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## APPENDICES

APPENDIX A.—SCHEDULE

APPENDIX B.—INSTRUCTIONS TO SPECIAL AGENTS

# APPENDIX A.

## SCHEDULE.

### CENSUS OF ELECTRIC RAILWAYS, 1907.

(All electric roads and all street railroads, irrespective of kind of motive power, should be reported on this schedule. Separate supplementary reports should be made for nonoperating lessor companies, showing answers to inquiries 1 to 4, inclusive, 7, 18, 20, 21, and 22.)

Name of company.....  
 State..... City.....  
 General office (give state, city, street, and number).....

WASHINGTON, D. C., December 31, 1907.

The act of Congress of June 7, 1906, directs the Director of the Census to take a census of street railways every five years, and this schedule has been formulated for that purpose.

The information returned on this schedule should cover the business year of the company most nearly conforming to the year ending December 31, 1907. All questions that require a fixed time, such as mileage of track, cash on hand, etc., should be of the date of the last day of the year covered by the report.

The answers to inquiries in regard to financial matters, other than capitalization, will be held absolutely confidential; the separate reports will be combined so as to show totals for all companies in the different states. The information will be used only for the statistical purposes for which it is given.

The canvass is to be made under the supervision of Mr. W. M. Steuart, Chief Statistician for Manufactures.

S. N. D. NORTH,  
 Director of the Census.

Extract from act of Congress, March 3, 1899:

SEC. 22. \* \* \* "And every president, treasurer, secretary, director, agent, or other officer of every corporation, and every establishment of productive industry, whether conducted as a corporate body, limited liability company, or by private individuals, from which answers to any of the schedules, inquiries, or statistical interrogatories provided for by this act are herein required, who shall, if thereto requested by the Director, supervisor, enumerator, or special agent, willfully neglect or refuse to give true and complete answers to any inquiries authorized by this act, or shall willfully give false information, shall be guilty of a misdemeanor, and upon conviction thereof shall be fined not exceeding ten thousand dollars, to which may be added imprisonment for a period not exceeding one year."

#### CERTIFICATE.

THIS IS TO CERTIFY that the information contained in this schedule is complete and correct to the best of my knowledge and belief, and it covers the period from ....., 190 , to ....., 190 .

(Signature and official designation of the person furnishing the information.)

(Address of person furnishing the information.)

(Signature of Special Agent.)

Each question should be answered; if not applicable use word "None."

Inquiries 1 to 23, inclusive, relate to Electric or Street Railways; inquiries 24 to 26, inclusive, to Electric Light and Power Plants operated by railway companies. Separate reports should be prepared for electric light and power plants on Form B 2-231. If it is not possible to make complete separate reports, one combined report may be made on this schedule for railways and light and power plants, showing number of lamps, itemized income, etc., of the light and power plants, as called for by inquiries 24 to 26, inclusive.

1. If a consolidated company, give names of constituent companies for which complete report is included in this return, or write same on last page .....
2. If a controlling company, give names of subsidiary or leased companies for which operating report is included in this return, or write same on last page. (If operating company can not furnish the supplementary report of financial data for nonoperating lessor companies (see instructions on title page), please give name and address from whom obtainable.)

3. If a reorganized company, give name of original company.....
4. If a subsidiary or leased company, give name and address of operating company or lessee.....
5. Is electric current generated for sale for light or power?.....If so, is there a separate power plant or line construction?.....Are data for electric light and power plant included in this report, or is separate report made for same?.....
6. Give name of city or cities in which the road is operated, and if in rural districts name the towns, counties, and states, or write same on last page.....
7. TRACK: Length in single-track miles\*—The totals reported for the first and second sections—"Classification by character and ownership" and "Classification by kind of system"—should agree.

CLASSIFICATION BY CHARACTER AND OWNERSHIP.	Owned.	Leased.	Operated under trackage rights.	Total operated.*
Length of road (first main track).....				
Length of second main track.....				
TOTAL LENGTH OF MAIN TRACK.....				
Length of sidings and turnouts, including car barns, storage yards, etc.....				
TOTAL COMPUTED AS SINGLE TRACK.....				

CLASSIFICATION BY KIND OF SYSTEM.	Subway and tunnels.	Elevated.	Surface.	Total operated.*
Operated by:				
Overhead trolley.....				
Conduit trolley.....				
Third rail.....				
Cable.....				
Steam.....				
Animal.....				
Other (state kind).....				
TOTAL.....				

If track extends into more than one state, give the number of single-track miles \* in each state. (The total operated as reported above should be segregated by states.)

\* Length to be stated in miles and decimals of a mile carried to two places.

	Length in single-track miles.*
Total track operated on private right of way owned by railway companies.....	
Total track operated on private right of way not owned by railway companies (do not include track on streets or thoroughfares).....	
Total track operated within city or municipal limits (include any city, town, or village not rural in character).....	
Constructed and opened for operation during the year covered by this report.....	
Weight of steel rails per yard, maximum (pounds)....., minimum (pounds).....	
Style of rail (girder, T, half groove, full groove, etc.).....	

STREET AND ELECTRIC RAILWAYS.

8. OVERHEAD ELECTRIC-LINE CONSTRUCTION.	LENGTH OF LINE, MILES.*			
	Total.	Span wire.	Slide bracket.	Center pole.
Overhead trolley.....				
Miles of line with steel, iron, or concrete poles *.....				
Miles of line with wooden poles *.....				
Number of poles to the mile.....				

9. CARS: Account for all cars operated, ready for operation, or being repaired. Do not count a car more than once. Cars reported as "Express, freight, and mail cars," must be devoted solely to one or more of these specified uses.

	Total number.	Motor cars, number.	Trailers, number.
Closed passenger cars.....			
Open passenger cars.....			
Combination cars (open and closed).....			
Combination cars (passenger, with express, freight, or mail).....			
Parlor, sleeping, dining, and private cars (state which).....			
TOTAL PASSENGER CARS.....			
Express, freight, and mail cars.....			
Work cars.....			
TOTAL CARS.....			
Snow plows, number.....			
Sweepers, number.....			
Locomotives, number (steam or electric [state kind]).....			

10. EQUIPMENT OF CARS: If cars have more than one variety of equipment they should be reported for each. If cars are equipped so that fenders can be put on when run out of barn they should be counted as equipped with fenders.	Total number.
Equipped:	
With fenders.....	
With hand brakes.....	
With air brakes.....	
With other mechanical brakes (state kind).....	
With electric heaters.....	
With stoves or other heating systems (state kind).....	
With one motor....., two motors....., three motors....., four motors.....	
Lighted by electricity.....	
Lighted by oil, gas, etc.....	

\* Length to be stated in miles and decimals of a mile carried to two places.

11. TRAFFIC AND MILEAGE: In computing car mileage the individual car should, as a rule, be considered the unit. Motor and one small trailer can be treated as a unit if this is the practice of the company. Train mileage should not be reported as such.	Number.
Fare passengers carried.....	
Transfer passengers carried.....	
Free passengers carried (not including badge passengers).....	
TOTAL PASSENGERS CARRIED.....	
Passenger-car mileage.....	
Express, freight, mail, and work car mileage, including mileage of steam or electric locomotives.....	
TOTAL CAR MILEAGE.....	
Passenger-car hours.....	
Express, freight, mail, and work car hours, including hours of steam or electric locomotives.....	
TOTAL CAR HOURS.....	

12. ACCIDENTS: The character or degree of injury should not be considered in answering this inquiry. All accidents of which the company has record should be reported.	NUMBER.	
	Killed.	Injured.
Passengers.....		
Employees.....		
Other persons.....		
TOTAL.....		

13. POWER-PLANT EQUIPMENT.

GENERATING POWER PLANT.	500 H. P. or under.	Over 500 H. P. and under 1,000 H. P.	1,000 H. P. and under 2,000 H. P.	2,000 H. P. and under 5,000 H. P.	5,000 H. P. and over.
Steam engines, number.....					
Total capacity in horsepower.....					
Steam turbines, number.....					
Total capacity in horsepower.....					
Gas engines, number.....					
Total capacity in horsepower.....					
Water wheels, number.....					
Total capacity in horsepower.....					
Auxiliary engines for use within plant as accessories, etc.: Number....., total capacity in horsepower.....					

14. SUBSTATION EQUIPMENT: The kilowatt capacity, voltage, and amperage reported should represent a single machine. If more than one machine of the same class, give separate information for each.	Number.	Total capacity in kilowatts of each machine.	Indicated voltage of each machine.	Indicated amperage of each machine.
Rotary converters, etc.....				
Transformers.....				
Storage battery, cells.....				
Miscellaneous (state kind).....				

ELECTRIC MOTORS USED IN PLANT OR SUBSTATION FOR MISCELLANEOUS WORK:  
Direct current, number....., total capacity in horsepower.....  
Alternating current, number....., total capacity in horsepower.....

15. ELECTRICAL GENERATORS: The kilowatt capacity, voltage, and amperage reported should represent a single machine. If more than one machine of the same class, give separate information for each.

	Number.	Total capacity in kilowatts of each machine.	Indicated voltage of each machine.	Indicated amperage of each machine.
DYNAMOS, DIRECT CURRENT:				
500 K. W. or under.....				
Over 500 K. W. and under 1,000 K. W.....				
1,000 K. W. and under 2,000 K. W.....				
2,000 K. W. and under 5,000 K. W.....				
5,000 K. W. and over.....				
DYNAMOS, ALTERNATING CURRENT:				
500 K. W. or under.....				
Over 500 K. W. and under 1,000 K. W.....				
1,000 K. W. and under 2,000 K. W.....				
2,000 K. W. and under 5,000 K. W.....				
5,000 K. W. and over.....				

15. ELECTRICAL GENERATORS: The kilowatt capacity, voltage, and amperage reported should represent a single machine. If more than one machine of the same class, give separate information for each—Continued.

	Number.	Total capacity in kilowatts of each machine.	Indicated voltage of each machine.	Indicated amperage of each machine.
Transformers.....				
Storage battery, cells.....				
Boosters for outside feeders.....				
Auxiliary generators for use within plant.....				
Rotaries.....				

16. OUTPUT OF STATION: The output should be calculated from the voltage and amperage of the generators, or obtained from the actual watt or kilowatt readings of dynamo meters.

Kilowatt hours, average per day.....  
 Kilowatt hours, total for year.....

17. MISCELLANEOUS STATISTICS.	Number.
Transfer points.....	
Power houses.....	
Car houses.....	
Lamps used in lighting offices, power houses, shops, car houses, ways, and pleasure resorts:	
Aro lamps.....	
Incandescent lamps.....	
Other varieties (Nernst, vacuum, vapor, etc. [state kind]).....	
Miles of telephone line in use exclusively for operation of road.....	
Miles of subway or tunnels occupied by tracks (state which)*.....	
Miles of street occupied by underground conduits for mains and feeders.* (If mains and feeders are carried in the conduit of underground-trolley construction, note this fact).....	
Steam-railroad crossings protected (by flagman, alarm bell, elevated or depressed tracks, etc.).....	
Steam-railroad crossings unprotected.....	
Are mails carried for the Government? (Answer Yes or No.).....	
Does the company own or operate any parks or pleasure resorts?.....; if so, give number.....; cost or investment, \$.....	
If hired, the annual rental, \$.....	
Estimate of number of visitors annually.....	
General description of the resorts, or write same on last page.....	

\* Length to be stated in miles and decimals of a mile carried to two places.

The following inquiries relating to financial operations conform to the system of accounting devised by the American Street and Interurban Railway Accountants' Association.

18. COST OF CONSTRUCTION AND EQUIPMENT: The answer must show the total cost of organization, engineering and superintendence, right of way, track and roadway construction, electric-line construction, real estate used in operation of road, buildings and fixtures used in operation of road, investment in real estate, power-plant equipment, shop tools and machinery, cars, electric equipment of cars, miscellaneous equipment, interest and discount, and miscellaneous.

Cost during the year..... \$.....  
 Cost to date..... \$.....  
 Is value of franchise included? (Answer Yes or No.).....

19. OPERATING EXPENSES.

MAINTENANCE:		
Ways and structures—		
1. Maintenance of track and roadway.....	\$.....	
2. Maintenance of electric, cable, etc., lines.....		
3. Maintenance of buildings and fixtures.....		
TOTAL.....		\$.....
Equipment—		
4. Maintenance of steam plant.....		
5. Maintenance of electric, cable, etc., plant.....		
6. Maintenance of cars.....		
7. Maintenance of electric, cable, etc., equipment of cars.....		
8. Maintenance of miscellaneous equipment.....		
9. Miscellaneous shop expenses.....		
TOTAL.....		
TRANSPORTATION:		
Operation of power plant—		
10. Power-plant wages.....		
11. Fuel for power.....		
12. Water for power.....		
13. Lubricants and waste for power plant.....		
14. Miscellaneous supplies and expenses of power plant.....		
15. Power purchased.....		
TOTAL.....		
Operation of cars—		
16. Superintendence of transportation.....		
17. Wages of conductors.....		
18. Wages of motormen.....		
19. Wages of other car-service employees.....		
20. Wages of car-house employees.....		
21. Car-service supplies.....		
22. Miscellaneous car-service expenses.....		
22a. Hired equipment.....		
23. Cleaning and sanding track.....		
24. Removal of snow and ice.....		
TOTAL.....		
GENERAL:		
25. Salaries of general officers.....		
26. Salaries of clerks.....		
27. Printing and stationery.....		
28. Miscellaneous office expenses.....		
29. Stores expenses.....		
30. Stable expenses.....		
31. Advertising and attractions.....		
32. Miscellaneous general expenses.....		
33. Damages.....		
34. Legal expenses in connection with damages.....		
35. Other legal expenses.....		
36. Rent of land and buildings.....		
37. Rent of tracks and terminals.....		
38. Insurance.....		
TOTAL.....		
Wages, supplies, and expenses incident to electric service not included in any of the above items*.....		
GRAND TOTAL.....		

\* For roads that sell current for light or power.

STREET AND ELECTRIC RAILWAYS.

20. INCOME ACCOUNT: Give actual amounts carried on income-account statement of company. This may include income and expenses for the year, and therefore need not agree with a cash statement. If accounts do not show the income from each source enumerated, give a carefully estimated segregation. The total income should be the gross income of the company for the year.

INCOME.	
Passengers.....	\$.....
Chartered cars.....	
Freight.....	
Mall.....	
Express.....	
Sale of electric current for light or power, including sale of current to other public-service corporations.....	
Interest on bonds and dividends on stock of other electric railways.....	
Income from other permanent investments.....	
Miscellaneous (specify principal items).....	
<b>TOTAL.....</b>	

EXPENSES.	
Total operating expenses (from Inquiry 19).....	x x x x x x \$.....
Taxes paid or due for the year:	
Real and personal property.....	\$.....
Capital stock.....	
Earnings.....	
Miscellaneous (specify items).....	
<b>TOTAL.....</b>	
Interest paid or due for the year:	
Funded debt.....	
Real-estate mortgages.....	
Floating debt.....	
<b>TOTAL.....</b>	
Rent of leased lines and terminals.....	x x x x x x
Miscellaneous (specify principal items).....	x x x x x x
<b>TOTAL.....</b>	x x x x x x

Net income.....	\$.....
Net deficit.....	\$.....

21. BALANCE SHEET.

ASSETS.		LIABILITIES.	
Kind.	Amount.	Kind.	Amount.
Cost of construction, equipment, and real estate.....	\$.....	Capital stock.....	\$.....
Stocks and bonds of other electric-railway companies.....		Funded debt.....	
Other permanent investments (specify).....		Real-estate mortgages.....	
Cash on hand.....		Floating debt (loans and notes).....	
Bills and accounts receivable.....		Reserves.....	
Supplies.....		Bills and accounts payable.....	
Sundries (specify principal items).....		Interest due and accrued.....	
Profit and loss deficit.....		Dividends due.....	
		Sundries (specify principal items).....	
<b>TOTAL.....</b>		Profit and loss surplus.....	
		<b>TOTAL.....</b>	

22. CAPITAL STOCK, BONDS, DIVIDENDS, AND INTEREST: If the company is engaged in some other industry, and it is impossible to segregate the capitalization, report the entire capital, and give an estimate of the proportion chargeable to the electric-light and street-railway interests.

	Number of shares or bonds.	Total par value.	DIVIDENDS DECLARED AND INTEREST PAID OR DUE FOR THE YEAR.	
			Rate.	Amount.
<b>AUTHORIZED CAPITALIZATION BY CHARTER:</b>				
Common stock.....		\$.....	x x x x x	x x x x x x
Preferred stock.....			x x x x x	x x x x x x
Bonds.....			x x x x x	x x x x x x
<b>CAPITAL STOCK AND BONDS OUTSTANDING:</b>				
Common stock.....				\$.....
Preferred stock.....				
Bonds.....				

Estimated proportion of above capitalization chargeable to electric-light and street-railway interests.....

23. EMPLOYEES, SALARIES, AND WAGES: The salaries and wages reported here should also be included in the amounts reported for the different items under Inquiry 19. "Operating expenses." The average number employed during the year is the number that would be required, at continuous employment, for the twelve months. Account for all regular officers and employees whether engaged on maintenance, canvassing, collecting, operation, or otherwise. (Do not include employees engaged exclusively on additions or extensions.)

SALARIED EMPLOYEES:

Salaried officers of corporation.....		\$.....
Other officers (managers, superintendents, etc.).....		
Clerks and bookkeepers.....		
<b>TOTAL.....</b>		\$.....

WAGE-EARNERS (do not include salaried employees reported above):

Foremen.....		
Inspectors.....		
Conductors.....		
Motormen.....		
Starters.....		
Switchmen.....		
Road and track men.....		
Linemen.....		
Electricians (include only skilled electricians).....		
Car and motor repairers.....		
Engineers.....		
Dynamo and switchboard men.....		
Firemen.....		
Other mechanics.....		
Hostlers, stablemen, etc.....		
Watchmen (include building, track, and crossing watchmen).....		
All other employees.....		
<b>TOTAL.....</b>		

Questions for railways which operate separate electric-light and power plants: The following questions should be answered if there is a separate power plant or line construction and a complete separate report *can not* be prepared as provided for by instructions next preceding inquiry.

24. NUMBER OF LAMPS: Account for all lamps wired for service on last day of year covered by report, irrespective of ownership. If actual number is not known give careful estimate. (Do not include lamps used by company to light its own properties, which should be reported under Inquiry 17.)

CLASS.	Type of lamp.	Public. (Number.)	Commercial or other private. (Number.)	Total. (Number.)
<b>Arc lamps:</b>				
Direct current.....	Open.....			
	Inclosed.....			
Alternating current.....	Open.....			
	Inclosed.....			
All other (state kind).....	Open.....			
	Inclosed.....			
<b>TOTAL.....</b>	Open.....			
	Inclosed.....			
<b>Incandescent lamps:</b>				
Sixteen candlepower.....				
Thirty-two candlepower.....				
All other.....				
<b>TOTAL.....</b>				
Other varieties (Nernst, vacuum, vapor, etc. (state kind)).....				

25. METERS AND MOTORS.

	Number.
Stationary motors served (do not include small fan motors).....	
Total capacity in horsepower.....	
Meters on consumption circuits:	
Mechanical.....	
All other (state kind).....	

26. INCOME: The total income reported here should also be included under Inquiry 20, "Income account." If accounts do not show the income from each class of service enumerated, give a carefully estimated segregation. (The estimated value of current supplied municipality or other government free of charge, and the estimated value of current consumed by lamps and motors on the company's own properties should *not* be included.)

SOURCE.	Amount.
<b>Lighting:</b>	
Commercial or other private—	
Arc lamps.....	\$.....
Incandescent lamps.....	
Other lamps.....	
Public, furnished municipality or other government for buildings and streets—	
Arc lamps.....	
Incandescent lamps.....	
Other lamps.....	
Motor service, stationary (not including small fan motors).....	
Electric-railway service (exclusive of company's own cars).....	
Electric heating, cooking, welding, etc.....	
Sale of current to other electric companies.....	
Charging automobiles.....	
All other electric service (specify items).....	
Gross income from sale of supplies and fixtures.....	
Income from all other sources (specify items).....	
<b>TOTAL.....</b>	

Give estimated amount of income lost because of free service furnished municipality or other government..... \$.....

The following inquiries comprise a part of the annual investigation of consumption of forest products: It is desired to ascertain the number of poles and ties purchased during the entire year. The number reported here need not necessarily agree with the cost reported in Inquiry 19, "Operating expenses," which relates to the poles and ties used during the year.

27. POLES PURCHASED DURING 1907.

LENGTH, FEET.	CEDAR.		CHESTNUT.		JUNIPER.		OTHER SPECIES. (Specify.)	
	Number.	Average cost per pole at point of purchase.	Number.	Average cost per pole at point of purchase.	Number.	Average cost per pole at point of purchase.	Number.	Average cost per pole at point of purchase.
Under 20.....								
20 and over but under 25.....								
25 and over but under 30.....								
30 and over but under 35.....								
35 and over but under 40.....								
40 and over but under 45.....								
45 and over but under 50.....								
50 and over but under 55.....								
55 and over but under 60.....								
60 and over.....								

How many treated poles were purchased during 1907?.....  
 What preservative was used?.....  
 How many poles were treated during 1907?.....  
 What preservative was used?.....

28. CROSS-TIES PURCHASED DURING 1907.

KIND OF WOOD.	HEWED CROSS-TIES.		SAWED CROSS-TIES.	
	Number.	Average cost per tie at point of purchase.	Number.	Average cost per tie at point of purchase.
Oaks.....				
Southern pines.....				
Cedar.....				
Douglas fir.....				
Chestnut.....				
Cypress.....				
Western pine.....				
Tamarack.....				
Hemlock.....				
Redwood.....				
Lodgepole pine.....				
White pine.....				
All other.....				
<b>Total.....</b>				

How many ties were purchased for new track?.....  
 How many miles of track are now laid with treated ties?.....  
 How many treated ties were purchased during 1907?.....  
 What preservative was used?.....  
 How many ties were treated during 1907?.....  
 What preservative was used?.....

## APPENDIX B.

### INSTRUCTIONS TO SPECIAL AGENTS.

The schedule is prepared primarily for railways operated by electricity, as the greater number of street railways, including the most important, have adopted this form of motive power. All classes of street railways, whether operated in whole or in part by cable, animal, steam, or other motive power, and also inter-urban railways, must be reported on it. The data in regard to track, overhead electric-line construction, cars, equipment of cars, traffic and mileage, accidents, power-plant equipment, substation equipment, electrical generators, output of station, miscellaneous statistics, and capitalization, will probably be published for each individual company or system. The agent should be particular, therefore, to see that the name and location of the company and these data are exact and correct in every detail.

*Reports to state offices.*—In a number of states the electric railways make reports to state railroad commissioners or other state officials. In all cases where such reports are of assistance in the preparation of the census schedule, copies of them have been secured and will be given the different agents.

*Combined reports for two or more systems.*—In a number of instances independent street-railway companies have recently been combined under one *ownership*. In such cases one report may be made for the operations of the entire system, provided the roads which were formerly operated as independent lines are located in the same city or immediate vicinity, but if the system of accounting will permit of the preparation of separate schedules, a separate report should be secured for each of the constituent companies. In preparing separate reports for subsidiary companies the name and address of the controlling company must be given in answer to inquiry 4. (See also instructions for "separate supplementary reports for nonoperating lessor or leased roads," p. 558.)

*Combined reports for railways and light and power plants.*—A number of street-railway companies generate electricity for sale to other roads, or for light, power, or other purposes. In such cases either a combined report or separate reports should be prepared, as provided for by the instructions in the schedule. Separate reports should not be secured unless they can be made *complete*, with no cross references. If this can not be done, a combined report should be prepared on the railway schedule.

Of the first 6 inquiries special attention is called to inquiry 5. The answer to this inquiry must show how the two industries, when carried on by the same company, have been reported.

#### INQUIRY 7.—TRACK.

The track reported in answer to all three sections of this inquiry must be given in single-track miles and decimals of a mile carried to two places. The total miles reported for answer to the first and second sections of the inquiry should agree, and each must cover the total track. "Single track" means one set of rails in any thoroughfare. "Second track" means another pair of rails running alongside the first, so that cars can pass each other in opposite directions. Even in some of the largest cities there will be but one track in one street, the return route running parallel on another street near by. It is desired to secure these details itemized, so that when the second track, and the length of sidings and turn-outs, is

added to the first-main track there will appear the total mileage of track owned and operated by each road. At the same time the return will then exhibit the extent to which single tracks and double tracks occupy the streets.

Be careful not to report as "operated under trackage rights" any portion of the track operated under a lease and included in the column "Leased." The ownership (name and address of company) of leased track should be noted on the margin of the schedule.

The statistics for miles of track must be shown by states; therefore when a company operates in more than one state the entire length of the road, including leased lines, must be segregated so as to show the number of single-track miles in each state.

The third section of the inquiry covers only a portion of the track, as indicated by the following questions and instructions:

*Total track operated on private right of way owned by railway companies.*—Give the length in single-track miles of all tracks laid on ground owned by railway companies.

*Total track operated on private right of way, not owned by railway companies.*—Give length in single-track miles of all tracks laid on ground owned by individuals, firms, or corporations, other than railway companies. This must not include tracks laid on streets or public thoroughfares.

*Total tracks operated within city or municipal limits.*—The object of this inquiry is to ascertain the miles of track within urban districts as compared with rural districts. The city or municipal limits should be construed to mean any city, town, or village, whether incorporated or not, which is not rural in character.

*Constructed and opened for operation during year covered by this report.*—Report the number of single-track miles constructed and opened for operation during the year covered by the report.

*Weight and style of rails.*—Give the maximum and minimum weight per yard of the steel rails in use at the time of making the report. A girder rail weighs from 38 to 135 pounds to the yard; T rails from 15 to 91 pounds per yard. These weights are only general indications and should be used only by the agent to detect wide variations, for which explanation should be made. It is likely that many street-railway systems will have more than one weight of rail, the heaviest being used in cities, the lightest in the outskirts or where supported on ties and sleepers. If possible, the style of rail should be noted, as indicated in the schedule. The agent may be informed of the existence of some iron rail, but this should be disregarded, as such rail has virtually gone out of manufacture and use.

#### INQUIRY 8.—OVERHEAD ELECTRIC-LINE CONSTRUCTION.

The answer to the inquiry must show the length of *construction*, whatever such construction may be, "span wire," "side bracket," or "center pole;" also the length of construction with "steel, iron, or concrete poles," and "wooden poles." This length would be the same whether single or multiple tracks were used under such construction. For example: If 5 miles of double track under span-wire construction were reported, the answer to this inquiry would not be 10 miles, but 5 miles. If 5 miles of single track having 1 mile of siding or turn-outs were reported, the answer would probably not be 6 miles, but 5 miles, as the same construction which covers the single track would in most cases cover the sidings also.

The construction reported as "overhead trolley" must include both single and double overhead trolleys. The miles reported for steel, iron, or concrete, and for wooden-pole construction will, when combined, be the same as the total given for overhead trolley, except such portion as is carried by span wire supported from buildings or structures other than poles. The latter condition should be noted and explained.

Considering all systems reported at the census of 1902 there were on the average about 52 poles to each mile of line. A wide departure from this average should be explained. When poles are required for both sides of the track under span-wire construction, the fact should be stated, the total number per mile given, and divided by 2 so the report will show actual conditions.

#### INQUIRIES 9 AND 10.—CARS AND EQUIPMENT OF CARS.

The answers to inquiry 9 must account for all cars operated, ready for operation, or being repaired. Some cars may serve for more purposes than one, but they must not be counted twice. The total must be the actual number. Passenger cars used also for express, freight, or mail business must be reported as "combination cars (passenger, with express, freight, or mail)." The cars reported as "express, freight, and mail cars" must be devoted solely and specifically to one or more of these several uses. Snowplows and sweepers are often a composite vehicle, and in such cases must be counted only once, under either head. Sprinklers should be reported under "snowplows" or "sweepers," and so designated. "Motor cars" should be reported only for electric or cable systems. Grip cars should be reported as motor cars (with explanation). All other cars, including horse cars, not equipped with electric motive power, should be reported as "trailers."

Some cars may not have the equipment of the character specified in inquiry 10 and therefore should not be included in the answer to the inquiry, while others may have more than one variety of equipment and be reported more than once. The total number reported for the different classes of equipment may not agree with the total of inquiry 9.

The fender is usually a removable piece of apparatus, and where all the cars of the road are so equipped that fenders can be used on them when run out of the car barn for service, they should all be enumerated as equipped with fenders. If a car has no fender attachments, it should not be counted here. Brakes are a permanent fixture on any car, and in the majority of instances will be the ordinary hand brake. Air brakes are set by air-compression mechanism and comprise those in which electric motors under the car drive the air pumps, or the compressed air is obtained from tanks.

#### INQUIRY 11.—TRAFFIC AND MILEAGE.

*Transfer passengers carried.*—Many street railways voluntarily, or when required by law, give free transfers to passengers paying one fare and desiring to ride over more than one line. These transfers are generally issued in the shape of tickets at junction transfer points, or sometimes the passenger steps from one car to the other, without such tickets, under the eye of the transfer agent; and in this manner a continuous ride can be made over more than one road for the one fare. Careful count or estimate of transfers is made by all the roads granting them.

*Free passengers carried (not including badge passengers).*—All free passengers carried of whom record was kept should be reported here. This includes employees of the company and local government, and other persons, riding on passes; but *would not include* employees of the company, policemen, and letter carriers in uniform, and known as "badge passengers."

*Car mileage.*—It is an ordinary practice for street railways to keep an account of this mileage. Where it is not known the car mileage can be estimated fairly well by ascertaining the number of round trips daily on each line or branch of the system and multiplying this by the length of the respective trips. The daily average should be multiplied by the number of days the road was in opera-

tion during the year to obtain the total for the period covered by the report. The number of miles that cars run per day depends upon the location of the road, roads in rural districts making faster time than those in cities. The earnings per car mile should, as a rule, be between 10 and 40 cents.

The use of "trailers" is a source of confusion in computing the car mileage. As a rule, the individual car should be considered as the unit in computing the car mileage, but when the trailers are small and it is the practice of the company to consider the motor car and the trailer as one car in making the computation, the company's figures should be accepted. Train mileage based on three or more cars should not be accepted for car mileage.

The ratio of the number of fare passengers to the number of car miles run has a very important bearing upon the prosperity of the street-railway business. For the country as a whole the average number of fare passengers per car mile in 1902 was 4.26; the cars were run, therefore, on an average, nearly one-fourth of a mile for each fare collected. An extreme variation from this average should be questioned and explained.

In many cases the car mileage of express, freight, mail, and work car service will be a matter of estimate and should include mileage of steam or electric locomotives.

The other inquiry, "car hours," is not obligatory, but is a new method of accounting for car operation and is already employed by some roads. Such roads, however, are large and the system of accounts is likely also to include the older and more familiar "car mile." At the census of 1902 the roads which reported car hours indicated an average of 33 fare passengers per passenger-car hour.

#### INQUIRY 12.—ACCIDENTS.

In the return of killed or injured, "other persons" is meant to refer to foot passengers or persons riding in vehicles other than street cars that are in collision with the cars. The character or degree of the injury, whether severe or slight, should not be considered in making answer to this inquiry. All accidents of which the company has record should be reported.

#### INQUIRIES 13, 14, AND 15.—POWER-PLANT EQUIPMENT, SUBSTATION EQUIPMENT, AND ELECTRICAL GENERATORS.

The capacity of the engines and water wheels and of the dynamos is closely related. The engines and water wheels, as a rule, have an excess capacity over that of the dynamos. "Auxiliary engines" will sometimes be found in small railway plants, but in the larger plants electric motors are in common use to drive pumps, etc., and the superintendent or manager can readily enumerate them.

Electric railways are, as a rule, operated by direct-current motors, and current to these motors is furnished either by direct-current generators (i. e., dynamos) or by converters which take alternating current from large alternating polyphase generators and convert it into direct current for consumption at the cars. There will be no difficulty in ascertaining the facts as to these different classes of apparatus, as only the larger systems employ alternating current for widespread distribution, and then usually in connection with substations, to which such current is delivered to be passed through transformers and converters, so that it may be adapted for use by the direct-current motors. Storage batteries are used, either in the main power plants or in the substations, to help maintain a steady supply of current at the right pressure, and "boosters" are dynamos assisting to the same end. The substation is particularly a feature of long-distance rural electric-railway work, but in every instance such roads have competent engineers who can give the substation equipment should it not be in possession of the management.

The feature of substation equipment is that it does not generate current, but receives it, manipulates it, stores it, and lowers the pressure or changes the form for local consumption. All the generating plants will usually be found in the generating stations, but sometimes substation apparatus will be found under the same roof as the main generating-plant apparatus.



As a rule, dynamos for road work vary from 480 to 600 volts each, there being very few over 800 volts. The voltage of machines for lighting purposes varies greatly. In all cases the kilowatt capacity, voltage, and amperage reported must represent a single machine. If there is more than one machine of the same class, give separate information for each.

#### INQUIRY 16.—OUTPUT OF STATION.

This is an inquiry in regard to which some roads may have no data, although with many of them it is a matter of careful scientific accounting. In every case the volts multiplied by the amperes will give the number of watts. A kilowatt is 1,000 watts. There are 746 watts in the old familiar horsepower, so that a kilowatt is roughly  $\frac{1}{3}$  horsepower. Watt hours are the product of watts multiplied by the number of hours during which the current is in use. Thus a power house with a dynamo delivering current to the line of 1,000 amperes at 550 volts pressure is generating 550,000 watts, or 550 kilowatts. If these 550,000 watts are furnished, on an average, twenty hours daily, we get 11,000,000 watt hours or 11,000 kilowatt hours. The total for the year can be arrived at from the daily total.

The output must be obtained from the load voltage and amperage, or from the actual watt or kilowatt reading of dynamo meters. The kilowatt hours may be tested by the car mileage. One car mile requires from eight-tenths of one to three and one-half kilowatt hours. Long and heavy cars in some instances require more.

#### INQUIRY 17.—MISCELLANEOUS STATISTICS.

Most of the questions under this inquiry are self-explanatory. Special attention is, however, directed to the following:

*Miles of telephone lines in use exclusively for operation of road.*—Many street railways have their own regular car-dispatching system, which is aided and supplemented by a telephone service belonging to the road, the wires being strung along the line. Other roads that may not have dispatchers place telephone boxes on their poles to enable communication between any conductor and headquarters. All of this service is independent of the local telephone system used by the public and furnished from a local exchange; and the inquiry does not include the instruments or lines that the street-railway company may hire from the telephone company as a subscriber.

*Miles of subway or tunnels occupied by tracks.*—This question must not be confused with the question of "subway and tunnels" of inquiry 7, which calls for the single-track mileage. The question here calls for the miles of subway or tunnel construction and not the single-track mileage.

*Steam-railroad crossings protected, etc.*—Warning signs or orders to car motormen to stop and run forward at track crossings are not to be regarded as a protection of railroad crossings in the sense of this inquiry.

*Parks or pleasure resorts.*—These are a feature of modern street-railway business and often a large source of income. They have frequently been created by the companies themselves on their lines, and the data should be readily obtainable in every case. The agent must not, however, include in the return parks and pleasure grounds belonging to the community or other interests and entered by street-railway systems; but if the company pays for the privilege of touching at these points, a memorandum should be made of that fact, and the number of passengers thus specifically delivered within such pleasure resorts should be noted, if possible, as distinguished from traffic on lines terminating outside public parks or running around them.

#### FINANCIAL OPERATIONS.

To facilitate the answers to the inquiries concerning financial operations, the office has adopted the system of accounting devised by the American Street and Interurban Railway Accountants' Association. It is presumed that all street-railway companies are familiar with this system of accounting, but the

following instructions in regard to the items to be included in the answer to each inquiry are given to assist in their compilation:

In the following classification, "Labor" should be understood to mean, not only the manual work of laborers, but also superintendence, supervision, clerical work, engineering, and inspection, so far as they are chargeable to the account referred to.

"Material" should be understood to mean, not only finished or unfinished products, appliances, or parts, but such smaller articles as are usually termed "Supplies."

"Tools" should be understood to mean hand tools of mechanics and other tools, used in the work chargeable to the account referred to.

"Expenses" should be understood to mean all expenses chargeable to the account referred to that are not labor, material, or tools.

The cost of replacement, renewal, or repair of property destroyed or injured by fire, worn-out, or otherwise unfitted for use, should be charged to the appropriate maintenance account, which should be credited with the amount received for insurance or realized from the sale of property so unfitted for use. But if the property substituted is of greater value than the original property, the excess should be charged to the capital or construction account to which the original property was charged; if of less value, the difference between the value of the property as repaired, renewed, or replaced, and its original cost or value should be credited to the capital or construction account to which the first cost was charged. So proceeds from the sale of scrap material should be credited to the account to which the cost of replacement of that material is charged, or, if not replaced, to the original cost account.

The cost of experiments should be charged in operating expenses to the account most affected.

#### INQUIRY 18.—COST OF CONSTRUCTION AND EQUIPMENT.

The schedule used at the census of 1902 required a separate amount for each item of this account. The majority of the companies could not make the segregation and therefore only the totals are required at this census. In order to obtain an amount which will be comparable with the totals for 1902 care must be taken to include the cost of each of the following items:

*Organization.*—All expenses incurred in effecting organization, including legal expenses.

*Engineering and superintendence.*—All expenditures for services of engineers, draftsmen, and superintendents employed on preliminary and construction work, and all expenses incident to the work.

*Right of way.*—All expenditures in connection with securing or paying for right of way, including cost of real estate for right of way.

*Track and roadway construction.*—All expenditures for track and roadway construction, including labor, material, tools, freight, hauling, distribution of material, and all other expenses incident to the work; cost of grading, excavating, track laying, ties, yokes, slot rails, manhole frames and covers, rails, rail fastenings, welded joints, special work (such as crossings, crossovers, curves, frogs, guard rails, run-offs, switches, switch mates, turn-outs), ballasting, paving, fences (right of way), bridges and culverts, trestles, subways, and tunnels.

The cost of tracks in yards, terminals, car houses, or other buildings should be charged to this account.

*Electric-line construction.*—All expenditures for overhead, underground, third-rail, or surface-contact electric-line construction, including labor, material, tools, freight, hauling, distribution of material, and all other expenses incident to the work; cost of punching and drilling rails for track wiring, rail bonds, poles (iron, concrete, and wood), labor and material for setting and painting poles; feed wire, guard wire, span wire, strain wire, supplementary wire, trolley wire, ground feeders, underground feeders, pole fixtures, hangers or suspensions, insulators (overhead), lightning arresters and appliances, signals and signaling apparatus,

overhead crossings and switches, ground terminals, and all labor in connection with putting same in position; conduits and conduit appliances for underground-trolley construction, including conductors, insulators, sewer connections, sewer traps, and underground feeders; third rails, and insulators for third-rail construction; surface-contact appliances for surface-contact roads, including magnets, contact boxes, manhole frames and covers.

*Real estate used in operation of road.*—All expenditures for real estate used in operation of road.

*Buildings and fixtures used in operation of road.*—All expenditures for buildings and fixtures used in operation of road, including labor, material, tools, freight, hauling of material, and all other expenses incident to the work. The term "buildings and fixtures" includes power houses, car houses, shops, office buildings (when owned by the company), waiting rooms, sheds, out-houses, coal bins, sand houses, stables, storehouses, switch tenders' houses, fences (except park and right of way), docks, wharves, and all other buildings and inclosures, and their stationary fixtures, including pipes for gas, water, sewage, and drainage, apparatus for heating, lighting, and ventilating, sidewalks, and paving in streets in front of and adjacent to the company's buildings (except in tracks), and inspection and repair pits in car houses, shops, or other buildings.

*Investment real estate.*—All expenditures for land and buildings not used in operation of road.

*Power-plant equipment.*—All expenditures for steam and electric equipment of power plant, including foundations and installation. The equipment of substations (if used) should be charged to this account. All expenditures for water-power machinery (if used) should be charged to this account.

*Shop tools and machinery.*—All expenditures for shop tools and machinery for general repair shops, car houses, etc., including foundations and installation.

*Cars.*—All expenditures for passenger, baggage, express, freight, mail, and other cars from the operations of which revenue is derived. The term "cars" includes car bodies and trucks, and all fixtures or appliances inside of or attached to the car body or truck (except the electric equipment of the car).

*Electric equipment of cars.*—All expenditures for electric equipment and wiring of all cars, whether revenue cars or work cars, including labor, material, tools, freight, hauling of material, and all other expenses incident to the work.

*Miscellaneous equipment.*—All expenditures for water cars, sprinkling cars, sand cars, salt cars, supply cars, and other work cars; snowplows, sweepers, scrapers, and miscellaneous snow equipment; horses, harness, wagons, and vehicles; tools and appliances necessary in the use of work cars or snow equipment.

*Interest and discount.*—All interest paid or received in connection with funds for construction, and all discounts or premiums resulting from the negotiation of securities for construction, should be charged or credited to this account.

*Miscellaneous.*—All expenditures for printing and stationery, office supplies and expenses, damage claims, wages of clerks, and all other expenses incident to construction not otherwise provided for.

If a combined report for railway and light and power plant is prepared as provided for by the instructions in the schedule, the cost of the electric light and power plant should be included in this inquiry.

#### INQUIRY 19.—OPERATING EXPENSES.

1. *Maintenance of track and roadway.*—All expenditures for repairs and renewals of track and roadway, of culverts and subways, of tracks in yards, terminals, car houses or other buildings, including labor, material, tools, fuel, light, water, ice, freight, hauling, and distribution of material, and all other expenses incident to the work.

The cost of taking up track, whether new track is laid in its place or not, should be charged to this account.

The cost of punching and drilling rails for repairs or renewals of track wiring, and of removing and relaying pavement, ballast,

etc., when necessary for repairs or renewals of the line, should be charged to account No. 2.

The cost of repairs and renewals of harness and wagons used in connection with this work should be charged to account No. 8.

The cost of feed and keep of horses used in connection with this work should be charged to account No. 30.

Following is a list of some of the items chargeable to this account:

Ballast.	Manhole covers, for underground trolley.
Bolts.	Manhole frames, for underground trolley.
Braces, rail.	Molds, for welded joints.
Brick.	Nails.
Bridges.	Nuts.
Cement.	Nut locks.
Chairs, for rails.	Paving materials.
Cinders, for ballast.	Fig iron, for welded joints.
Clamps, for welded joints.	Pipes, drain.
Coke, for welding joints.	Rails.
Crossings.	Run-offs.
Crossovers.	Sand.
Culverts.	Screws.
Curves.	Slots, for underground trolley.
Drains.	Spikes.
Fences, right of way	Steel.
Fish plates.	Stone.
Freight.	Subways.
Frogs.	Switches.
Fuel.	Switch mates.
Gravel.	Ties.
Guard rails.	Tie plates.
Hauling.	Tie-rods.
Ice, for ice water.	Tools.
Iron.	Trestles.
Joints, welded.	Tunnels.
Joints, not welded.	Turn-outs.
Labor.	Washers.
Light (lanterns and fixtures, oil, lampwick, torches, candles, incandescent lamps and fixtures, arc lights and fixtures, globes, and carbons).	Water.
Lumber.	Yokes, for underground trolley.

2. *Maintenance of electric, cable, etc., lines.*—All expenditures for repairs and renewals of overhead, underground, third-rail, or surface-contact electric lines, and cable line, including labor, material, and tools employed or used in taking up, resetting, and painting or repainting poles, taking down trolley, feed, guard, and supplementary wires, and substituting new, repairing and renewing conduits for wires, repairing and renewing bond wires, punching and drilling rails for track wiring, removing and relaying pavement, ballast, etc., when necessary for repairs or renewals of the line, freight, hauling, and distribution of material, fuel, light, water, and ice, and all other expenses incident to the work.

The cost of repairs and renewals of the line in yards, terminals, car houses, or other buildings should be charged to this account.

The cost of feed and keep of horses used in connection with this work should be charged to account No. 30.

The cost of repairs and renewals of harness and wagons used in connection with this work should be charged to account No. 8.

Following is a list of some of the items chargeable to this account:

Bolts.	Manhole frames, for surface-contact roads.
Boxes, for lightning arresters.	Nuts.
Cement.	Painting material, for poles.
Charcoal.	Plas, iron, for cross-arms.
Clamps, for poles.	Plas, wood, for cross-arms.
Conductors, for underground trolley.	Poles, iron.
Conduits.	Poles, wood.
Contacts, for surface-contact roads.	Pole tops, for iron poles.
Contact boxes, for surface-contact roads.	Rail bonds.
Cord.	Sand.
Cross-arms, iron.	Screws.
Cross-arms, wood.	Sewer connections, for underground trolley.
Crossings.	Sewer traps, for underground trolley.
Feeders, ground.	Signals and signaling apparatus.
Feeders, overhead.	Solder.
Feeders, underground.	Soldering salts.
Freight.	Steel.
Fuel.	Stone.
(Gasoline).	Suspensions.
Hangers.	Switches.
Hauling.	Tape, insulating.
Ice, for ice water.	Terminals.
Insulators, overhead.	Third rails.
Insulators, underground.	Tools.
Insulators, for third rail.	Washers.
Iron.	Water.
Labor.	Wire, feed.
Light (lanterns and fixtures, oil, lampwick, torches, candles, incandescent lamps and fixtures, arc lights and fixtures, globes, and carbons).	Wire, guard.
Lightning arresters and parts.	Wire, span.
Magnets for surface-contact roads.	Wire, strain.
Manhole covers, for surface-contact roads.	Wire, supplementary.
	Wire, trolley.

3. *Maintenance of buildings and fixtures.*—All expenditures for repairs and renewals of buildings and fixtures used in the operation of the road, including labor, material, tools, freight, hauling of material, and all other expenses incident to the work.

The term "buildings and fixtures" includes power houses, car houses, shops, office buildings (when owned by the company), waiting rooms, sheds, outhouses, coal bins, sand houses, stables, storehouses, switch tenders' houses, fences (except park and right-of-way fences), docks, wharves, and all other buildings and inclosures, and their stationary fixtures, including pipes for gas, water, sewage, and drainage, apparatus for heating, lighting, and ventilating, sidewalks and pavements in front of and adjacent to the company's buildings (except in tracks), and inspection and repair pits in car houses, shops, or other buildings.

The cost of repairs and renewals of tracks in yards, terminals, car houses, or other buildings should be charged to account No. 1.

The cost of repairs and renewals of the line in yards, terminals, car houses, or other buildings should be charged to account No. 2.

Following is a list of some of the items chargeable to this account:

Awnings.	Pipes, gas.
Bolts.	Pipes, sewer.
Bolt ends.	Pipes, water.
Brick.	Pits in car houses and shops.
Builders' hardware.	Plaster.
Building material.	Plumbing.
Building permits.	Rivets.
Cement.	Roofing material.
Cisterns.	Sand.
Drains.	Sash cord.
Excavations.	Sash weights.
Fences (except park and right of way).	Scales, platform.
Foundations.	Screws.
Freight.	Sewering.
Grading.	Shelving and other fixtures.
Hauling.	Shingles.
Heating apparatus and fixtures.	Sidewalks.
I-beams.	Slate.
Iron.	Spikes.
Labor.	Steel.
Leads.	Stone.
Lighting apparatus and fixtures.	Tile.
Line.	Tools.
Lumber.	Turn-buckles.
Nails.	Ventilating apparatus and fixtures.
Nuts.	Washers.
Painting materials (oil, turpentine, varnish, lead, and painters' supplies).	Water.
Paving in streets (except in connection with trucks).	Water connections.
Pipes, drain.	Water meters.
	Wells.
	Wire.

4. *Maintenance of steam plant.*—All expenditures for labor, material, tools, freight, hauling of material, and all other expenses incident to repairs and renewals of steam plant or water-power plant, including engines and engine parts, appliances and fixtures, belts, belt tighteners and fixtures, receivers, lubricators, and oiling devices; shafting, clutches, cranes, hoists, and other engine-room appliances; boilers, boiler fittings and appliances; furnaces, economizers, stacks, mechanical-draft machinery, pumps, feed-water heaters, purifiers, tanks, condensers, coal and ash conveying machinery, mechanical stokers, and other boiler-room appliances; piping and steam fitting, including valves, separators, water and sewer connections, and water meters.

Following is a list of some of the items chargeable to this account:

Ash-conveying machinery.	Holsts.
Belts.	Injectors.
Belt fixtures.	Iron.
Belt tighteners.	Labor.
Boilers.	Lubricators.
Boiler appliances.	Oiling devices.
Boiler fittings.	Piping.
Bolts.	Pipe covering.
Cement.	Pipe fittings.
Clutches.	Pulleys.
Coal-conveying machinery.	Pumps.
Condensers.	Purifiers.
Cranes.	Receivers.
Draft machinery.	Screws.
Economizers.	Separators.
Engines.	Sewer connections.
Engine appliances.	Shafting.
Engine fixtures.	Stacks.
Engine parts.	Steam fittings.
Fire brick.	Steel.
Fire clay.	Stokers, mechanical.
Freight.	Tanks.
Furnaces.	Tools.
Grate bars.	Water connections.
Hauling.	Water meters.
Heaters, feed-water.	Water-power machinery.

5. *Maintenance of electric, cable, etc., plant.*—All expenditures for labor, material, tools, freight, hauling of material, and all other expenses incident to repairs and renewals of plant, including generators and generator parts, switchboards, cables, and feeder terminals and wiring in connection with same, storage batteries, transformers, boosters, rheostats, circuit breakers, ammeters, and other electric equipment.

Commutator brushes for generators should be charged to account No. 14.

Following is a list of some of the items chargeable to this account:

Ammeters.	Labor.
Boosters.	Lightning arresters and parts.
Cables.	Rheostats.
Circuit breakers.	Storage batteries.
Feeder terminals.	Switchboards.
Freight.	Switches.
Generators.	Tools.
Generator parts.	Transformers.
Hauling.	

6. *Maintenance of cars.*—All expenditures for repairs and renewals of passenger, baggage, express, freight, mail, and other cars from the operation of which revenue is derived, including labor, material, tools, freight, hauling of material, and all other expenses incident to the work.

The term "cars" includes car bodies and trucks and all fixtures or appliances inside of or attached to the car body or truck, except the electric, cable, etc., equipment of the car.

The cost of cars purchased to keep good the original number of cars should be charged to this account.

Bell and register cord, trolley rope, incandescent lamps, commutator brushes, and other supplies for cars should be charged to account No. 21.

Following is a list of some of the items chargeable to this account:

Axles.	Labor.
Bells.	Life guards.
Bell-cord fixtures.	Lumber.
Bolts.	Mirrors.
Brakes (hand or power).	Nails.
Brake appliances (hand or power).	Nuts.
Brake shoes.	Oil boxes.
Brasses.	Painting material.
Brass fixtures.	Pedestals.
Brass trimmings.	Pilots.
Bumpers.	Sand boxes, attached to cars.
Canvas.	Screws.
Cotters.	Seats.
Curtains.	Seat covering.
Curtain fixtures.	Seat fixtures.
Dashes and parts.	Signs.
Drawbars.	Sign fixtures.
Electric heaters.	Snow scrapers, attached to cars.
Electroliers.	Springs.
Fare registers.	Steel.
Fenders and parts.	Steps.
Floor mats.	Stoves.
Freight.	Stove fixtures.
Gates.	Tools.
Glass.	Trucks.
Gongs.	Truck frames and parts.
Grab handles.	Washers.
Hauling.	Wheels.
Headlights and parts.	Woodwork.
Iron.	

7. *Maintenance of electric, cable, etc., equipment of cars.*—All expenditures for repairs and renewals of the electric, cable, etc., equipment and wiring of cars, whether revenue cars or work cars, including labor, material, tools, freight, hauling of material, and all other expenses incident to the work.

Following is a list of some of the items chargeable to this account:

Armatures and parts.	Light circuits.
Bearings.	Lightning arresters and parts.
Bolts.	Motor frames.
Brasses, armature, axle, gear-case.	Nuts.
Brush holders and parts.	Pinions.
Canvas.	Plows, for underground-trolley cars.
Circuits for heat, light, power.	Power circuits.
Circuit breakers, automatic.	Rheostats.
Commutators and parts.	Screws.
Contact shoes for surface-contact cars.	Shafts.
Contact shoes for third-rail cars.	Springs.
Controllers and parts.	Steel.
Cotters.	Storage batteries, for storage-battery cars.
Cut-out boxes and parts.	Tap.
Fields and parts.	Terminals.
Frames, for motors.	Tools.
Freight.	Trolley bases.
Gears.	Trolley forks.
Gear cases and parts.	Trolley poles.
Hauling.	Trolley wheels and parts.
Heat circuits.	Washers.
Insulating material.	Wiring.
Iron.	
Labor.	

The cost of shifting equipments from summer to winter cars, or vice versa, should be charged to this account.

The cost of equipments purchased to keep good the original number of equipments should be charged to this account.

The cost of commutator brushes, incandescent lamps, oil, and other supplies for the equipment of cars should be charged to account No. 21.

8. *Maintenance of miscellaneous equipment.*—All expenditures for repairs and renewals of water cars, sprinkling cars, sand cars, salt cars, supply cars, other work cars, snowplows, sweepers, scrapers, miscellaneous snow equipment, wagons, and all other vehicles not operated for the purpose of revenue, including labor, material, tools, freight, hauling of material, and all other expenses incident to the work.

Replacing horses lost by death or worn-out in the service, depreciation in value of horses, and repairs and renewals of all harness and vehicles should be charged to this account.

Repairs and renewals of the electric, cable, etc., equipment of all work cars, snowplows, sweepers, etc., should be charged to account No. 7.

Following is a list of some of the items chargeable to this account:

Axles.	Life guards.
Bolts.	Lumber.
Brakes (hand or power).	Nails.
Brake appliances (hand or power).	Nuts.
Brake shoes.	Oil boxes.
Brasses.	Painting material.
Brass fixtures.	Pedestals.
Bumpers.	Pilots.
Canvas.	Rattan, for sweepers.
Cotters.	Sand boxes, attached to work cars.
Dashes and parts.	Serows.
Drawbars.	Snow scrapers, attached to work cars.
Electroliners.	Springs.
Fenders and parts.	Steel.
Freight.	Tools.
Glass.	Trucks.
Gongs.	Truck frames and parts.
Grab handles.	Washers.
Hauling.	Wheels.
Headlights and parts.	Woodwork.
Iron.	
Labor.	

9. *Miscellaneous shop expenses.*—All expenditures for repairs and renewals of shop tools, machinery, and appliances, such as engines, boilers, shafting, motors, etc., used in general repair work, including labor, tools, coal, coke, lubricants, waste, and other material, freight, hauling of material, fuel, light, water, and ice, wages of master mechanic, shop foreman, engineers, firemen, and other employees engaged in operating shop engine, and all other expenses incident to the general repair shops.

Hand tools of mechanics or laborers used exclusively in connection with work chargeable to accounts Nos. 1 to 8, 14, 21, and 22 should not be charged to this account, but to the account benefited by their use.

Following is a list of some of the items chargeable to this account:

Belts and belt fixtures.	Light (lanterns and fixtures, oil, lamp-wick torches, candles, incandescent lamps, arc-light globes and carbons).
Boilers and boiler fittings.	Lubricants.
Bolts.	Lumber.
Brooms.	Motors and parts (for shop use only).
Charcoal.	Nails.
Clutches.	Nuts.
Coal.	Piping.
Coke.	Pipe covering.
Cotters.	Pipe fittings.
Cranes.	Pulleys.
Draft machinery.	Pumps.
Engines and parts.	Serows.
Engine appliances and fixtures.	Shafting.
Fire brick.	Stacks.
Fire clay.	Steam fittings.
Forges.	Steel.
Freight.	Tools, machine.
Fuel.	Tools, hand.
Furnaces and parts.	Washers.
Hauling.	Waste.
Heaters, feed-water.	Water.
Holsts.	Welding compounds.
Ice, for ice water.	
Iron.	
Labor.	

10. *Power-plant wages.*—All expenditures for labor in the power plant, except labor employed in making repairs or renewals.

This includes the wages of the following employees:

Boiler cleaners.	Oilers.
Chief engineer.	Other labor (boiler room).
Coal passers.	Other labor (engine room).
Engineers.	Switchboard tenders.
Firemen.	Water tenders.
Generator tenders.	

11. *Fuel for power.*—All expenditures for coal, oil, or gas used as fuel, or other fuel used at power plant, including freight and hauling.

12. *Water for power.*—All expenditures for water used to produce steam or to operate a water-power plant.

13. *Lubricants and waste for power plant.*—All expenditures for lubrication of power plant, including oil, grease, waste, rags, etc.

14. *Miscellaneous supplies and expenses of power plant.*—All expenditures for operation of power plant not otherwise provided for.

Following is a list of some of the items chargeable to this account:

Boiler compound.	Matches.
Boiler inspection.	Mops.
Brooms.	Oil cans.
Brushes, fluo.	Packing.
Brushes, for generators.	Polish.
Brushes, for scrubbing.	Sandpaper.
Buckets.	Soap.
Chamois skins.	Sponges.
Dusters.	Sprinkling cans.
Emery cloth.	Tools.
Fire buckets.	Water (except water charged in account No. 12).
Fire extinguishers.	Water-gauge glasses.
Garnet paper.	Waste cans.
Hose.	
Ice, for ice water.	
Light (lanterns and fixtures, oil, lamp-wick, torches, candles, incandescent lamps, arc-light globes and carbons).	

15. *Power purchased.*—All expenditures for power purchased from other companies or power plants.

16. *Superintendence of transportation.*—Wages of division superintendents, their assistants and aids, road officers, inspectors, and others employed in superintending transportation.

17. *Wages of conductors.*—Those engaged in operating revenue cars.

18. *Wages of motormen.*—Those engaged in operating revenue cars.

19. *Wages of other car-service employees.*—Wages of starters, transfer agents, switch tenders, trolley men, trail-car couplers, and other car-service employees.

20. *Wages of car-house employees.*—Wages of car-house foremen, watchmen, car placers, car shifters, car and motor inspectors, car cleaners, lamp and headlight tenders, car oilers, car-stove firemen, trolley oilers, and other car-house employees not engaged in making repairs or renewals.

The cost of shifting cars for the purpose of repairs or renewals should be charged to account No. 6 or 7.

21. *Car-service supplies.*—All expenditures for lubricants and waste for cars and equipment of cars, incandescent lamps, oil and other supplies for lighting cars, water and other supplies for cleaning cars, fuel for heating cars, bell and register cord, trolley rope, commutator brushes, tools, and other material and supplies, except such as are used for repairs or renewals of cars or equipment of cars.

Following is a list of some of the items chargeable to this account:

Batteries, dry, for electric bells in cars.	Lubricants.
Bell cord.	Matches.
Brooms, for cars.	Mops.
Brushes, for car washing.	Oil cans.
Brushes, for motors.	Pokers.
Buckets, for car washing.	Polish.
Candles.	Rags.
Chamois skins.	Register cord.
Chimneys, for headlights.	Shakers.
Coal hods, for cars.	Shovels.
Dusters.	Soap.
Fuel, for cars.	Sponges.
Fuses.	Stove blacking.
Hose, for car washing.	Tools.
Illuminating oil.	Trolley rope.
Incandescent lamps.	Waste.
Kindling.	Water, for car washing.
Lampwick.	

22. *Miscellaneous car-service expenses.*—All expenditures for secret inspection, transfers and tickets, conductors' books, punches, portable registers, tools for motormen, employees' badges and uniforms; cost of getting derailed cars on track and removing obstructions and wreckage; miscellaneous expenses of car houses, including fuel, light, water (except water used for car washing), and ice, and all other car-service expenses not otherwise provided for.

Water used for car washing should be charged to account No. 21. Following is a list of some of the items chargeable to this account:

Badges, for employees.	Portable registers.
Brooms, for car houses.	Secret inspection expenses.
Buckets, for car houses.	Sprinkling cans.
Conductors' books.	Tickets.
Conductors' fare boxes.	Tools.
Conductors' punches.	Tools, for motormen.
Fire buckets.	Transfers.
Fire extinguishers.	Uniforms.
Fuel, for car houses.	Water (except water for car washing).
Hose, for car houses.	Wrecking expenses.
Ice, for ice water.	
Light (lanterns and fixtures, oil, lamp-wick, torches, candles, incandescent lamps, arc-light globes and carbons).	

22a. *Hired equipment.*—The rental of cars, equipment of cars, and other equipment.

23. *Cleaning and sanding track.*—All expenditures for cleaning, greasing, watering, sprinkling, and removing dirt from track, sanding track, including wages of men engaged in the work, cost of sand and of hauling, drying, and distributing same, cost of track brooms and other tools, curve grease, water for sprinkling and watering track, and all other supplies and expenses incident to the work.

The cost of feed and keep of horses used in connection with this work should be charged to account No. 30.

The cost of repairs and renewals of harness and wagons, water, sprinkling, and sand cars used in connection with this work should be charged to account No. 8.

This account should not include cost of sprinkling rendered necessary by repairs or construction of track or paving.

The cost of sprinkling street (except tracks) in front of or adjacent to company's property should be charged to account No. 32.

Following is a list of some of the items chargeable to this account:

Curve grease.	Shovels.
Fuel for drying sand.	Track brooms.
Sand.	Track brushes.
Sand dryer and parts.	Water.

24. *Removal of snow and ice.*—All expenditures for removal of snow and ice from tracks, whether done by the company or otherwise, including labor, material, tools, and expenses, cost of salt and of delivering same in car houses or bins, and the wages of men engaged in salting track and operating snowplows, sweepers, scrapers, etc.

The cost of feed and keep of horses used in connection with this work should be charged to account No. 30.

The cost of repairs and renewals of harness, wagons, salt cars, snowplows, sweepers, scrapers, and miscellaneous snow equipment used in connection with this work should be charged to account No. 8.

25. *Salaries of general officers.*—Salaries of president, vice-president, secretary, treasurer, auditor, general manager, assistant general manager, chief engineer, general superintendent, purchasing agent, and all other officers whose jurisdiction extends over the entire system.

26. *Salaries of clerks.*—The salaries of bookkeepers, cashiers, receivers, paymasters, stenographers, clerks employed in counting cash, tickets, and transfers, and all other clerks employed in the general office or elsewhere.

27. *Printing and stationery.*—All expenditures for printing, stationery, and stationery supplies, except as hereinafter provided.

The cost of printing tickets and transfers should be charged to account No. 22.

The cost of printing briefs and other legal papers should be charged to account No. 34 or 35.

The cost of printing signs, posters, and other advertising matter should be charged to account No. 31.

Following is a list of some of the items chargeable to this account:

Arm rests.	Paper cutters.
Binders.	Paper fasteners.
Blanks.	Paper files.
Blank books.	Paper weights.
Blotters.	Pencils.
Blotting paper.	Pencil erasers.
Carbon paper.	Pens.
Coin bags.	Penholders.
Copy (impression) books.	Penracks.
Copying brushes.	Pins.
Dating stamps.	Printing (except printing charged to accounts Nos. 22, 31, 34, 35).
Envelopes.	Rubber bands.
Eyelets.	Rubber stamps.
Eyelet punches.	Rulers.
Erasers.	Scrapbooks.
Hectographs.	Sealing wax.
Indexes.	Seals.
Ink.	Shears.
Inkstands.	Shipping tags.
Ink erasers.	Shipping tickets.
Letterpresses.	Shorthand books.
Mechanical calculators.	Sponges.
Mimeographs.	Sponge cups.
Money tags.	Tissue (impression) paper.
Money wrappers.	Typewriters.
Mucilage and brushes.	Typewriter supplies.
Numbering stamps.	Twine.
Oil paper.	Wastebaskets.
Paper (all kinds).	Wrapping paper.
Paper baskets.	
Paper clips.	

28. *Miscellaneous office expenses.*—The cost of office supplies, repairs and renewals of office furniture, wages of janitors, porters, and messengers, and all other office expenses.

The cost of printing, stationery, and stationery supplies should be charged to account No. 27, except as otherwise provided.

Following is a list of some of the items chargeable to this account:

Brooms.	Newspapers.
Brushes.	Periodicals.
Buckets.	Postage.
Chamois skins.	Soap.
Dusters.	Sponges.
Fuel.	Sprinkling cans.
Ice.	Towels.
Light.	Towel service.
Mops.	Water.

29. *Stores expenses.*—All salaries and expenses in connection with storerooms, including cost of sending material and supplies from general storeroom to branch storerooms, and the collecting of scrap material.

30. *Stable expenses.*—The cost of feed, keep, and shoeing of horses, and all other stable expenses.

This account should include the stable expenses of all horses, regardless of where they are used.

Replacing horses lost by death or worn out in service, depreciation in value of horses, and repairs and renewals of harness and vehicles should be charged to account No. 8.

Following is a list of some of the items chargeable to this account:

Bedding.	Horseshoeing supplies.
Blankets.	Horseshoeing (by contract).
Brooms.	Hose.
Brushes.	Hostlers, wages of.
Buckets.	Ice.
Chamois skins.	Light.
Currycombs.	Medicine.
Dusters.	Salt.
Feed.	Sponges.
Fire buckets.	Sprinkling cans.
Fire extinguishers.	Stablemen, wages of.
Fuel.	Veterinarian (salary or fees).
Horseshoers, wages of.	Water.

31. *Advertising and attractions.*—The cost of advertising of every description, including printing handbills, dodgers, posters, folders, etc., net expense of music, parks, park properties and resorts (after deducting all income from admittance fees, sale of privileges, etc.), and all donations made and other expenses incurred for the purpose of attracting travel.

32. *Miscellaneous general expenses.*—The cost of public telephone service, maintaining and operating private telephone system, telegrams, subscriptions, and donations (except those provided for in account No. 31), traveling expenses of general officers and others connected with general office, and contingent expenses connected with the general management not otherwise provided for.

33. *Damages.*—All expenditures on account of property damaged and persons killed or injured, salaries and expenses of claim agents, investigators, adjusters, and others engaged in the investigation of accidents and adjustment of claims, salaries, fees and expenses of

surgeons and doctors, nursing, hospital attendance, medical and surgical supplies, fees and expenses of coroners and undertakers, fees of witnesses and others, except lawyers' fees and court costs and expenses.

Following is a list of some of the items chargeable to this account:

Accident insurance premiums.	Doctors' fees or salaries.
Adjusters' expenses.	Funeral expenses.
Adjusters' salaries.	Hospital expenses.
Claim agents' expenses.	Investigators' expenses.
Claim agents' salaries.	Investigators' salaries.
Coroners' fees and expenses.	Medical supplies.
Damage claims for ejectment from cars.	Nurses' expenses.
Damage claims for electrolysis.	Nurses' fees.
Damage claims for horses killed or injured.	Premiums for accident insurance.
Damage claims for persons killed or injured.	Surgeons' expenses.
Damage claims for property damaged.	Surgeons' fees.
Damage claims for wagons or vehicles damaged.	Surgeons' salaries.
Doctors' expenses.	Surgical supplies.
	Undertakers' expenses.
	Undertakers' fees.
	Witnesses' expenses.
	Witnesses' fees.

34. *Legal expenses in connection with damages.*—All legal expenses incurred in connection with the defense or settlement of damage claims.

The compensation of the general solicitor or counsel and other attorneys engaged partly in the defense and settlement of damage suits and partly in other legal work should be apportioned between this account and account No. 35.

The term "legal expenses" should be understood to include the salary of general solicitor or counsel, salaries, fees, and expenses of attorneys, fees of court stenographers, unless included in court costs, cost of law books, printing of briefs, court records, and other papers, court costs, expenses connected with taking depositions, and all other court expenses.

35. *Other legal expenses.*—All legal expenses except those incurred in connection with the defense or settlement of damage claims.

The compensation of the general solicitor or counsel and other attorneys engaged partly in the defense and settlement of damage suits and partly in other legal work should be apportioned between this account and account No. 34.

36. *Rent of land and buildings.*—All rents paid for land and buildings used in the operation of the road.

37. *Rent of tracks and terminals.*—All rents paid for tracks and terminals, bridge rentals, and tolls. The word "terminals" is not meant to refer to depots, car houses, or other buildings at the termini of the road. Rents for these should be charged to account No. 36.

38. *Insurance.*—The cost of fire and boiler insurance.

*Wages, supplies, and expenses incident to electric service not included in any of the above items.*—Amounts are to be reported for railway companies that sell electric current for light or power. Include all operation and maintenance expense incident to the generation and sale of electric current that has not been included in the answer to any of the other inquiries.

The following alphabetical list of items chargeable to operating expense accounts of electric railways shows the account, or accounts, to which each item is chargeable. The purpose of this list is that it may serve as a guide in the use of the classification of operating expense accounts recommended by the American Street and Interurban Railway Accountants' Association, and bring about a standard method of making charges. It is not a complete list of all items chargeable to the operating expense accounts of electric railway companies, but is an index of many and perhaps most of such items.

Item.	Accounts chargeable.
Accident insurance premiums.....	33
Adjusters' expenses and salaries.....	33
Advertising.....	31
Aids.....	16
Ameters (electric plant).....	5
Architects.....	3
Arc lights (light).....	1, 2, 3
Arc-light carbons (light).....	1, 2, 0, 14, 22, 28, 29, 30
Arc-light fixtures (light).....	1, 2, 3
Arc-light globes (light).....	1, 2, 0, 14, 22, 28, 29, 30
Armatures and parts.....	5, 7
Armature winders (mechanics).....	5, 7, 9
Arm rests.....	27
Ash-conveying machinery (steam plant).....	4
Assistant division superintendents.....	16
Assistant general manager.....	25
Attorneys' expenses, fees, and salaries.....	34, 35
Attractions for promoting travel.....	31
Auditor.....	25
Awnings.....	3
Axles, car.....	0, 8
Babbit metal.....	4, 5, 7, 9
Badges, employees'.....	62
Ballast.....	1
Batteries for electric bells in cars.....	21
Batteries, storage (electric plant or cars).....	5, 7
Bearings for electric equipment of cars.....	7
Bedding (stable).....	30
Bells, cars.....	0
Bell cord.....	21
Bell-cord fixtures.....	0
Belts for steam plant.....	4
Belts for shops.....	9
Belt fixtures.....	4, 9
Bolt tighteners.....	4, 9
Blinders (office).....	27
Blocksmiths (mechanics).....	1, 2, 3, 4, 5, 6, 7, 8, 0
Blank books.....	27
Blank forms.....	27
Blankets (stable).....	30
Blotters.....	27
Blotting paper.....	27
Boiler compounds.....	0, 14
Boiler fittings.....	4, 9
Boiler inspection (city or insurance companies).....	0, 14
Boiler-room employees (power plant).....	10
Bolts.....	1, 2, 3, 4, 5, 6, 7, 8, 0
Bolt ends.....	1, 2, 3, 4, 5, 6, 7, 8, 0
Books (blank books).....	27
Bookkeepers.....	5
Boosters (electric plant).....	20
Boxes for lightning arrestors.....	2
Braces, rolls.....	1
Brakes (hand or power).....	0, 8
Brake appliances (hand or power).....	0, 8
Brake shoes.....	0, 8
Brasses (car brasses).....	0, 7, 8
Brass fixtures (cars).....	0, 8
Brass trimmings (cars).....	0
Brick.....	1, 3
Bridges.....	1
Bridge rentals.....	37
Bridge tolls.....	37
Briefs (printing of law briefs).....	34, 35
Brooms, corn.....	0, 14, 21, 22, 28, 29, 30
Boilers, steam plant.....	4
Boilers, shop.....	0
Boiler appliances.....	4, 9
Boiler cleaners.....	0, 10
Brooms, stable.....	30
Brooms, track.....	23
Brushes for car washing.....	21
Brushes, fluo.....	14
Brushes for generator.....	14
Brushes, horse.....	30
Brushes (cars or electric equipment of cars).....	21
Brushes, scrubbing.....	0, 14, 21, 22, 28, 29, 30
Brush holders and parts (electric equipment of cars).....	7
Buckets.....	0, 14, 21, 22, 28, 29, 30
Buggies.....	8
Buggies (material or repair parts).....	8
Builders' hardware.....	3
Building material.....	3
Building permits.....	3
Bumpers (cars).....	0, 8
Cables, switchboard.....	5
Calculators, mechanical.....	27
Candles (light).....	1, 2, 0, 14, 21, 22, 28, 29, 30
Canvas or duck for cars.....	0, 7, 8
Carbons for arc lights (light).....	1, 2, 0, 14, 22, 28, 29, 30
Carbon paper.....	27
Carpenters (mechanics).....	1, 2, 3, 4, 5, 6, 7, 8, 9
Cars, baggage.....	0
Cars, express.....	0
Cars, freight.....	0
Cars, mail.....	0

Item--Continued.	Accounts chargeable.
Cars, passenger.....	6
Cars, private.....	6
Cars, salt.....	8
Cars, sand.....	8
Cars, sprinkling.....	8
Cars, supply.....	8
Cars, water.....	8
Cars, work.....	8
Car cleaners.....	8
Car curtains.....	20
Car-curtain fixtures.....	6
Car couplers (labor).....	6
Car-house employees.....	19
Car-house foreman.....	20
Car inspectors.....	20
Car oilers.....	20
Car placers.....	20
Car seats.....	20
Car-seat coverings.....	6
Car-seat fixtures.....	6
Car-service employees.....	6
Car shifters.....	19
Car signs.....	20
Car-sign fixtures.....	6
Car springs.....	6
Car steps.....	6
Car stoves.....	6
Car-stove firemen.....	6
Car-stove fixtures.....	20
Car wiring.....	6
Carts.....	7
Carts (material or repair parts).....	8
Cashiers.....	26
Cement.....	1, 2, 3, 4, 9
Chairs for rails.....	1
Chamois skins.....	9, 14, 21, 22, 28, 29, 30
Charcoal.....	2, 9
Chief engineers, civil, electrical, mechanical.....	25
Chief engineers (of power plant).....	10
Chimneys for headlights.....	21
Chuders for ballast.....	1
Circuits (heat, light, power) for cars.....	7
Circuit breakers (electric plant or cars).....	5, 7
Cisterns.....	3
Claim agents' expenses and salaries.....	33
Clamps for poles.....	2
Clamps for welding rail joints.....	1
Clerks.....	1, 2, 3, 4, 5, 6, 7, 8, 9, 26, 29
Clutches (steam plant or shop).....	4, 9
Coal for heating.....	1, 2, 9, 21, 22, 23, 28, 29, 30
Coal for power.....	11
Coal-conveying machinery (steam plant).....	4
Coal hods (for car stoves).....	21
Coal passers (steam plant).....	10
Coal bags.....	27
Coke for heating.....	1, 2, 9, 21, 22, 23, 28, 29, 30
Coke for welding rail joints.....	1
Commutators and parts (electric plant or cars).....	5, 7
Condensers (steam plant).....	4
Conductors (of revenue cars).....	17
Conductors for underground trolley.....	2
Conductors' books.....	22
Conductors' fare boxes.....	22
Conductors' punches.....	22
Conduits.....	2
Contacts (for surface-contact roads).....	2
Contact boxes (for surface-contact roads).....	2
Contact shoes (for surface-contact cars).....	2
Contact shoes (for third-rail cars).....	7
Contingent expenses.....	32
Controllers and parts (cars).....	7
Copying (Impression) books.....	27
Copying brushes.....	27
Cord, bell.....	21
Cord for electric line.....	2
Cord, register.....	21
Cord, trolley.....	21
Coroners' expenses and fees.....	33
Cotters.....	6, 7, 8, 9
Counsel.....	34, 35
Court costs.....	34, 35
Court records.....	34, 35
Court stenographers' fees.....	34, 35
Cranes (steam plant, shop, car houses).....	4, 9
Crews operating snowplows.....	24
Crews operating electric sweepers.....	24
Crews operating work cars.....	23, 24, 29
Cross-arms, iron, for poles.....	2
Cross-arms, wood, for poles.....	2
Crossing, track (special work).....	1
Crossings, electric line.....	2
Crossovers, track (special work).....	1
Culverts.....	30
Currycombs.....	1
Curves, track (special work).....	23
Curve grease.....	7
Cut-out boxes and parts (cars).....	33
Damage claims, ejection from cars.....	33
Damage claims, electrolysis.....	33
Damage claims, horses injured or killed.....	33
Damage claims, persons injured or killed.....	33
Damage claims, property damaged.....	33
Damage claims, vehicles damaged.....	33
Dashes and parts (cars).....	6, 8
Dating stamps (office).....	27
Depreciation of horses.....	8
Deposition expenses.....	34, 35
Division superintendents.....	16
Division superintendents, assistant.....	16
Doctors' expenses, fees, and salaries.....	33
Dodgers (printing).....	31
Donations to attractions.....	31

Item--Continued.	Accounts chargeable.
Donations, other than to attractions.....	32
Draft machinery.....	4, 9
Draftsmen.....	1, 2, 3, 4, 5, 6, 7, 8, 9
Drains.....	1, 3
Drawbars for cars.....	6, 8
Duck or canvas for cars.....	6, 8
Dusters, leather.....	9, 14, 21, 22, 28, 29, 30
Economizers (steam plant).....	4
Electric heaters, for cars.....	6
Electric sweepers.....	6
Electricians (mechanics).....	2, 3, 5, 6, 7, 8, 9
Electroliners (cars).....	6, 8
Electrolysis.....	33
Emery cloth.....	1, 2, 3, 4, 5, 6, 7, 8, 9, 14
Employees.....	(Indexed by occupation.)
Engineers (chief engineers, civil, electric, mechanical).....	25
Engineers, chief of power plant.....	10
Engineers (civil, electric, mechanical).....	1, 2, 3, 4, 5, 6, 7, 8, 9
Engines in power plant or shop.....	9, 10
Engines (steam plant or shop).....	4, 9
Engine appliances.....	4, 9
Engine fixtures.....	4, 9
Engine parts.....	4, 9
Envelopes.....	27
Erasers.....	27
Excavations for buildings.....	27
Expenses, contingent.....	3
Expenses, depositions.....	32
Expenses, storeroom.....	34, 35
Eyelets (office).....	29
Eyelet punches (office).....	27
Fare boxes (cars).....	27
Fare boxes, conductors'.....	6
Fare registers.....	22
Feather dusters.....	9, 14, 21, 22, 28, 29, 30
Feed.....	30
Feeders, ground.....	2
Feeders, overhead.....	2
Feeder terminals (electric plant).....	2
Feeders, underground.....	2
Fields and parts.....	6
Fences (buildings and inclosures).....	5, 7
Fences, park.....	31
Fences, right-of-way.....	1
Fenders and parts (cars).....	6, 8
Fire brick (steam plant or shop).....	4, 9
Fire buckets.....	9, 14, 22, 28, 29, 30
Fire clay (steam plant or shop).....	4, 9
Fire extinguishers.....	9, 14, 22, 28, 29, 30
Firemen (power plant).....	10
Firemen (car stoves).....	20
Fish plates, track (rail fastenings).....	1
Fixtures for buildings.....	3
Floor mats for cars.....	6
Folders.....	31
Forges (blacksmith shop).....	9
Foremen of car houses.....	20
Forms, blank.....	27
Foundations for buildings.....	3
Frames, motor.....	7
Freight.....	1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 14, 21, 22, 23, 24, 27, 28, 30
Frogs, track (special work).....	1
Fuel (coal, coke, kindling).....	1, 2, 9, 21, 22, 23, 28, 29, 30
Fuel for power.....	11
Fuel for car stoves.....	21
Funeral expenses.....	33
Furnaces (boiler).....	4, 9
Fuses (cars).....	21
Garnet paper.....	1, 2, 3, 4, 5, 6, 7, 8, 9, 14
Gas for fuel for power.....	11
Gasoline for electric line.....	2
Gates (cars).....	6
Gears (electric equipment of cars).....	7
Gear cases and parts.....	7
General manager.....	25
General manager, assistant.....	25
General solicitor.....	34, 35
General superintendent.....	25
Generators and parts (electric plant).....	5
Generator tenders (power plant).....	10
Glass.....	3, 6, 8
Globes for arc lamps (light).....	1, 2, 9, 14, 22, 28, 29, 30
Glue for car repairs.....	6, 8
Gongs for cars.....	6, 8
Grab handles for cars.....	6, 8
Grading for buildings.....	3
Grading for track.....	1
Grate bars for furnaces (steam plant or shop).....	4, 9
Gravel for track.....	1
Grease for power plant.....	13
Grease for cars.....	21
Grease for tracks.....	23
Grease for wagons and other vehicles.....	30
Guard rails, track (special work).....	1
Handbills.....	31
Hangers for electric line.....	2
Hardware (buildings).....	3
Harness (buggy, cart, wagon).....	8
Harness (material or repair parts).....	8
Hauling of material.....	1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 14, 21, 22, 23, 24, 27, 28, 29, 30
Hauling of salt.....	24
Headlights and parts (cars).....	6, 8
Headlight tenders.....	20
Heat circuit for cars.....	7
Heaters, electric, for cars.....	6
Heaters, feed-water.....	4, 9
Heating apparatus for buildings.....	3
Heating fixtures for buildings.....	3
Hectographs.....	27
Hired power.....	4, 9
Hoists (steam plant, shop or car house).....	15
Horses, depreciation of.....	8

Item—Continued.	Accounts chargeable.
Horses, replacement of	3
Horseshoeing	30
Horseshoeing supplies	30
Horseshoers	30
Hose	0, 14, 21, 22, 28, 29, 30
Hospital expenses (persons injured)	33
Hostlers	30
I-beams for buildings	3
Ice for tea water	1, 2, 9, 14, 22, 28, 29, 30
Impression paper	27
Impression books	27
Incandescent lamp fixtures (light)	1, 2
Incandescent lamps (light)	1, 2, 9, 14, 21, 22, 28, 29, 30
Indexes (office)	27
Injectors, steam	4, 9
Ink	27
Inkslands	27
Inspectors, secret	22
Inspectors, not secret	16
Inspectors, cars	20
Inspectors, motors	20
Insulating material for electric equipment of cars	7
Insulating tape	2, 7
Insulators, overhead	2
Insulators, third rail	2
Insulators, underground trolley	2
Insurance, accident	33
Insurance, boiler	38
Insurance, fire	38
Investigators' expenses and salaries	1, 2, 3, 4, 5, 6, 7, 8, 9
Iron	1, 2, 3, 4, 5, 6, 7, 8, 9
Janitors	28
Joints, track (not welded)	1
Joints, track (welded)	1
Kindling wood (fuel for heating)	1, 2, 9, 21, 22, 28, 29, 30
Laborers (Indexed by occupation.)	1, 2, 3, 4, 5, 6, 7, 8, 9
Labor, manual (maintenance accounts)	1, 2, 9, 14, 21, 22, 28, 29, 30
Lamps, incandescent (light)	20
Lamp tenders	20
Lamp wick (light)	1, 2, 9, 14, 21, 22, 28, 29, 30
Lanterns and fixtures (light)	1, 2, 9, 14, 22, 28, 29, 30
Laths	3
Lathes	9
Law books	34, 35
Law briefs	34, 35
Legal expenses, in connection with damages	34
Legal expenses, other than damages	35
Legal papers	34, 35
Letter books	27
Lithopresses	27
Life guards for cars	0, 8
Light (lanterns, oil, wick, torches, candles, incandescent lamps, arc-light globes and carbons)	1, 2, 9, 14, 21, 22, 28, 29, 30
Light circuits for cars	7
Lighting apparatus for buildings	3
Lighting fixtures for buildings	3
Lightning arresters and parts (line, electric plant, cars)	2, 5, 7
Lime for buildings	3
Linemen	2
Linseed oil (paint)	2, 3, 4, 6, 8
Lubricants	9, 13, 21, 30
Lubricators for engines	4, 9
Lumber	1, 3, 9, 8, 9
Machinery, ash-conveying	4
Machinery, coal-conveying	4
Machinery, mechanical draft	4
Machinery, waterpower	4
Mechanists (mechanics)	1, 2, 3, 4, 5, 6, 7, 8, 9
Magnets for surface-contact roads	2
Manager (assistant general manager)	25
Manager (general manager)	25
Manhole covers for underground trolley	1
Manhole covers for surface-contact roads	2
Manhole frames for underground trolley	1
Manhole frames for surface-contact roads	2
Matches	0, 14, 21, 28, 29, 30
Material for buildings	3
Material not otherwise specified	1, 2, 3, 4, 5, 6, 7, 8, 9
Mechanics (blacksmiths, carpenters, painters, machinists, electricians, armature winders, motor repairers)	1, 2, 3, 4, 5, 6, 7, 8, 9
Medical supplies (damages)	33
Medicine for horses	30
Messengers	28
Meters, water	3, 4, 9
Mimeographs	27
Mirrors for cars	0
Molds for welded joints	1
Money tags	27
Money wrappers	27
Mops	0, 14, 21, 22, 28, 29, 30
Motormen (of revenue cars)	18
Motormen (of work cars)	1, 2, 23, 24, 29
Motor repairers	7
Motors, complete, for cars	7
Motor frames	7
Motor inspectors	20
Motors and motor parts for shop	9
Mucilage	27
Mucilage brushes	27
Music for promoting travel	31
Nails	1, 3, 6, 9
Newspapers	28
Numbering stamps (office)	27
Nurses' expenses and fees (damage cases)	33
Nuts, for bolts	1, 2, 3, 4, 5, 6, 7, 8, 9
Nut locks, for track (rail fastenings)	1
Officers (Indexed by titles or positions.)	28
Office furniture, repairs and renewals of	11
Oil for fuel for power	9, 13, 21, 30
Oil, lubricating	1, 2, 9, 14, 21, 22, 28, 29, 30
Oil for light	3

Item—Continued.	Accounts chargeable.
Oil boxes for cars	0, 8
Oil cans	14, 21
Oil paper (office)	27
Oilers, car	20
Oilers, power plant	10
Oilers, trolley	20
Oiling devices for engines	4, 9
Painting for engines	0, 14
Painting material (linseed oil, turpentine, varnish, white lead, painters' brushes and supplies)	2, 3, 6, 8
Painters (mechanics)	2, 3, 6, 8
Paper (writing paper, wrapping paper)	27
Paper baskets	27
Paper clips	27
Paper cutters	27
Paper fasteners	27
Paper files	27
Paper weights	27
Parks and park properties for promoting travel	31
Favors (laborers)	1, 2, 3
Paving in connection with buildings	3
Paving in connection with electric line	2
Paving in connection with tracks	1
Paving material	1, 2, 3
Pedestals for cars	6, 8
Panells	27
Pencil erasers	27
Pens	27
Penholders	27
Ponracks	27
Periodicals	28
Permits for buildings	3
Pig iron for welding joints	1
Pilots for cars	6, 8
Pinions for electric equipment of cars	7
Pins	27
Pins, iron, for cross-arms	2
Pins, wood, for cross-arms	2
Pipe covering (steam pipe)	4, 9
Pipes, drain	1, 3
Pipe fittings, steam	4, 9
Pipes, gas	3
Pipes, sewer	3
Pipes, water	3
Piping, steam	4, 9
Pits, in car houses and shops	3
Plaster	3
Plows for underground trolley cars	7
Plumbing	3
Pokers for car stoves	21
Poles, iron or wood, for electric line	2
Pole fixtures	2
Pole tops for iron poles	2
Polish	0, 14, 21, 22, 28, 29, 30
Portable registers	22
Porters	28
Postage	28
Posters	31
Power circuits, cars	7
Power plant labor (boiler room, not otherwise specified)	10
Power plant labor (engine room, not otherwise specified)	10
President	25
Printing (except transfers, tickets, dodgers, posters, handbills, folders, law books, law briefs, legal papers, charged to accounts 22, 31, 34, 35)	27
Printing (advertising matter)	31
Printing (briefs)	34, 35
Printing (dodgers)	31
Printing (folders)	31
Printing (handbills)	31
Printing (legal papers)	34, 35
Printing (posters)	31
Printing (tickets)	22
Printing (transfers)	22
Pulleys	4, 9
Pumps, steam	4, 9
Punches, conductors'	22
Purchasing agent	25
Purifiers (steam plant)	4
Rags	13, 21
Rails for track	1
Rail bonds, electric line	2
Rail braces, track (rail fastenings)	1
Rail chairs, track (rail fastenings)	1
Rattan for sweepers	8
Receivers (employees counting receipts)	26
Receivers for steam plant	4
Register cord	21
Registers (stationary fare registers)	6
Removing snow	24
Rent of bridges	37
Rent of land and buildings	30
Rent of tracks and terminals	37
Replacing horses	8
Resorts for promoting travel	31
Rheostats for electric plant or cars	5, 7
Rivets	1, 2, 3, 4, 5, 6, 7, 8, 9
Roadmasters	1
Road officers	16
Roofing material	3
Rope (trolley rope)	21
Rubber bands	27
Rubber stamps	27
Rulers	27
Salaries (Indexed by titles or positions.)	28
Salt	21, 30
Sand	1, 2, 3, 23
Sand boxes attached to cars	0, 8
Sand dryer and parts, for drying sand	28
Sandpaper	1, 2, 3, 4, 5, 6, 7, 8, 9, 14
Scenes, platform	3
Scrapbooks	27



Item—Continued.	Accounts chargeable.
Screens, wire (for buildings)	3
Screens, wire (for cars)	6
Screws	1, 2, 3, 4, 5, 6, 7, 8, 9
Seals	27
Sealing wax	27
Seats for cars	6
Seat coverings for cars	6
Seat fixtures for cars	0
Secretary	25
Secret inspection	22
Separators (steam plant)	4
Sewer connections for underground trolley	2
Sewer connections for steam plant	4
Sewer traps for underground trolley	2
Sewerling for buildings	3
Shafting for steam plant or shop	4, 9
Shafts for motors	7
Shakers for car stoves	21
Shears for office	27
Shelving for buildings	3
Shipping tags	27
Shipping tickets	27
Shorthand books	27
Shovels for track cleaning	23
Shovels for removing snow	27
Shovels for car stoves	24
Sidewalks	3
Signals and signaling apparatus	2
Signs and sign fixtures for cars	0
Slot rails for underground trolley	1
Snowplows	8
Snowplow crews	24
Snow scrapers	8
Snow shovels	24
Snow sleds	8
Snow sweepers	8
Son	9, 14, 21, 22, 28, 29, 30
Solder and soldering salts for electric line	2
Soliflors, general	34, 35
Spikes	1, 3
Sponges	9, 14, 21, 22, 27, 28, 29, 30
Sponge cups for office	27
Sprinkling cans	9, 14, 22, 28, 29, 30
Stabblers	30
Stacks, steam plant or shop	4, 9
Steam fittings for steam plant or shop	19
Steel	1, 2, 3, 4, 5, 6, 7, 8, 9
Stenographers	26
Stokers, mechanical	10
Stones	1, 2, 3
Storage batteries for electric plant	5
Storage batteries for cars	7
Storekeepers	29
Storeroom clerks	20
Storeroom employees	29
Storeroom expenses	29
Stoves for cars	6
Stove backing for car stoves	21
Stove fixtures for cars	6
Subscriptions for cars	31
Subscriptions to attractions	32
Subscriptions other than to attractions	32
Subways	1
Superintendence	1, 2, 3, 4, 5, 6, 7, 8, 9
Superintendents, division	16
Superintendents, assistant division	16
Superintendents, general	25
Surgeons' expenses, fees, and salaries	33
Surgical supplies	33
Suspensions for electric line	2
Sweepers, electric	8
Sweeper crews	24
Switches, track (special work)	1
Switches, overhead, electric line	2
Switches for electric plant	5
Switchboards for electric plant	5
Switchboard tenders	10
Switch mates, track (special work)	1
Switch tenders	19
Tanks (steam plant)	4
Tape, insulating	2, 7
Teamsters	1, 2, 3, 4, 5, 6, 7, 8, 9, 23, 24
Telegrams	32
Telephone system, private	32
Telephone service, public	32
Terminals for electric line	32
Terminals for electric equipment of cars	7
Terminals, feeder	5
Third rails (third-rail system)	2
Tickets, printing of	22
Ties	1
Tie plates (rail fastenings)	1
Tie-rods (rail fastenings)	1
Timekeepers	1, 2, 3, 4, 5, 6, 7, 8, 9
Tissue (impression) paper	27
Toils, bridge	37
Toils, hand	1, 2, 3, 4, 5, 6, 7, 8, 9, 14, 21, 22
Toils, for motormen	22
Toils (machine tools in shop)	9
Torches (light)	1, 2, 9, 14, 22, 28, 29, 30
Towels	28
Towel service	28
Track brooms for track cleaning	23
Track cleaners	23
Trall-car couplers	19
Transfers, printing of	22
Transfer agents	19
Transformers (electric plant)	5
Traveling expenses of general officers and others connected with the general office	32
Treasurer	25

Item—Continued.	Accounts chargeable.
Trestles	1
Trolley bases	7
Trolley forks	7
Trolley rollers	20
Trolley poles for cars	7
Trolley rope	21
Trolley tenders (of revenue cars)	19
Trolley tenders (of work cars)	1, 2, 23, 24, 29
Trolley wheels and parts (cars)	7
Trucks for cars	6, 8
Truck frames and parts, for cars	6, 8
Tunnels	1
Turpentine (paint)	2, 3, 6, 8
Turn-outs, track (special work)	1
Twine (office)	27
Typewriters and typewriter supplies	37
Undertakers' expenses and fees	38
Uniforms	22
Varnish (paint)	3, 6, 8
Vehicles (buggies, carts, snow scrapers, snow sleds, wagons, work cars)	3
Ventilating apparatus and fixtures	30
Veterinarian	25
Vice-president	(Indexed by occupation)
Wages	8
Wagons	1, 2, 3, 4, 5, 6, 7, 8, 9
Washers (not car washers)	9, 13, 21
Waste	27
Wastebaskets	14
Waste cans	1, 2, 3, 4, 5, 6, 7, 8, 9, 20
Watchmen	1, 2, 3, 9, 14, 21, 22, 23, 28, 29, 30
Water	1, 2, 9, 14, 22, 28, 29, 30
Water barrels	3, 4, 0
Water connections	1, 2, 9, 14, 22, 28, 29, 30
Water coolers	12
Water dippers	1, 2, 9, 14, 22, 28, 29, 30
Water for steam power	12
Water for operating water-power machinery	12
Water-gauge glasses	14
Water meters	3, 4, 0
Water pails	1, 2, 9, 14, 21, 22, 28, 29, 30
Water-power machinery	4
Water tenders for steam plant	10
Water tenders for water-power plant	10
Welding compound	9
Wells	3
Wheels for cars	6, 8
Wheels, trolley	7
White lead (paint)	2, 3, 6, 8
Wire for buildings	2
Wire, feed	2
Wire, guard	2
Wire screens for buildings	6
Wire screens for cars	6
Wire, span	2
Wire, strain	2
Wire, supplementary	2
Wire, trolley	2
Wiring cars	7
Witnesses' expenses and fees	38
Woodwork for buildings	3
Woodwork for cars	6, 8
Wood car crews	1, 2, 23, 24, 29
Wrapping paper	27
Wrecking expenses	22
Yokes for underground trolley	1

INQUIRY 20.—INCOME ACCOUNT.

Give the actual amounts carried on the income-account statement of the company. This may in some cases include bookkeeping items of income and expenses for the year and therefore need not in every instance agree with an actual cash statement for the year.

*Passengers.*—Include cash fares, sale of tickets and commutation books, and all sources of income from passengers.

*Chartered cars.*—It is a practice on many street railways to hire out cars for special travel purposes. These are usually known as "chartered" cars, a definition which includes parlor cars, observation cars, theater cars, funeral cars, etc. For all work of this class it is the custom to make a special and separate rate, and the roads doing this business should have no difficulty in giving the income from it.

*Freight, mail, and express.*—Some electric interurban roads carry large quantities of freight and express matter. If it is impossible to ascertain the exact amount of each class of income, obtain the total for the three items and prepare a careful estimate for the segregation.

*Sale of electric current.*—Be careful to include the income from the sale of current to other public-service corporations. If a combined report is prepared for railway and light and power plant, the total income reported in inquiry 26 should also be reported in answer to this question.

*Interest on bonds and dividends on stock of other electric railways.*—It is necessary to show the total net amount of interest on funded

debt and of dividends paid by street-railway companies to the outside public as distinguished from the gross interest and dividends, part of which goes to other street or electric railways. For this purpose the income from interest on bonds of other street or electric railway companies and the amount received as dividends on their stocks must be reported in answer to this question.

*Income from other permanent investments.*—Railway companies may own securities of public-service corporations (other than electric railways), also industrial or municipal securities. It is desired to secure a separate statement of the income, if any, from such sources.

*Miscellaneous.*—This item should include all amounts received from sources other than those enumerated, such as income from advertising, pleasure resorts, interest on deposits, etc. The principal items must be enumerated separately. The total income reported must be the gross income of the company for the year.

*Miscellaneous taxes.*—Include special taxes, such as car licenses, special taxes for police service at street crossings, etc., but in such cases a note must be made on the schedule describing the tax or license.

*Interest paid or due for the year.*—When funded debt is shown as a liability in answer to inquiries 21 and 22, interest should be reported as paid on funded debt or proper explanation made under "remarks" on the last page of the schedule. In like manner if real-estate mortgages and floating debt are shown as a liability under inquiry 21, interest should be reported or explanation made.

#### INQUIRY 21.—BALANCE SHEET.

This condensed statement must balance and show the financial condition of the company on December 31, 1907, or the last day of the year for which the report is made. Any large items which would come under the head of "sundries" should be stated specifically.

The combined balance sheets of all roads in the country must result in showing the total capital stock and funded debt of both operating and leased roads, therefore the proportion of these securities which are owned by street or electric railways should be shown separately, so that a net figure for each kind of capital can be presented. For this purpose it is necessary that the amount of stocks of other street or electric railway companies and the amount of bonds of other street or electric railway companies owned by the company reporting must be reported in answer to the second question under "assets."

Some companies may consider their own stock or bonds held in the treasury as an asset, but in making up the balance sheet such securities should be treated as not issued and should be omitted from both sides of the balance sheet statement, giving full explanation under "remarks."

If there is a profit and loss deficit, or if a large amount is reported for "other permanent investments," the reason for the loss and the nature of the investments should be given under "remarks." Items such as "purchase of completed road" or "payment for franchise" must be included as "cost of construction, equipment, and real estate," and not as "sundries" or "other permanent investments." "Sundries" is intended to include only the minor elements of accounts.

If the entire stock issue of a subsidiary company is owned by the operating company and a separate supplementary lessor report is not prepared for the subsidiary company (see instructions, next column), the cost of said securities to the operating company should be considered as part of the cost of construction and equipment rather than as "stocks and bonds of other electric railways." In like manner the cost of securities of an electric light and power plant owned and operated by a railway company and included in a combined report should be considered as cost of construction and equipment. On the other hand, if a railway company holds securities of an electric light and power plant but does not entirely own or directly operate it, such securities should be reported as "other permanent investments."

#### INQUIRY 22.—CAPITAL STOCK, BONDS, DIVIDENDS, AND INTEREST.

Account for the entire amount of stock and bonds authorized by charter, and the amount outstanding on the last day of the year covered by the report. Give full amounts of dividends declared and interest paid or due for the year. The rate of interest should always be stated, even though no interest may have been paid or due for the year. In some cases companies have been reorganized or consolidated, and the new company has issued stock, the new stock being accepted by the holders of the original stock which was surrendered to the new company. The new company may also issue bonds and assume the debt represented by the bonds of the original companies, which may or may not be retired. In such cases there may be no cash realized on either the stock or bonds of the new company, but the amount of stock and bonds issued by the new company, and also the stock and bonds *outstanding* of the original company must be given. The amounts of the old and new companies should be given separately. The agent should attach a memorandum to the schedule, giving a full explanation of the issues of the stock and bonds of both companies.

#### INQUIRY 23.—EMPLOYEES, SALARIES, AND WAGES.

The salaries and wages reported here will also be included in the amounts reported for the different items, under inquiry 19, "operating expenses," but this statement is required in order to obtain the number and wages for each class of employees. Account for all persons employed by the company, both in the management and in the operation of the road. Give the number of officers who receive salaries (not the number of stockholders) and the total amount of their salaries. Report separately the number and wages of conductors, motormen, and other classes of employees specified. There should be no difficulty in securing this information for the road of ordinary size, but it may be that the large companies keep an itemized pay roll, the total only being carried forward from each week or month. In such cases it will be necessary either to add the pay roll of each week or month, for each class of employees, or to compute the aggregate for each class, using a pay roll for a representative week or month as the base. Results obtained by the latter method will be accepted. The average number employed during the year is the number that would be required, at continuous employment, for the twelve months.

If the road was in operation only a portion of the year, and for this or other reason the average number does not represent the number required to operate the road under normal conditions, the conditions must be explained and the number of each class required to operate the road under normal conditions given under "remarks."

#### INQUIRIES 24, 25, AND 26.—QUESTIONS FOR RAILWAYS WHICH OPERATE SEPARATE ELECTRIC LIGHT AND POWER PLANTS.

These inquiries, when considered in connection with their accompanying instructions and those in the schedule and page 547 of these instructions, should be readily understood and properly answered.

#### INQUIRIES 27 AND 28.—POLES PURCHASED DURING 1907, AND CROSS-TIES PURCHASED DURING 1907.

These inquiries comprise a part of the annual investigation of consumption of forest products and should be treated as separate and distinct from the census of electrical industries. They *must not*, however, be overlooked by the agent, and must be answered for every company.

#### SEPARATE SUPPLEMENTARY REPORTS FOR NONOPERATING LESSOR OR LEASED ROADS.

As stated on the title-page of the schedule, separate reports must be obtained for all street railways which are leased to operating companies, covering the data for inquiries 1 to 4, inclusive; 7, track; 18, cost of construction and equipment; 20, income account;

21, balance sheet; and 22, capital stock, bonds, dividends, and interest. The purpose is to present, in the financial accounts, a correct bookkeeping total of cost, income, expenses, etc., including the duplications which arise from the practice of leasing railway properties. The amount of such duplications will then appear under the respective inquiries in the schedules, and net amounts can be calculated.

Aside from the desirability of having such complete bookkeeping accounts it is essential to secure the statistics of leased roads separately in order to avoid error. Operating railway companies do not ordinarily keep accounts showing the cost of construction of leased roads, and certain schedules which profess to cover both operating and leased roads really include only the cost of construction and equipment for the operating road.

While agents may be able to prepare correct reports for the operating companies so far as the physical equipment and traffic features are concerned, it is very difficult to make a proper consolidation of the financial items. It requires an expert accountant to combine correctly figures of leased and operating roads, avoiding duplication.

While the figures for both operating and leased roads should be published separately, it will not do to calculate either the cost per mile of track or the capital liabilities per mile of track of either the operating or the leased roads separately, since in many cases the operating company spends large sums in improving leased lines which are not counted in the cost of such leased lines.

When the attempt is made to combine reports of operating and leased roads there should be an item of receipt in the income account, usually in the form of payments of guaranteed dividends and interest on stock and bonds received by the leased companies, equal in amount to the item for rentals paid under the head of expenses by the operating companies. The net income would then include the amount of rentals as well as the dividends and surplus of the operating company. Indeed, if the operating com-

pany and leased lines were to be treated strictly as one, both payments for rentals and receipts from rentals would be omitted. When separate reports of operating and leased companies are made and tabulated, rentals received in the totals will balance rentals paid, and total net income will include the dividends and surplus of both operating and leased companies, or the real profits of the business.

In the same way the item of interest on funded debt in the case of operating companies should include only interest on their own bonds. In many cases such companies assume directly the bonds of leased lines. The schedule should show the interest of the operating companies on their own debt and that on the debt of leased lines, but only the former must be charged as interest and the latter as "rent of leased lines and terminals." The rental received by leased companies will then be made to show the sum intended for interest on other bonds, and their expenditures will show a payment for such interest.

Operating companies often own part of the securities of leased companies. A correctly combined balance sheet of both operating and leased companies will show the total capital stock and funded debt of both, and over against this, under the head "stocks and bonds of other electric-railway companies," the amount of stocks and bonds held by the operating company.

Because of the complications above indicated it is evidently essential to correctness of data, and for the purpose of securing a net balance sheet and a net statement of capitalization, to insist on having separate supplementary reports for nonoperating lessor or leased companies.

There are comparatively few leased street railways, and the supplementary figures desired can be obtained with little difficulty. Reports for leased roads should accompany the report of the operating company, with the word "lessor" written on the upper right-hand corner of the title-page.