regions of France.

The Edward Valve & Manufacturing Company, 72 West Adams Street, Chicago, is planning to rebuild its plant at East Chicago, Ind., recently destroyed by fire. The loss is estimated at about \$350,000.

C. H. Wheeler Manufacturing Company, Philadelphia, Pa., maker of condensers, pumps, feed water heaters, etc., announces the opening of a branch sales office in the Leader-News Building, Cleveland, Ohio. W. K. Eicher is in charge.

E. D. Kellogg has been appointed New Jersey representative for the Conveyors Corporation of America, manufacturer of machinery for handling coal, sand, gravel, ashes, etc. He will make his headquarters at the company's Eastern office, 110 West Tenth Street, N. Y.

The Maring Wire Company, Muskegon, Mich., manufacturer of enameled and cotton-covered magnet wire, announces the appointment of the R. W. Lillie Corporation, 30 Church Street, New York City as its Eastern representative. The Boston office at 176 Federal Street is in charge of H. D. Steele.

The Champion Engineering Company, Kenton, Ohio, manufacturer of electric traveling cranes, has appointed A. E. Hogrebe, mechanical and electrical engineer, sales engineer for the Baltimore territory. Mr. Hogrebe has been identified with the electric traveling crane business since 1891, having been connected with the Yale & Towne Manufacturing Company, Brown Hoisting Machinery Company, Niles-Bement-Pond Company and Pawling & Harnischfeger.

The MacGillis & Gibbs Company, Milwaukee, manufacturer of cedar posts, poles and railway cross-ties, which has completed its twenty-second year in business, is distributing a booklet entitled "Poles of Cedar," in which it gives an outline of its activities and short sketch of its officers. J. E. Gerich, president and general manager, was one of the incorporators of the company and was made president and general manager in 1905.

The Roller-Smith Company, 223 Broadway, New York City, announces the appointment of the J. E. Dilworth Company, 493 South Main Street, Memphis, Tenn., as its representative in the western half of Tennessee, the eastern half of Arkansas and the northern half of Mississippi. The electrical department of the Dilworth company is in charge of E. M. Greeson, who was formerly associated with Fairbanks, Morse & Company and the Sanborn Electric Company, both of Indianapolis.

New Advertising Literature

Insulating Material.—Mica Insulator Company, 68 Church St., New York City, has just issued a new catalog, No. 85, covering the company's line of electrical insulating materials.