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ILLINOIS TRACTION SYSTEM

"THE ROAD of GOOD SERVICE"

Illinois Traction System

COMPILED AT PEORIA, ILL., BY DEPARTMENT OF PUBLICITY,
IN OFFICE OF VICE-PRESIDENT EXECUTIVE.
OCTOBER 1ST 1911.

"The Road of Good Service"

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Peoria, Illinois

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Urbana Light, Heat & Power Company

H. J. PEPPER,
Urbana & Champaign Railway Gas & Electric Company

M. L. HARRY,
Decatur Railway & Light Company

M. G. LINN,
Bloomington & Normal Railway & Light Company

R. W. BAILEY,
Peoria Railway Company

E. D. BELL,
Madison County Light & Power Company
St. Louis Electric Terminal Railway Company
St. Louis Electric Bridge Company

J. P. DOAN,
Jacksonville Railway & Light Company

P. B. SAWYER,
Des Moines Electric Company

A. M. PATTEN,
Topeka Railway Company

A. H. PURDY,
Topeka Edison Company

THE ILLINOIS TRACTION SYSTEM

THE Illinois Traction System typifies the wonderful advance recently made in the use of electricity for motive power and illumination. So satisfactorily have the expectations of the founders of this property been realized that at this time it seems fitting to present this record of the growth of the group of railways and public service utilities which comprise this System. This can best be done by describing the scope of the property and the character of its services, by showing the wonderful resources of the territory which the property so completely serves, by relating the interesting steps of the development and by stating in a concise way how the construction work has been carried forward, how the property is operated and conserved and how much the future may have in store if dependence is put on carefully made estimates of traffic. All these subjects are correlated and of vital interest to those who have at heart the continued welfare of this successful property.

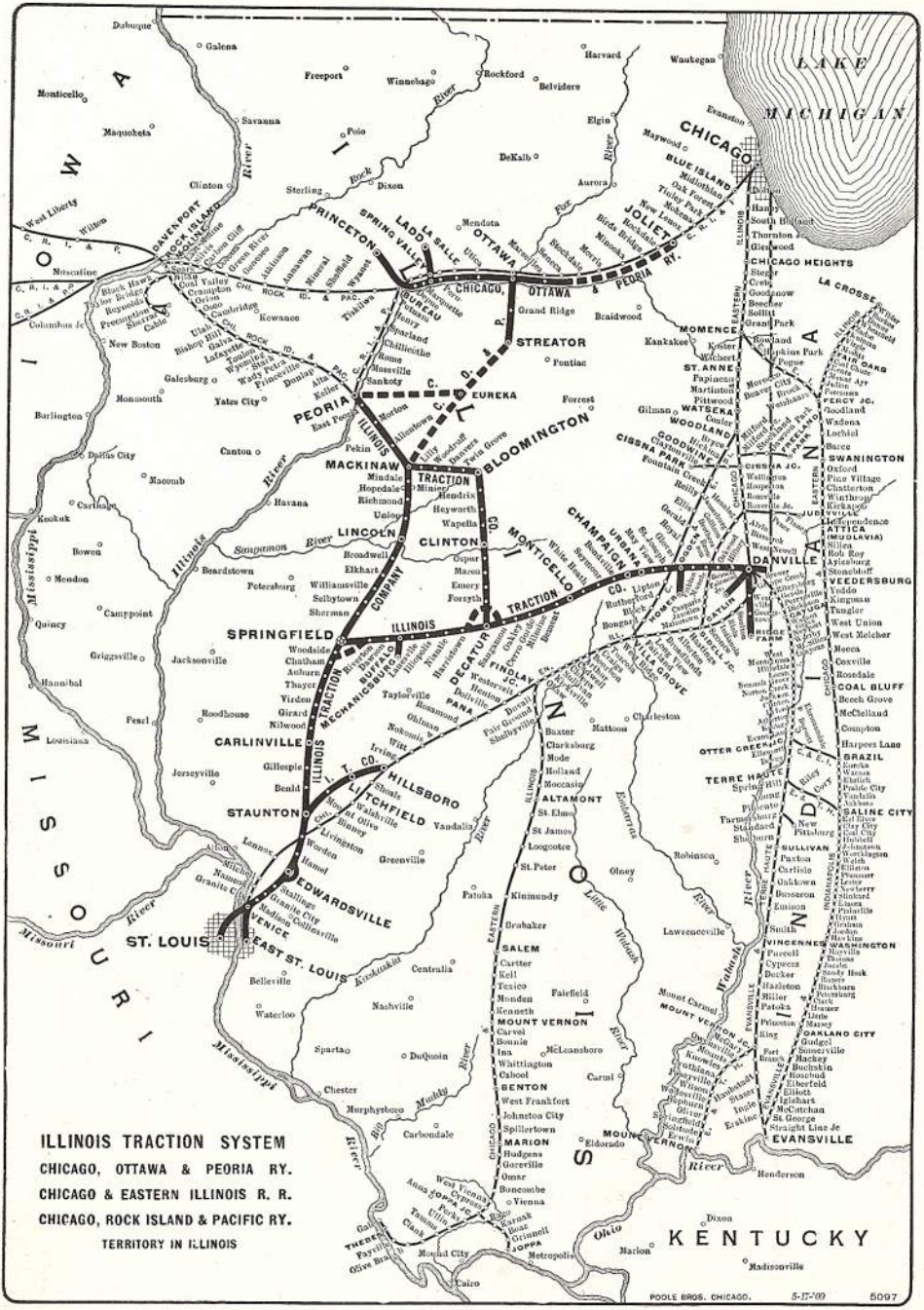
McKINLEY ELECTRIC BRIDGE

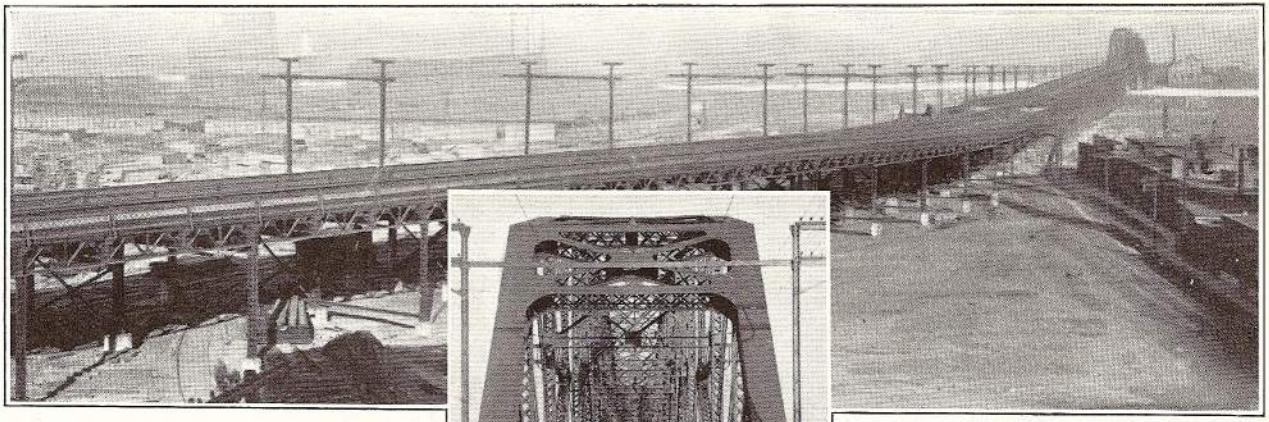
The largest bridge ever built by an electric railroad, and the heaviest in carrying capacity that crosses the Mississippi River. Its total length is one and a quarter miles, sixty-five feet wide, and has an eighty-five-foot clearance above low water. The three large spans are 523 feet in length each. Structural steel approach on Missouri side is 2,700 feet in length. Bridge carries two tracks and two roadways. Designed by Ralph Modjeski.

THE STATE OF ILLINOIS

THE great commonwealth of Illinois, within the borders of which are located the interurban lines of the Illinois Traction System and most of its various public utilities, is the greatest of the Central and Middle West States. With a population of 5,638,581, and with unequaled natural resources, it combines the energy and progressiveness of the West with the stability and conservatism of the East. Its fertile prairies, inexhaustible mines and busy factories place it high in the roll of wealth-producers of the Union.

It has a magnificent system of waterways. Lake Michigan, the outlet to the great waterways of the East, touches its northeastern border for seventy miles. The Mississippi River marks its western boundary for 487 miles and on the south and southeast the Ohio and Wabash touch the State


ILLINOIS TRACTION SYSTEM
CHICAGO, OTTAWA & PEORIA RY.
CHICAGO & EASTERN ILLINOIS R. R.
CHICAGO, ROCK ISLAND & PACIFIC RY.
TERRITORY IN ILLINOIS
POOLE BROS. CHICAGO. 5-17-09 5097



McKINLEY ELECTRIC BRIDGE

Top—Missouri Approach. Middle—Looking Through Spans. Bottom—Missouri Approach and Bridge Freight House.

for nearly 300 miles. Within its borders the Illinois is navigable for 245 miles.

Chicago, the second city in the United States, is the terminus of both the eastern and western trunk lines, most of the latter running across the State. It is connected to the South by the Illinois Central Railroad System, which extends through the State from Chicago to Cairo. Within the past few years the growth of the Illinois Traction System has given it what is perhaps the finest example of the modern completely equipped electric railway in existence.

Illinois is 385 miles in length from the northern to the southern boundary; 218 miles wide from the Indiana State line to the Mississippi River, and comprises a total area of 56,650 square miles. Practically the entire area of the State is highly improved farm lands, the value of which in 1900 exceeded $2,000,000,000. It is the greatest corn producing State in the Union, yielding last year 370,000,000 bushels of corn. 37,000 square miles of the State are underlaid with vast deposits of bituminous coal.

Across the river from St. Louis, the natural freight gateway to the growing Southwest, has sprung up a great manufacturing and industrial district.

Illinois now ranks third in population, third in agriculture, third in manufacturing; second in the production of coal and second in the yearly output of oil among the States of the Union. In 1900 the State produced farm products to the value of $350,000,000. Last year its coal production was 49,163,710 tons, having a total value of $50,303,757. 72,733 men are annually employed in the coal industry.

In 1900 the amount of capital invested in manufacturing was $760,000,000. Illinois produces $13,000,000 worth of dairy products. It is first in the production of liquor, second in the manufacturing of clothing, fifth in flour and first in meat packing. Illinois annually ships $45,000,000 worth of agricultural implements, which is forty-five per cent of the entire production of the United States.

Illinois ranks second in repair and construction of railroad cars; fifth in wagons and carriages; second in books and newspapers. The State leads in the yearly area and yield of corn; in the area and yield of oats; in the number and value of horses; in the extent and value of meat products marketed yearly; in the extent and value of farm implements manufactured; in the extent and value of yearly crops produced; in the value of farm lands and improvements.

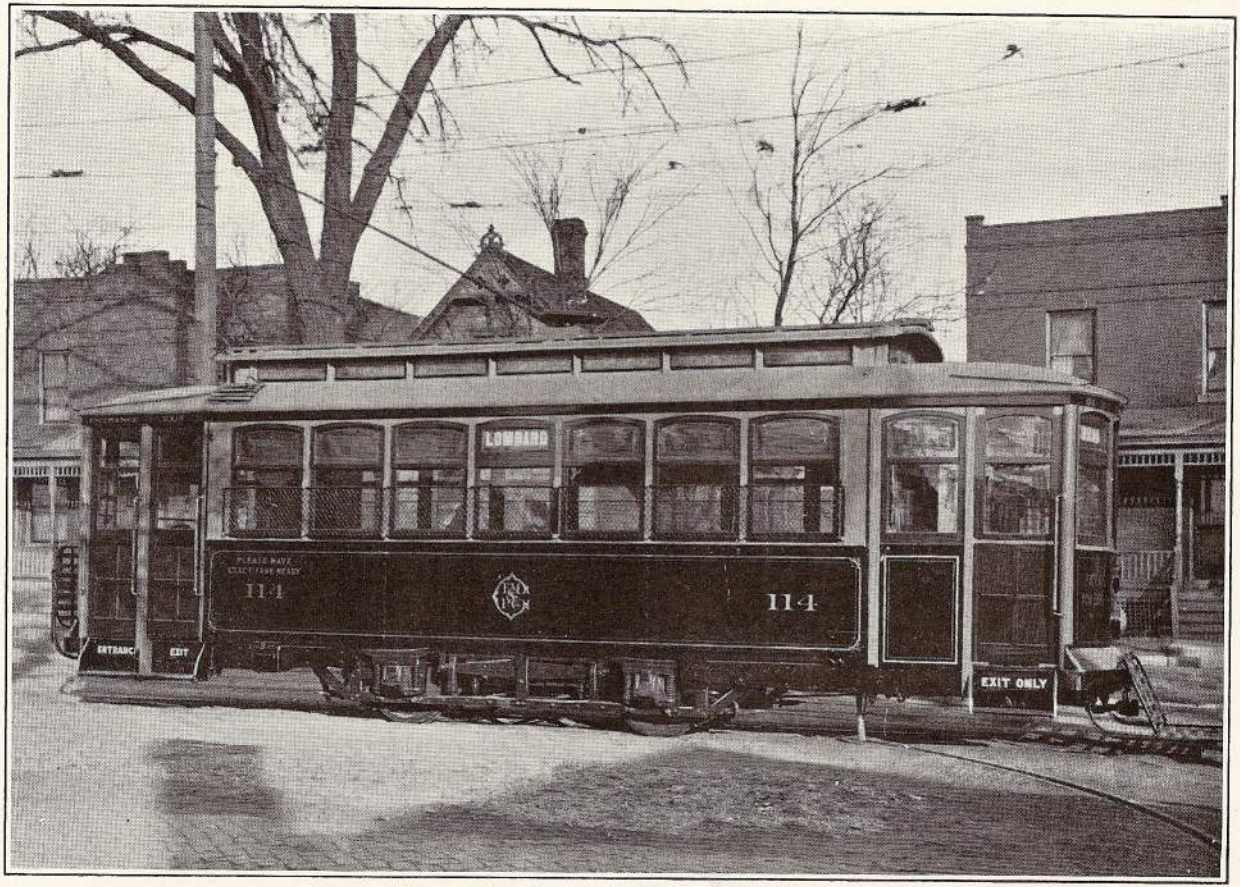
This is the promising territory which has sustained and fostered the rapid growth of the Illinois Traction System. Prospects for the future may be based upon the growing wealth of the State of Illinois.

DIVERSIFIED RESOURCES.

Stability in railway earnings is dependent on an ability to handle all classes of traffic which must spring from diversified sources. The Illinois Traction System fortunately is so favored that should the output from the mines diminish, substantial earnings will come from handling the products of the farm; and should the agricultural season be unfavorable, then the products of the mines will assist in sustaining the revenue of the road.

General stagnation in the entire territory traversed by the Illinois Traction System would indeed be a rare occurrence. At all times the manufacturing and jobbing centers are sending merchandise to the smaller country districts, and grain and coal make the reverse movement from the mining and agricultural districts to the cities.

Stagnation in any one locality is not reflected in the earnings of the Illinois Traction System, serving, as it does,



Standard P. A. Y. E. Single Truck City Car

more than 100 towns and cities located in fourteen counties comprising a belt which extends across the entire State.

Almost inestimable resources in coal and agriculture in the territory served guarantee stability to the manufacturing and rural districts.

LOCATION OF VARIOUS PROPERTIES.

The Illinois Traction System includes a highly developed electrically operated railway serving all the larger cities of Central Illinois. In addition to this, twelve electric light and power plants, five gas plants, six heating plants and street car systems in eleven cities are operated.

The principal routes of the interurban railway system are shown on the map on page 5.

In October, 1910, the McKinley Electric Bridge, leading across the Mississippi River into St. Louis, was put in service. This structure, having the greatest carrying capacity of any bridge spanning the Mississippi River, occupies the unique position of being the greatest project of a similar nature ever undertaken by an electric interurban railway. This bridge connects the high-speed lines in Illinois with the System's most advantageous entrance into the very heart of the business district of St. Louis. From there it extends in an unbroken line and roadway across the richest mining and agricultural part of Illinois to Danville, located practically on the Indiana State boundary line; to Peoria, the second city in the State, through Bloomington, Decatur, Urbana and Champaign, the various lines centering in Springfield, the State Capital.

In addition to the extensive interurban property, street car lines are operated in Danville, Urbana, Champaign, Decatur, Bloomington, Peoria, Granite City, Madison, Venice and Jacksonville, Ill.; as well as the very comprehensive street railway at Topeka, Kan.

Electrical energy for lighting and power is supplied to Danville, Urbana, Champaign, Decatur, Bloomington, Edwardsville, Granite City, Madison, Venice and Jacksonville, Ill.; Topeka, Kan., and Des Moines, Iowa.

Gas works are operated in Danville, Urbana, Champaign, Decatur, and Jacksonville, Ill.

District steam heat is supplied at Danville, Urbana, Champaign, Decatur and Bloomington, Ill., and Topeka, Kans.

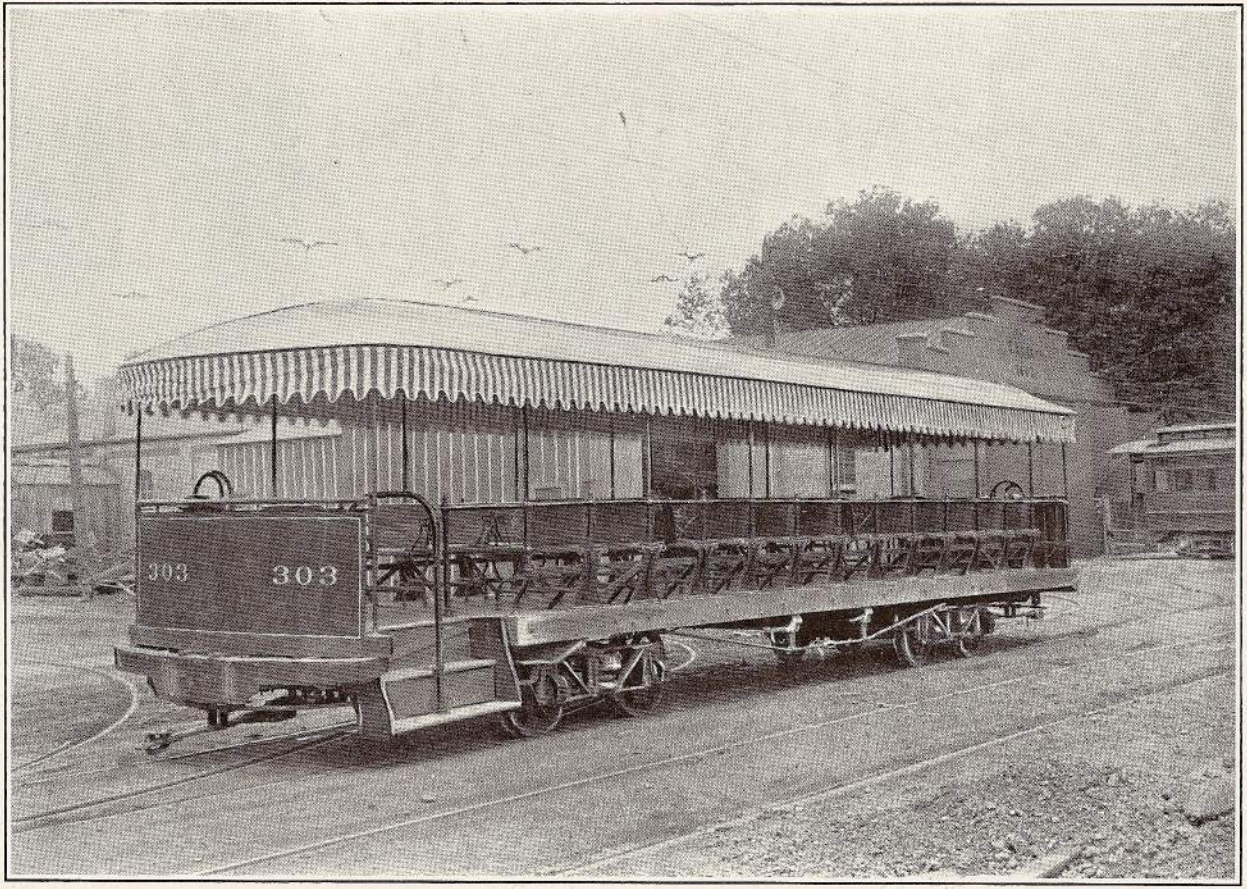
CITIES SERVED BY PUBLIC UTILITIES.

The cities which these various utilities serve are among the most thriving and substantial of the mining, manufacturing and agricultural districts of the Central States and Middle West. Their growth has been characterized not by the rapid expansion due to inflated values, but by the steady, continuous progress directly due to the healthy and normal development of the territory in which they are located.

To convey an idea of the stability of these cities, the following short descriptions are presented:

DANVILLE.

In Danville, the Illinois Traction System owns and operates public utilities giving street car, electric light, gas and district-heating service. The street railway system has seventeen miles of track and normally operates eighteen cars. The electric light department has 4,300 lighting and 200 commercial power customers, supplying electric energy from a generating station located less than a block from the



Excursion Trailer, Wichita, Kan.

business center of the town. District heating is furnished by exhaust steam from this station. A well-equipped gas plant supplies 2,700 customers.

Danville is located close to the Illinois-Indiana State line, 125 miles south of Chicago on the Chicago & Eastern Illinois Railroad, It has a population of 27,871 and is the county seat of Vermilion County, with a population of 77,986. Mining is the chief industrial interest in and about Danville, the normal production of coal in Vermilion County being 2,600,000 tons annually. Practically all of this is handled through Danville and its nearby suburbs which are served by two branch lines of the Illinois Traction System in addition to the main line and the service given by the local line. The main car shops of the Chicago & Eastern Illinois Railroad, employing 1,200 men, are located in East Danville, and are reached by the city street car system.

Danville also has one of the largest brick-making plants in the United States. It is the location of a National Soldiers' Home, which houses 3,000 United States' veterans. The United States Government has recently erected a Federal building in Danville at a cost of $500,000.

CHAMPAIGN AND URBANA.

The twin cities of Champaign and Urbana have a combined population of 20,666, of which Champaign has 12,421 and Urbana 8,245. Urbana is the county seat of Champaign County, with a population of 51,829. It is located in the east central portion of the famous "Illinois corn belt," and the improved farm lands of Champaign County are estimated to be worth $93,000,000.

In 1909 Champaign County produced over 14,000,000 bushels of corn and over 21,000,000 bushels of all kinds of grain.

The University of Illinois campus is located midway between Champaign and Urbana and is served by the local cars operating in both cities and by the interurban trains, the right-of-way being directly adjacent to the University buildings, passing through the campus. The attendance at this university, which is one of the most complete in the United States, is more than 5,000 students.

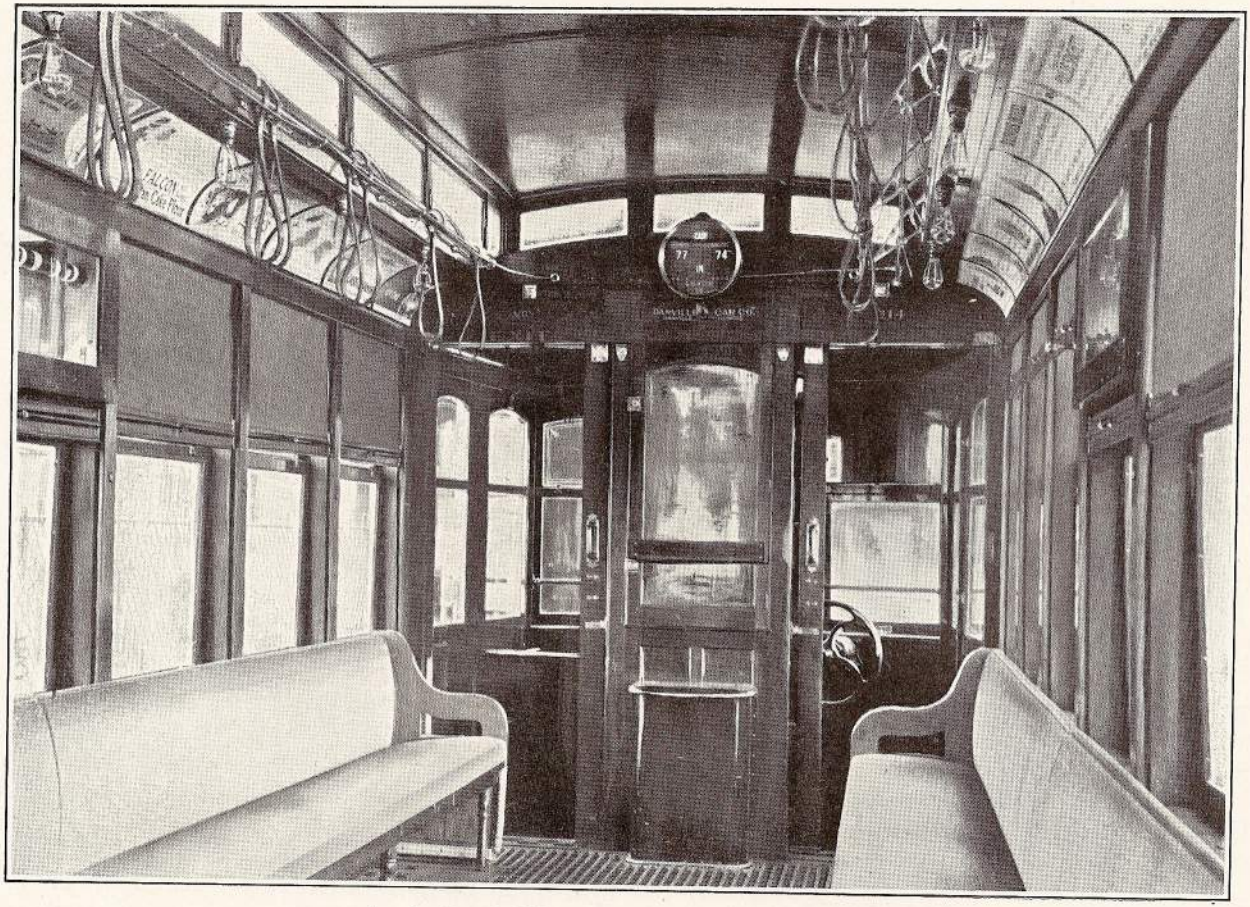
In addition to the railway service, the Illinois Traction System furnishes these two cities with electric energy for light and power and also furnishes gas and district heat. The local street railway in Champaign and Urbana has eleven miles of track and the company has customers for its other utilities as follows:

Lighting, 2,850; electrical power, 125; district heating, 150; gas, 2,800.

DECATUR.

Decatur, with a population of 31,140, is the county seat of Macon County, with a population of 54,186 and is located on the main line of the Wabash Railway, being the junction point for the Chicago, St. Louis, Kansas City, Pittsburg and New York branches. Ten years ago the population was 20,764, and the increase speaks volumes for the rapid growth of the city.

In addition to the agricultural wealth, Decatur is a city of important manufacturing enterprises, being one of the largest corn-grinding points in the world. Three large plants of the American Hominy Co. are located in Decatur, which also has starch works employing 300 men. The main shops of the Wabash Railroad employ about 1,500 skilled mechanics. The main repair shops of the Illinois Traction System, employing about 150 men, are located in Decatur. The main store house, located on the shop property, and the headquarters of the power and maintenance of way departments are here.



Interior Standard P. A. Y. E. Single Truck City Car

Decatur has the distinction of being the center for the manufacture of soda fountain appliances and is also noted for having one of the largest factories for the manufacture of plumbers' supplies in the United States.

Milliken University, with an annual attendance of 1,000, is located in Decatur. In addition to the Wabash and the interurban lines of the Illinois Traction from St. Louis, Springfield, Peoria, Bloomington, Danville and Champaign, Decatur has the Illinois Central, Vandalia, and Cincinnati, Hamilton & Dayton Railroads. The Illinois Traction System through its local company—the Decatur Railway & Light Company—furnishes Decatur with street car service, gas, light, power and district heating. The local street lines have 13.44 miles of track. Electric light and power is furnished to 2,693 customers; gas to 4,620 and heat to 210.

BLOOMINGTON AND NORMAL.

Bloomington and its adjacent city, Normal, have a combined population of 29,792, of which Bloomington has 25,768 and Normal, 4,024. Normal is connected to Bloomington by a local line of the Bloomington & Normal Railway & Light Company, which also furnishes electric light, district heating and street car service to the two cities. The street car mileage is seventeen miles and electric energy for light and power is supplied to 1,950 customers.

Bloomington is located on the main line of the Chicago & Alton Railway, 127 miles south of Chicago. It is the county seat of McLean County, which has a population of 68,000, and is one of the richest agricultural counties in Illinois. The main shops of the Chicago & Alton Railway, employing 1,500 men, are located in Bloomington, and there are numerous other industries.

Bloomington is the home of the Illinois Wesleyan University, with an attendance of 400. In Normal is located the State Normal University with an annual attendance of 2,000.

PEORIA.

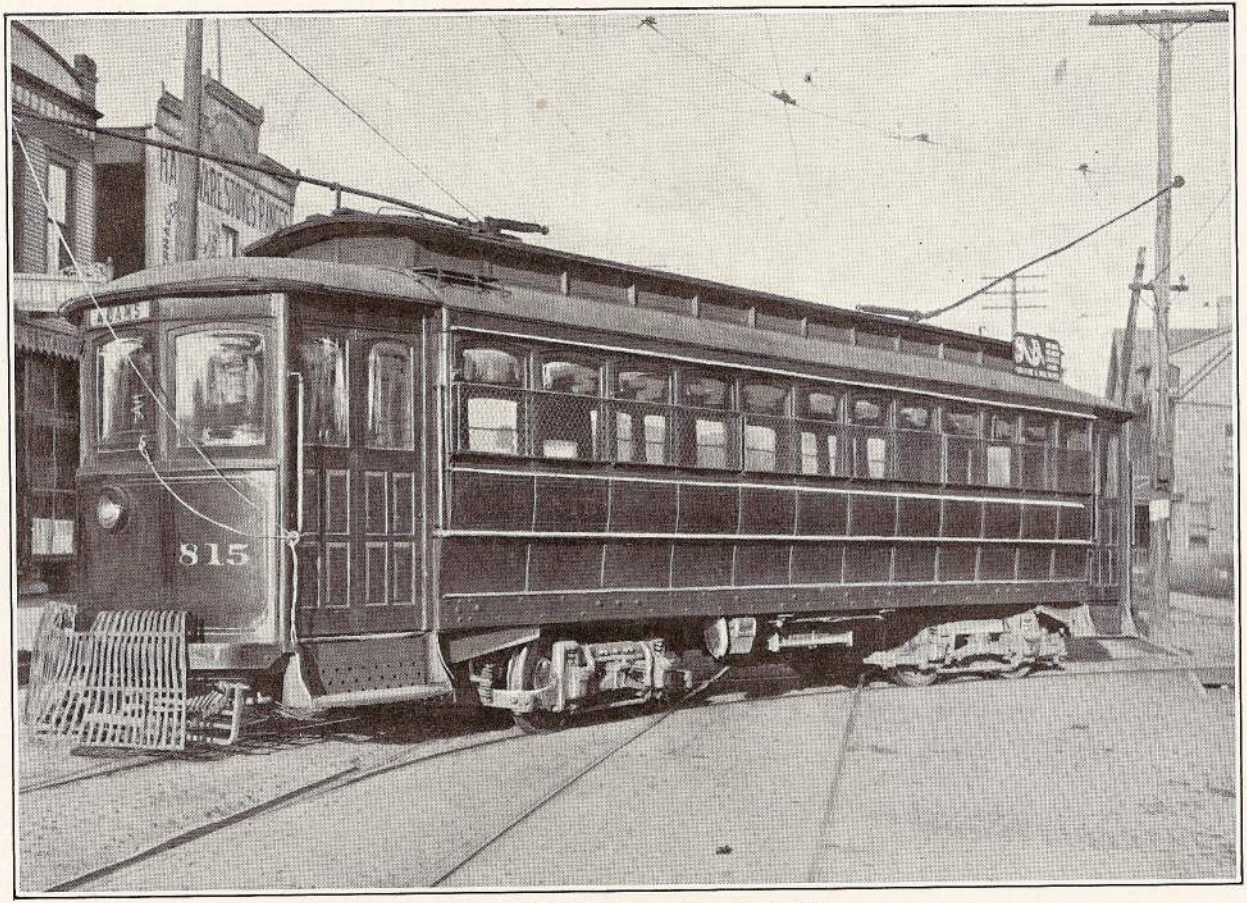
Peoria the second city in the State—has a population of 66,950, which, with the suburbs, will reach 75,000. It is the northern terminus for the Illinois Traction System and the location of its general offices. Fourteen steam railroads center in Peoria and it is located on the Illinois River, which is navigable for 245 miles.

Peoria is a manufacturing city, being the home of more than 10,000 workmen, who are employed by over 300 factories. It is the center of the whiskey distilling interest of the United States—paying $35,000,000 yearly internal revenue—the largest of any district in the country.

It is also noted as being the center of the farm implement business, implements manufactured in Peoria being shipped to all parts of the world. The local property of the Illinois Traction System—the Peoria Railway Company—has a trackage of fifty miles, serving the city and its suburbs. The large completely equipped generating station furnishes power for the street car lines as well as for the interurban.

JACKSONVILLE.

Jacksonville, the county seat of Morgan County, has a population of 15,362. It is located thirty-four miles west of Springfield, the capital of the State, and draws its chief resources from agricultural pursuits, in which Morgan County ranks high in Illinois. It is the home of many of the State institutions, the State Asylum for the Insane, Asylum for



Large Double Truck City Car, Peoria, Ill.

the Blind and the State Institute for the Deaf and Dumb being located in this city. The institutions care for 2,100 patients yearly. Jacksonville is the home of the Illinois Woman's College and Illinois College with an annual attendance of 1,000. The Jacksonville Railway & Light Company gives a street car service operating six and one-half miles of track, as well as electric light and gas service. It is interesting to note the following facts: The center of value of all farm property in the United States is ten miles north of Jacksonville. The center for all the corn grown in the United States is twenty-five miles south of Jacksonville. The center for the total acreage of improved farm lands is twenty miles southwest of Jacksonville. The center for the gross farm income of the United States is twenty-five miles south of Jacksonville.

EDWARDSVILLE.

The Madison County Light & Power Company furnishes electrical energy for lighting and power users to Edwardsville and the Tri-Cities. Edwardsville, which is the county seat of Madison County, has a population of 5,014, and in addition to the electric light and power is given interurban passenger and freight service by the Illinois Traction System. Since the opening of the McKinley Bridge real estate values in and around Edwardsville have appreciated remarkably. This district is very attractive from the real estate standpoint, inasmuch as the Illinois Traction cars place it within forty-five minutes of the business district of St. Louis.

MADISON, VENICE AND GRANITE CITY.

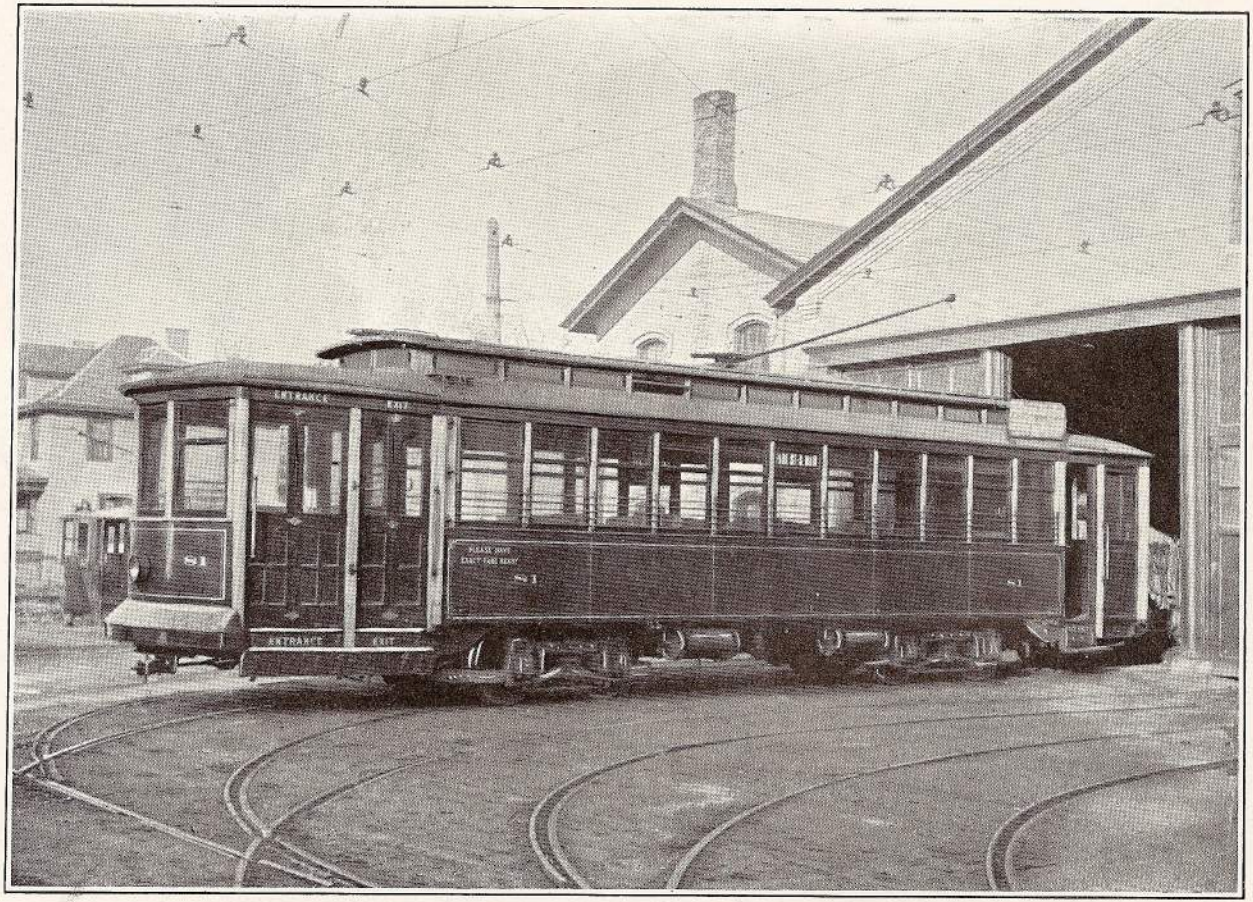
Madison, Venice and Granite City, known as the "Tri-Cities," are across the river from St. Louis at the center of a great industrial district, and have a combined population of 20,236.

The Illinois Traction System serves this district with street cars on short headway, operating to and from St. Louis over the new McKinley Bridge, and with interurban service to the central part of Illinois. In addition to this the Madison County Light & Power Company furnishes electricity for illumination and commercial use. A large car house and repair shop building has recently been erected in Granite City.

The industries of the Tri-Cities have largely to do with the manufacture of steel products, such as tin plate, granite ironware, structural steel shapes and freight cars. The latter are built in the large plant of the American Car & Foundry Company located in Madison. In Venice, adjoining the eastern end of the new McKinley Bridge, the Illinois Traction System has recently completed the construction of a large electric generating station which furnishes current, not only for lighting and commercial use by the Tri-Cities, but also for operating the local cars to St. Louis and for operating the interurban cars as far north as Springfield.

Among the important industries of the district are plants of the following:

Hoyt Metal Co.
Commonwealth Steel Company.
American Steel Company.
National Enameling and Stamping Works.
Corn Products Company.
National Tin Company.
Standard Cooperage Works.
Kettle River Quarries Company.
Cotton Seed Oil Company.
Pittsburg Plate Glass Company.



P. A. Y. E. Double Truck Car, Bloomington, Ill.

DES MOINES, IOWA.

The Des Moines Electric Company of Des Moines, Iowa, is the largest electric light and power station operated by the Illinois Traction System. Des Moines, a city of 86,368 people, is served by eight steam roads and two interurban lines. The development of the commercial and manufacturing interests of the city is in the hands of an organization of the leading business men known as the Greater Des Moines Committee. This committee is conducting a national advertising campaign, setting forth the advantages of Des Moines as a jobbing and manufacturing city. There are 433 factories in the city employing over 8,000 people with an annual output worth $25,000,000.

The electric company recently reconstructed its power house and installed additional generating equipment which gives it a total capacity of 9,000 K. W. A 1000-K. W. motor generator sub-station was placed in operation this year. The electric company serves 5,215 customers and the city streets are lighted by 488 arc lamps, 1,009 incandescents and 375 ornamental electroliers.

TOPEKA, KAN.

Topeka has a population of 50,000. It is situated in Eastern Kansas, a very rich agricultural district, and is given street car, electric light, power and district heating service by the Topeka Edison Company, a subsidiary of the Illinois Traction System. This Topeka property was completely rebuilt shortly before its purchase and is thoroughly modern throughout. Has excellent shop and car house facilities, as well as large generating system supplemented by large storage battery reserve.

The city of Topeka is one of the most progressive towns of the West Central States and is growing rapidly. Mill Dry Goods Co.'s seven-story department store building, the A. T. & S. F. Ry. Co.'s new ten-story office building and State Memorial Building, all in one block, at the present time being completed at a cost of over $1,000,000. Four railroads run into Topeka—the Rock Island, Santa Fe, Union Pacific and Missouri Pacific. It is the headquarters and home of the Atchison, Topeka & Santa Fe Railway System, and this road's main general offices and car and locomotive shops are located here, employing 1,200 in the offices and 2,500 in the shops, the combined yearly pay roll being over $2,500,000. The division offices of the Rock Island and the Western General Manager of the system are located here. The following are some of the principal industries: Continental Creamery Company's main plant, one of the largest creameries in the United States; Wolff Packing Company; five large flouring mills; Topeka Steam Boiler Works; numerous foundries and machine shops and printing offices. The following are some of the State institutions located in Topeka: Capitol Building, printing plant, Memorial, Building, Reform School, State Hospital for Insane and Industrial School.

FORMATION OF THE SYSTEM.

The growth of the Illinois Traction System, from a modest beginning at Danville to its present far-reaching interurban and utility network, has followed the controlling idea of its president, William B. McKinley. It was his plan gradually to construct a group of interurban lines which would unite the substantial cities of Central Illinois in which the public utilities could also be operated.

Mr. McKinley, who, for the greater part of his life, has made his home at Champaign, is a native of Illinois. His familiarity with the extensive resources of his native State and

his confidence in the possibility of interurban and public utility development, coupled with his keen foresight, have been largely responsible for the growth and success of the Illinois Traction System.

The construction work from the beginning was planned by the highest grade of engineering ability. With each successive stage of extension, the builders combined the experience gained in the earlier work with the highest known advancements in the art of electric railway and illuminating.

The general construction plan included the building of a track and roadway, comparable in every respect with that of the steam roads, and so designed that the heaviest freight and passenger equipments might economically be handled. Energy for the propulsion of the trains was to be furnished from large generating stations located with regard to economy in fuel delivery and distribution of output. Results show how well the far-sighted plans of the builders have been realized.

The Illinois Traction System is now an important factor in the freight and passenger transportation sphere of Central Illinois and St. Louis territory. Its capacity for handling freight and passenger traffic is great and provision wisely has been made for the development of facilities in accord with the increase in receipts.

A pioneer in the encouragement of long-distance travel, this company is today operating through electric trains over greater distances than any other electric railway or combination of electric railways.

ORGANIZATION.

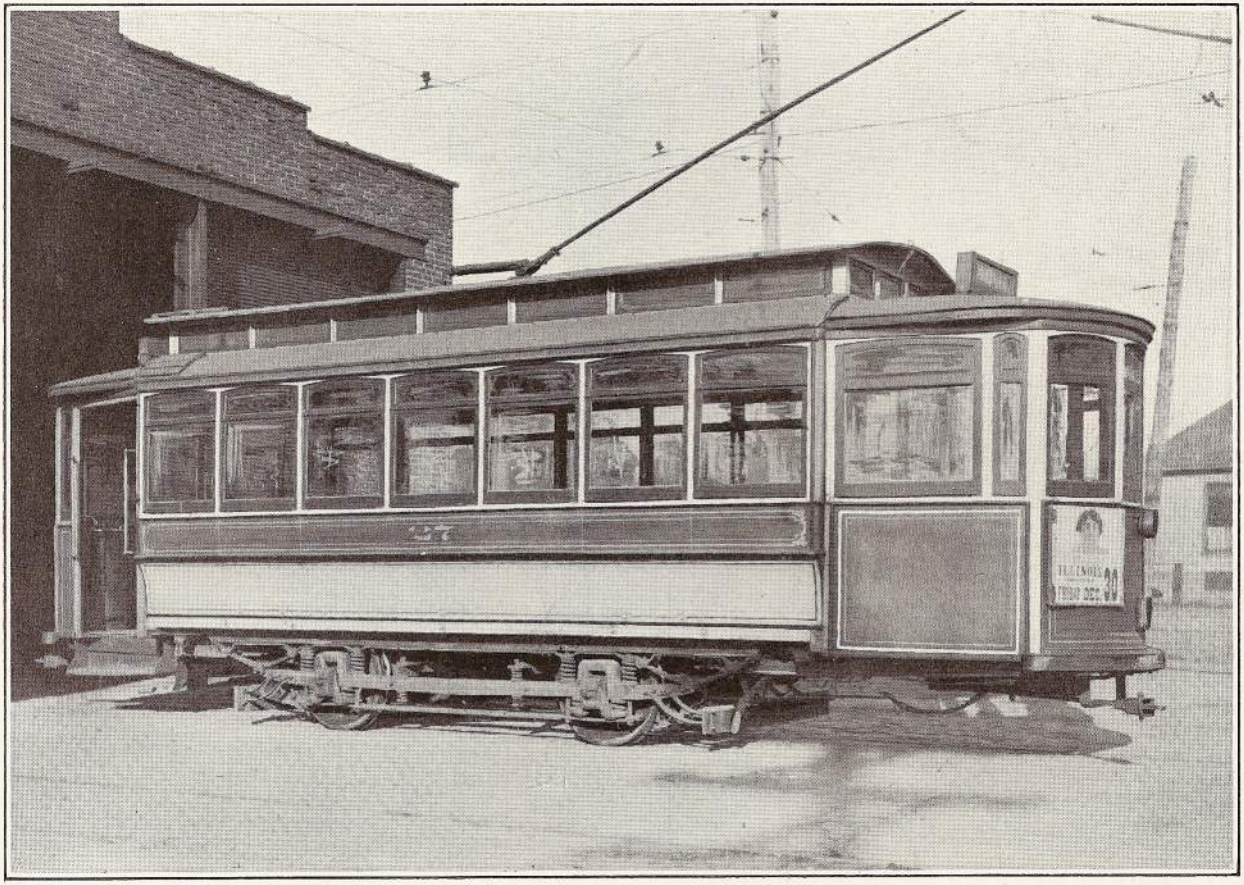
An organization, wide awake, vigorous and permanent, has been built up to carry on the work of operating and developing this property. Its formation has followed the line of principles which have been demonstrated to be correct by the better steam railroads.

Its personnel is under the direction and guidance of H. E. Chubbuck, Vice-President Executive and General Manager. Reporting to this official are the General Superintendent of interurban lines and the head of the traffic department. The heads of the maintenance of way, electric and mechanical engineering and transportation departments report to the General Superintendent and General Manager. The Traffic Manager, as on a steam road, has assistants for his subordinate departments. Each of the local utility properties is in active charge of a Superintendent reporting to the Vice-President Executive, who in turn reports to the President, W. B. McKinley.

More than forty superintendents and heads of departments, who are fulfilling their duties in an efficient and harmonious way, make up the personnel of this organization.

HISTORICAL FEATURES.

The present extensive property of the Illinois Traction System had a modest beginning with six miles of track built in 1901, from Danville to a mining suburb, Westville. In 1902 this line was extended six miles to Georgetown and four miles were built from Danville to Catlin. The first section of what is now the main line of the Illinois Traction, was started this year from Champaign and built to St. Joseph. In 1903 this line was finished to Danville, making the first fifty miles constructed and operated. In 1904, lines were built from Springfield to Decatur and from Springfield to Carlinville. Construction work was pushed and the following year saw the lines extended from Carlinville to Granite City and from Decatur to Bloomington. At the same time negotiations were started for the entrance into St. Louis and preliminary



Standard Single Truck City Car

work was done on the McKinley Bridge. In 1906 and 1907 the lines were built and put in operation from Bloomington to Peoria and Champaign to Decatur. In 1908 saw the last connecting link completed from Springfield to Mackinaw Junction to connect with the Peoria-Bloomington line. No other interurban line has experienced so rapid and so substantial a growth as that which the Illinois Traction System has enjoyed since the completion of the Danville-Champaign section in 1902.

As the lines were pushed across and down the State the earlier constructed tracks were gradually brought up to a high state of perfection. Neither expense nor effort was spared in the development of advanced types of rolling stock and the other important parts of an electric railway system. This improvement work is still progressing and each succeeding year sees improvements in the physical property as well as the operating methods, and the management is zealous to maintain the property in its foremost position in the electric railway world.

The system now operates 459 13/100 miles of interurban and 169 6/10 miles of street railway track, a total of 628 73/100 miles of track.

During the past year the interurban operated 220,155 passenger trains and 21,765 freight trains. Each year of the road's existence the traffic has greatly increased in comparison with the miles of track and the number of trains operated. From a physical standpoint the interurban section of the property is in a most enviable position and the possibilities for traffic development at low operating cost are enormous.

ROADWAY AND TRACK.

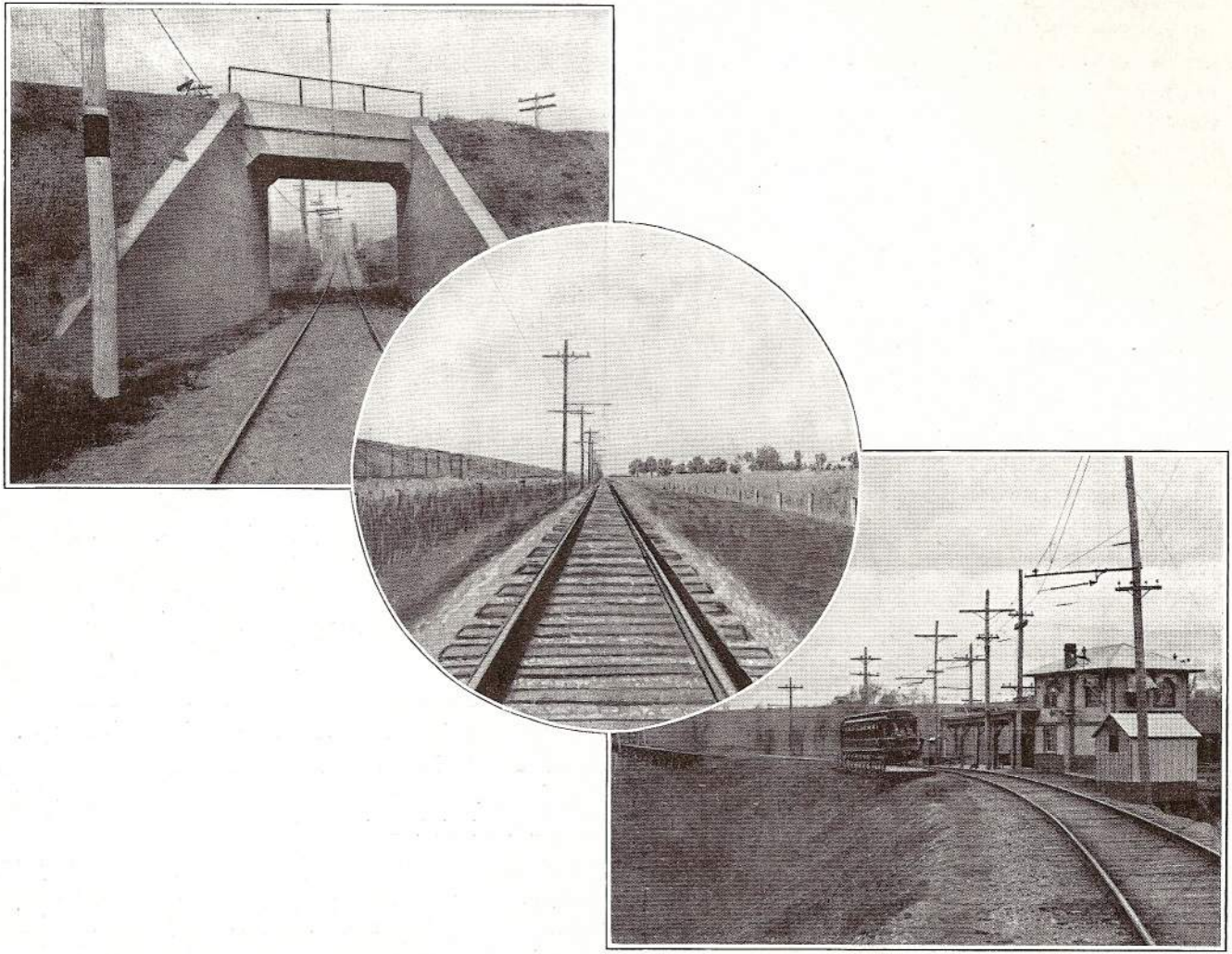
Practically the entire mileage of the Illinois Traction System is on private right-of-way, the greater part of which is sixty-six (66) feet or more in width. The design of roadway and track is similar to that of steam railroads, the rails weighing seventy (70) pounds per lineal yard, spiked to standard ties and ballasted throughout with gravel, crushed stone and chatts. All the ties installed in the past two years have been treated with a creosote preservative compound to reduce the cost of future maintenance work. A separate tie replacement fund has been established for tie renewals.

Each succeeding year finds the roadbed conforming to a higher standard so far as safety and economy of operation are concerned, as consistent maintenance work is constantly going on with a view to preserving the track in the best shape. Four or five times the present volume of traffic could be handled without inconvenience and the long, closely located sidings form a nucleus for eventual double tracking.

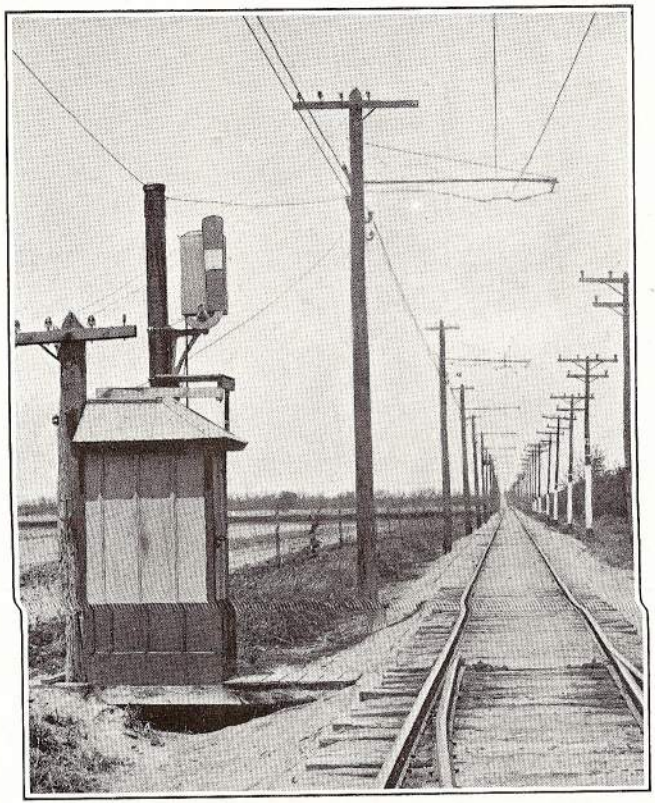
SUPPLY OF ELECTRICAL ENERGY.

The generation and distribution plants for the electrical energy used in propelling the trains have been designed with regard to an immediate low operating cost and future enlargement. Central stations located at Peoria, Danville, Riverton (near Springfield) and Venice (near St. Louis) have a total normal capacity of 20,000 kilowatts. These plants are connected through the medium of a 33,000-volt three-phase transmission system, a large part of which is carried on an independent pole line to insure continuity of service. The generating stations have been located with a regard to low cost of fuel and economy in distribution.

The plant at Venice which has just been completed at a cost of $600,000 is said to be one of the most economical of its



Concrete Subway Under Railway Tracks Track Section Mackinaw Junction, Showing Station and Dispatcher's Tower



Telephone Booth, Blake Dispatchers' Signal

kind in the country, including, as it does, the latest developments in power generating and transforming apparatus. This plant was so designed that its present peak load capacity of 8,000 kilowatts can be quadrupled by making future extensions. No power is required for handling coal and ashes *at this station—being so located at the east approach of the* McKinley Bridge that the coal is carried over the 800-ton bunkers in hopper cars and the ashes fall into the cars on the ground level beneath the boilers—gravity being the only power required.

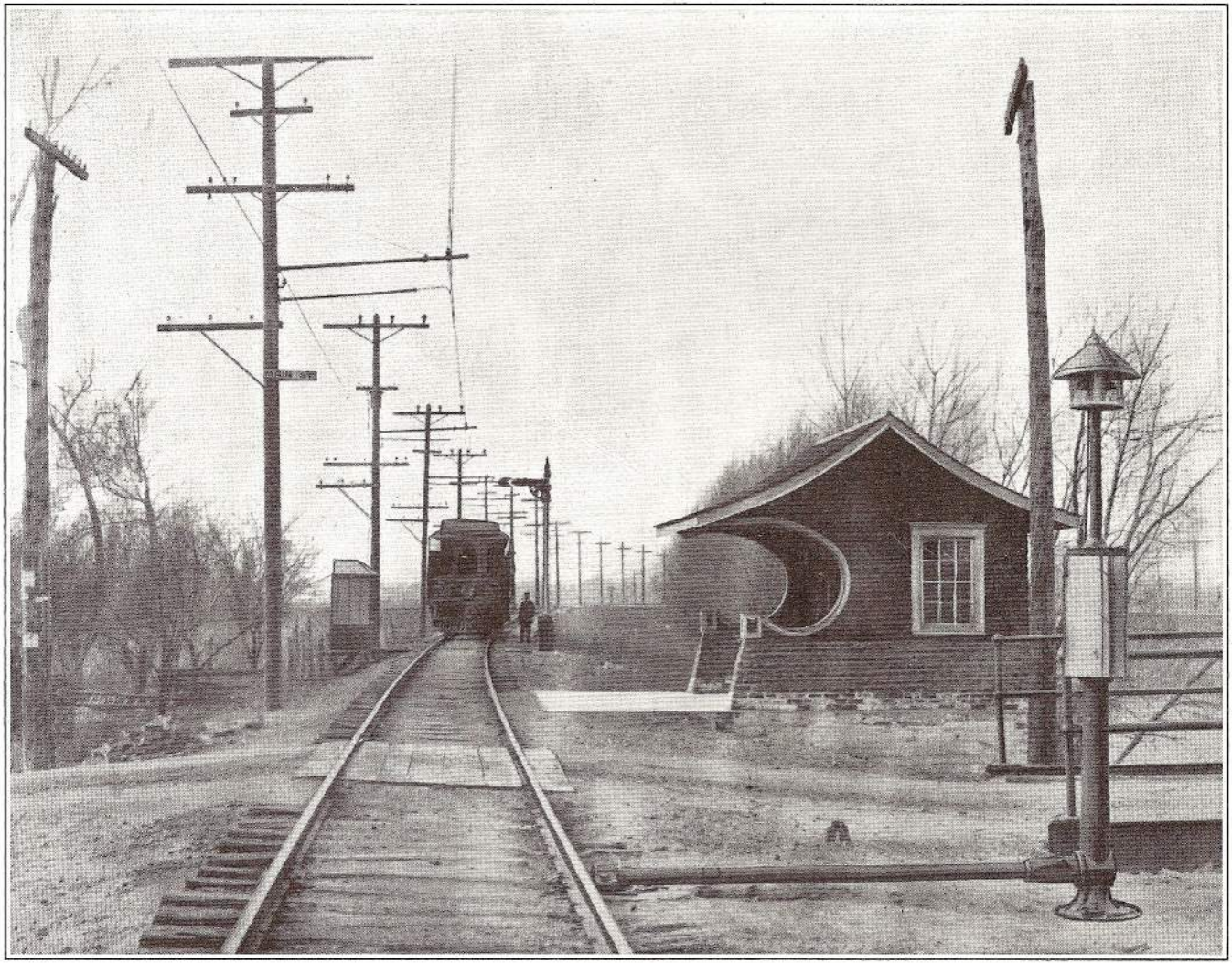
The power plants at Peoria, Riverton and Danville include the latest types of steam turbine-driven generating machinery. The high tension transmission lines uniting the capacity of the four large generating stations also serve for distributing energy to the forty (40) rotary converter sub-stations in which it is transformed and converted into 650-volt current, suitable for distribution over the trolley wires and feeders to the cars.

ROLLING STOCK.

The Illinois Traction System is unique in that every unit of the rolling stock has been designed by its own mechanical department. Standardization of the various parts of the equipment insures economy in maintenance. It has been the aim of the mechanical department to produce not an enlarged type of street railway car, but rather an interurban coach of heavy, substantial, easy-riding design, built with prime regard to safety, comfort and speed.

The motor cars are equipped with four 100-horse power motors so designed as to obtain the maximum speed of forty-five to fifty miles an hour, with an economical consumption of current.

The Illinois Traction System has the distinction of being the only interurban railway in the world to operate sleeping cars. For several years two sleeping cars have been operated between Springfield and St. Louis, and a year ago additional service of two new cars was inaugurated between Peoria and



Crossing Bell, Shelter Station, Telephone Booth, Automatic Signal and Limited Car on Illinois Traction System

Standard Type of Substation, Passenger, Freight and Express Station

Power House at Venice, Showing Coal Runway from Bridge

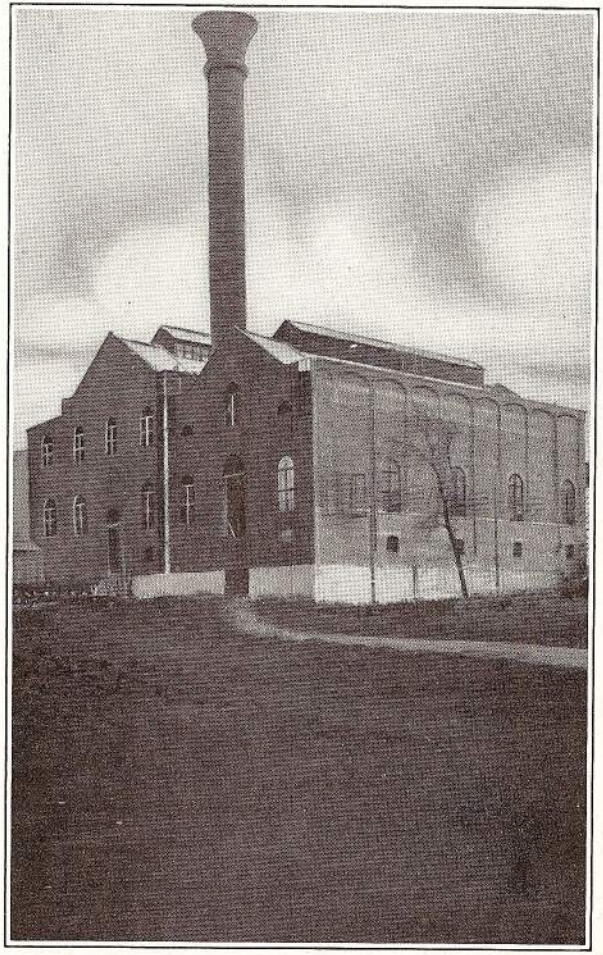
End View, Standard Substation

St. Louis, a distance of 174 miles. These cars—designed by officials of the system—represent considerable advancement in comfort over the Pullman cars, windows in the upper berths and longer berths assisting materially in this respect. Sleeping cars are drawn by motor cars especially designed to provide accommodations for coach passengers, mail, baggage and express. This service is extremely popular, and to meet immediate needs two additional cars of this type have recently been constructed.

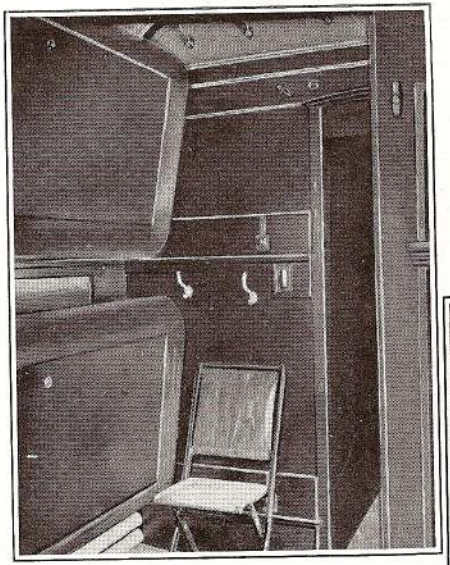
Six new parlor observation cars have recently been delivered and fast through parlor-car service, is maintained between Peoria and St. Louis, Danville and St. Louis, Peoria and Decatur. These cars are elaborately fitted for the comfort of patrons, containing all the features of Pullman cars. These trains will make but few stops and the running time will be materially reduced.

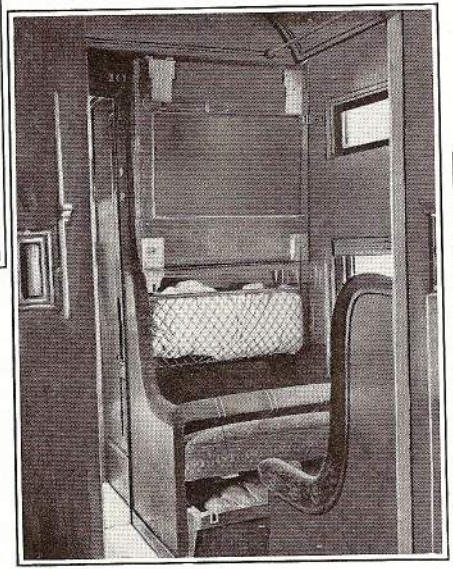
The freight equipment of the Illinois Traction System includes motor and trailer express cars; flat, gondola and box cars; refrigerator cars and hopper bottom coal cars—all conforming to the standard steam railway designs and having standard wheels and couplers.

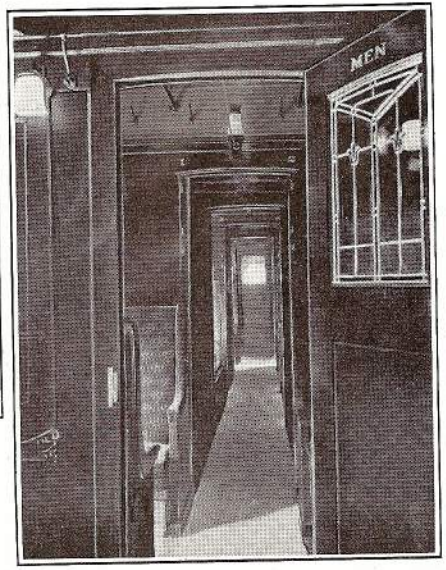
Freight and express traffic is handled by motor express cars drawing trailers and by large electric locomotives. Recently six locomotives have been built in the company's shops from designs made by its mechanical department, weighing sixty-three (63) tons with a drawbar pull of 35,000 pounds. A locomotive, with its four 200-horse power motors, can handle long freight trains with the ease of a large steam railroad locomotive.



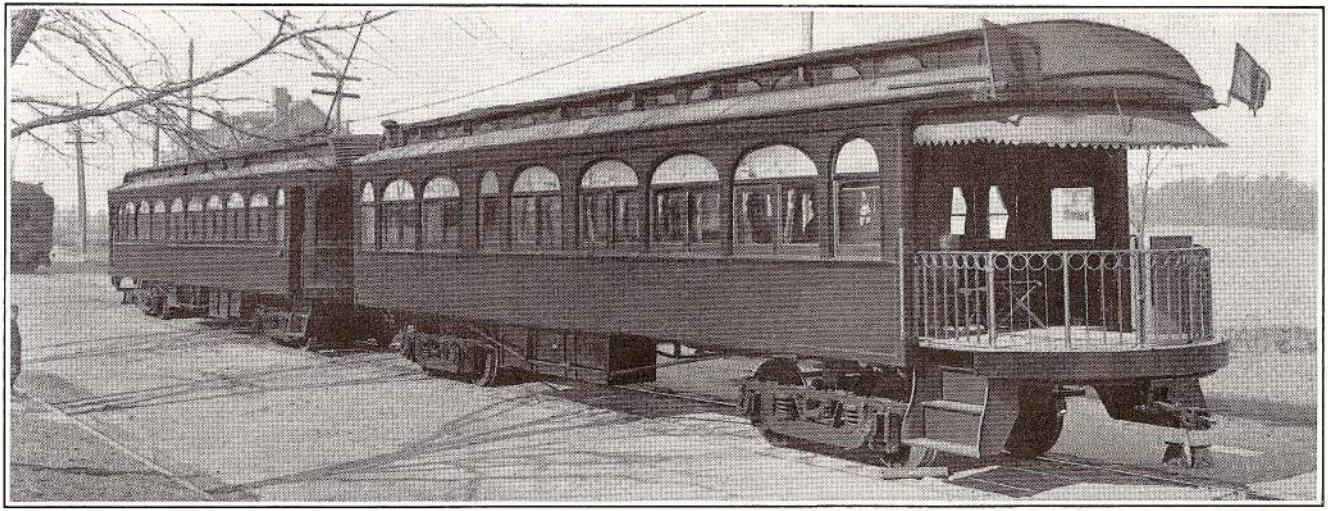
Venice Power Plant







Interior Views of Sleeper



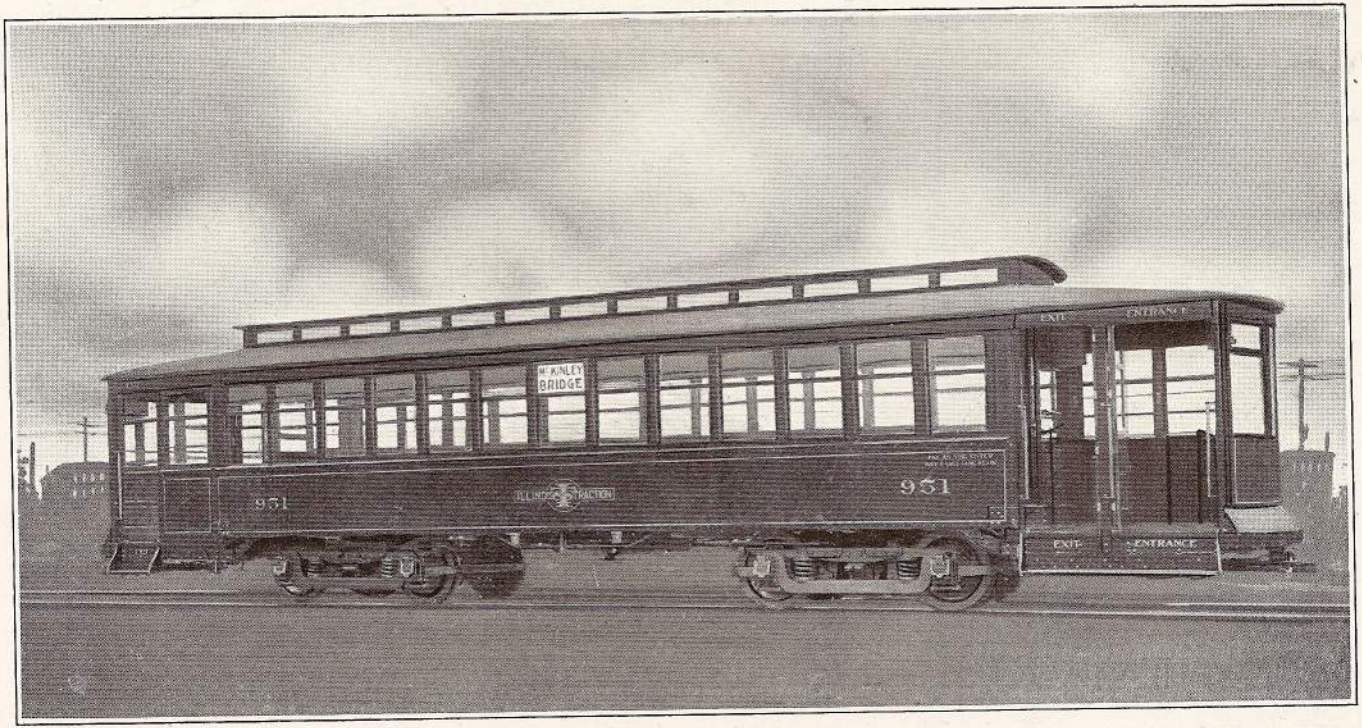
SHOPS.

Inspection and repair shops are located at each of the larger cities on the road, the work being done supplementing that of the main repair shops which are located on a fifteen-acre tract just east of Decatur. The Decatur shop machinery is housed in three large fireproof buildings, designed and built particularly for the maintenance of electric railway rolling stock. The tools in these shops are such not only to make all repairs to cars, but to also build new equipment. The six large steam locomotives earlier mentioned are a product of these shops. A new group of shops has been started at Granite City, where a fireproof repair shop building has been constructed, designed to handle the maintenance and inspection work on the interurban cars of the division south of Springfield and on the street cars operated in the St. Louis bridge service.

STATIONS AND BUILDINGS.

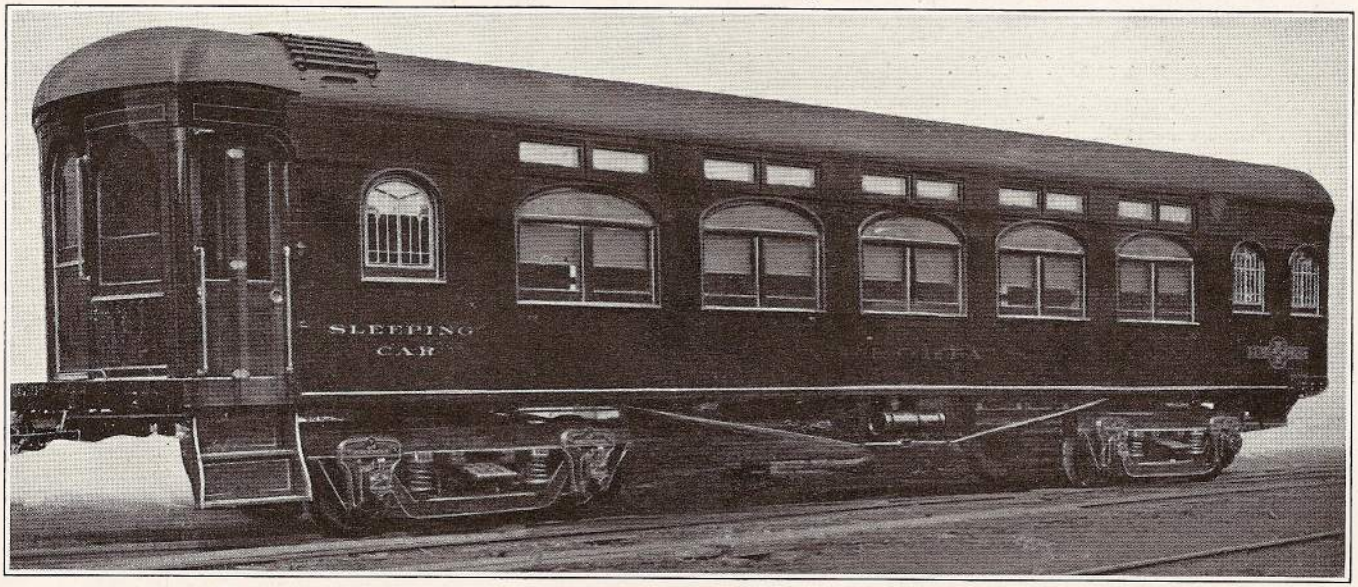
During the last two years much activity has been shown in constructing passenger and express stations at important points along the lines. Particular attention has been paid to secure uniformity of design, not only to serve the utilitarian purposes, but to give a decorative architectural appearance. The most notable of these are the combination passenger and express station and power sub-station buildings. These buildings conform to a pleasing style of architecture and have been constructed with concrete foundation, buff brick walls and French tile roofs supported on a steel superstructure.

One of the largest buildings recently erected is the combination freight and express station at the St. Louis terminal, which also conforms to the architectural design just mentioned

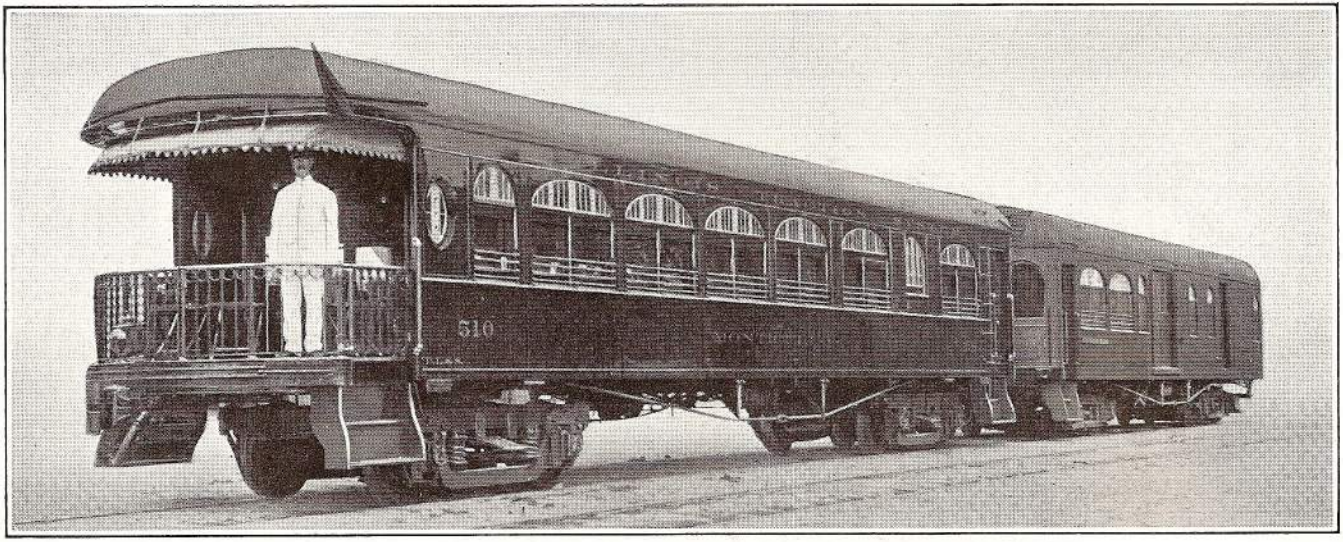


Bridge Car for St. Louis Local Service

Freight Train, Showing New Locomotive and String of Standard Box Cars



Sleeping Car. These cars, designed by Illinois Traction Officials, embody many innovations. They have windows in upper berths; safety deposit boxes for valuables; extra long berths, etc.



Parlor Car

and was erected at a cost of $75,000. It provides facilities for the receipt of miscellaneous freight. It is located in the heart of the business district of St. Louis.

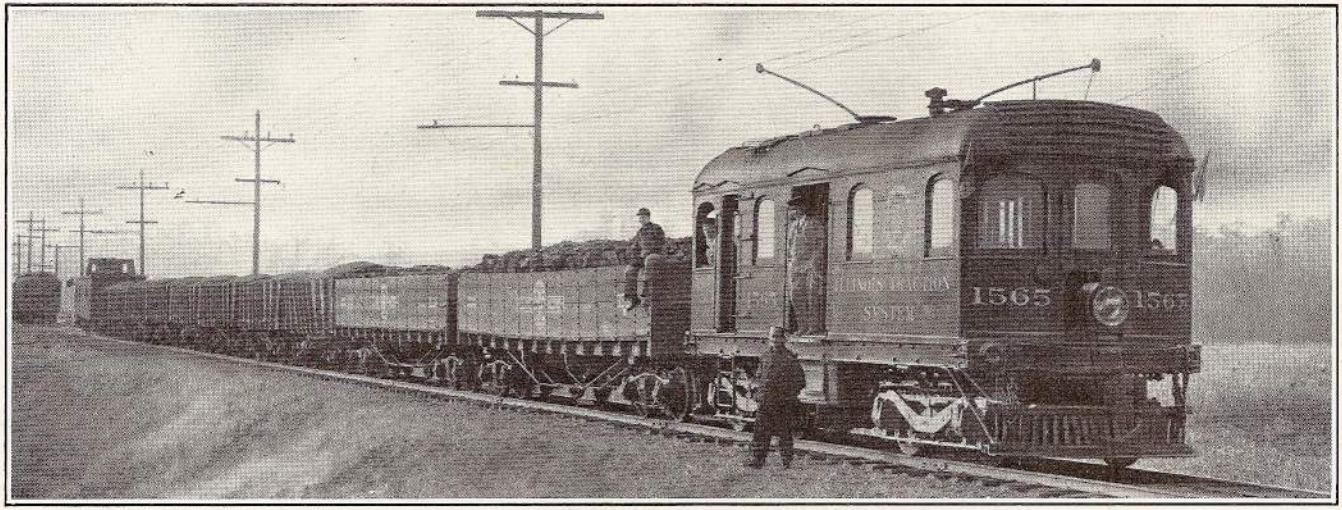
The passenger station at St. Louis, located at the corner of Twelfth Street and Lucas Avenue, is almost completed. This commodious building and train sheds will cover an entire block and will have every convenience of metropolitan station building. It is designed for immediate uses, the ultimate intention being to erect a magnificent building on the ground.

HEAVY FREIGHT FACILITIES.

The rapid and continuous growth of the carload freight traffic, brought about as a result of intensive solicitation from the traffic department, and increasing facilities for interchange with steam roads, has made desirable several innovations in electric railway construction, These are the newly built belt lines extending around the congested city tracks and the chain of grain elevators located in the rural districts.

It is a new departure for an electric railroad to build a belt railway around cities, but the Illinois Traction System has found such detour advisable at Springfield, Decatur, Edwardsville and Granite City, and others are contemplated. These belt lines permit of long, heavy trains of standard freight cars to be drawn around the cities by electric locomotives at good speed. They also make possible new connections with steam railroads and industrial tracks to

Interior Parlor Car



Coal Train

Standard Coal Car

Standard Box or Grain Car

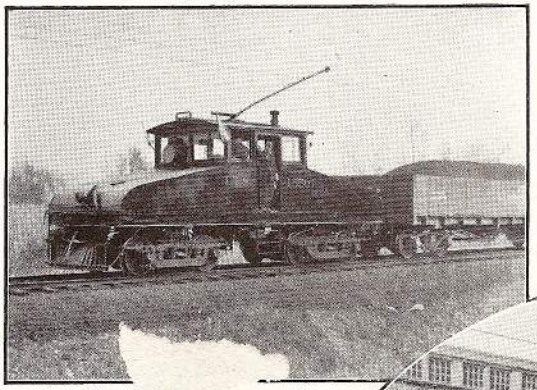
manufacturing plants that otherwise would not be easily accessible.

A series of grain elevators is being constructed along the interurban lines, fifteen of which are now in operation. From one of these during the past summer 100 cars of grain were shipped in ninety days. Much of the grain shipped from these elevators is delivered to a 50,000-bushel transfer elevator at Glover where connection is made with the Chicago & Eastern Illinois Railroad.

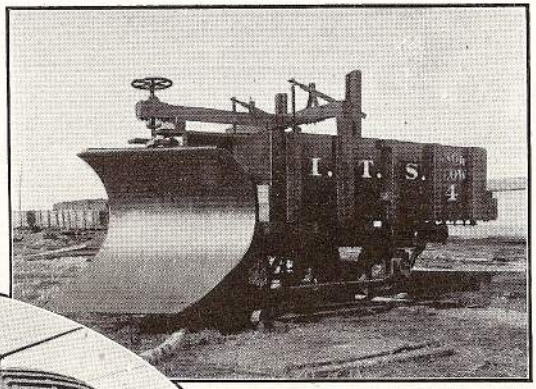
The Illinois Traction System has recently been admitted as an associate member to the American Railway Association, which is a recognition of its importance in the traffic field.

SAFETY IN TRAIN OPERATION.

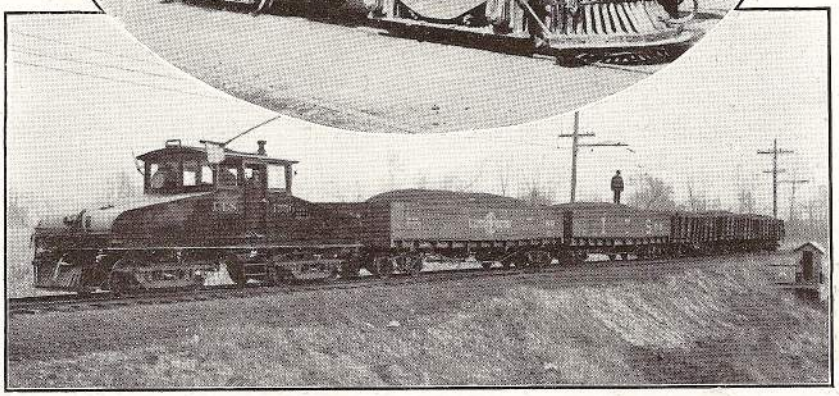
The operating department of the Illinois Traction System is extremely vigilant in guarding the operation of trains and caring for the safety of passengers. To this end every mechanical safeguard is employed and a most complete train dispatch-



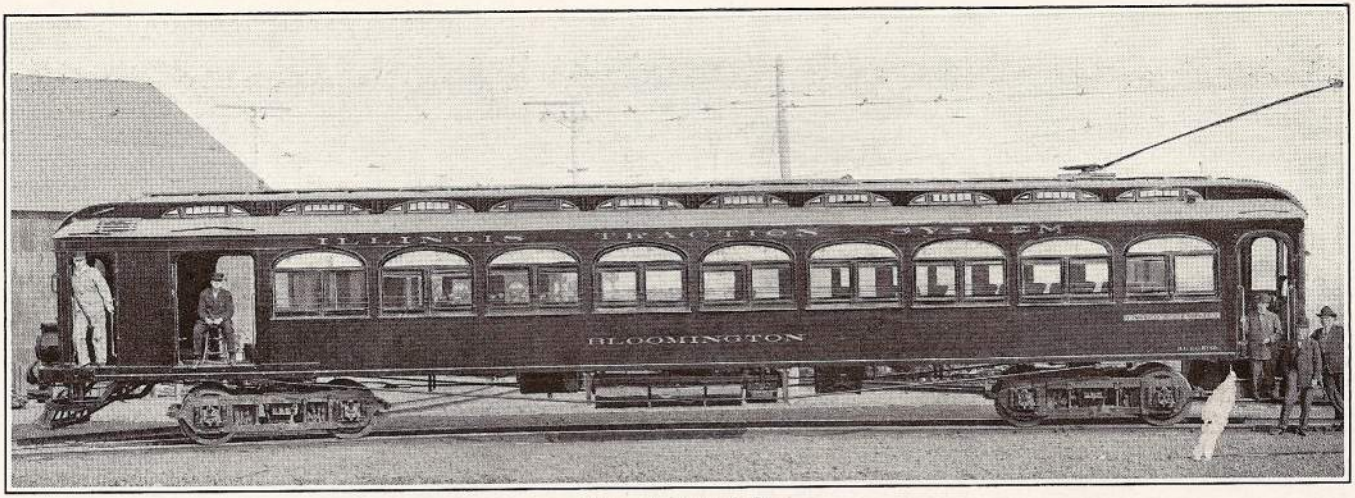
Small ...ight Locomotive



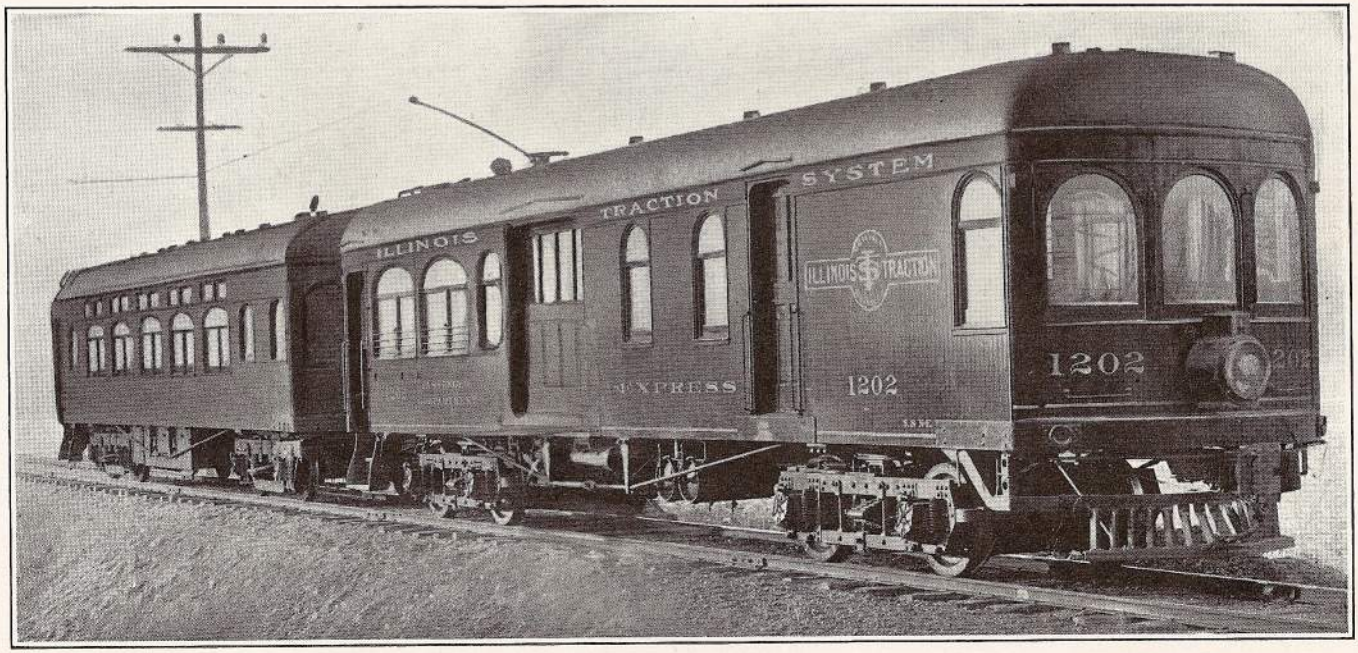
Snow Plow



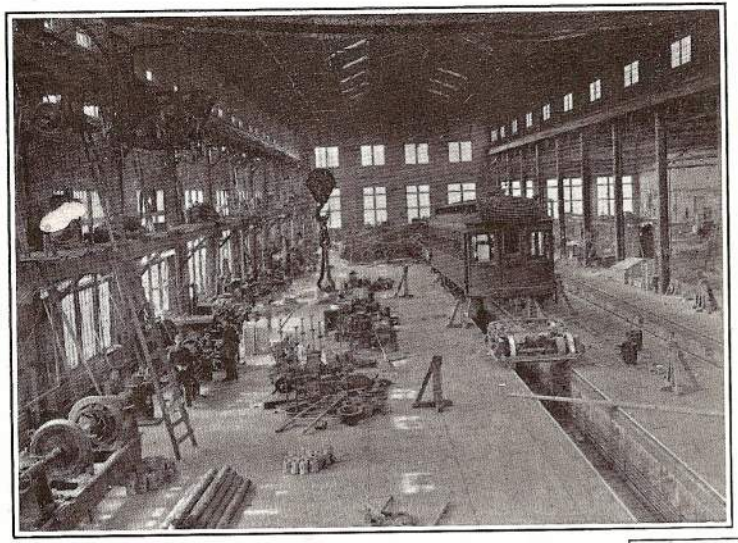
63 Ton Steel Locomotive
Coal Train



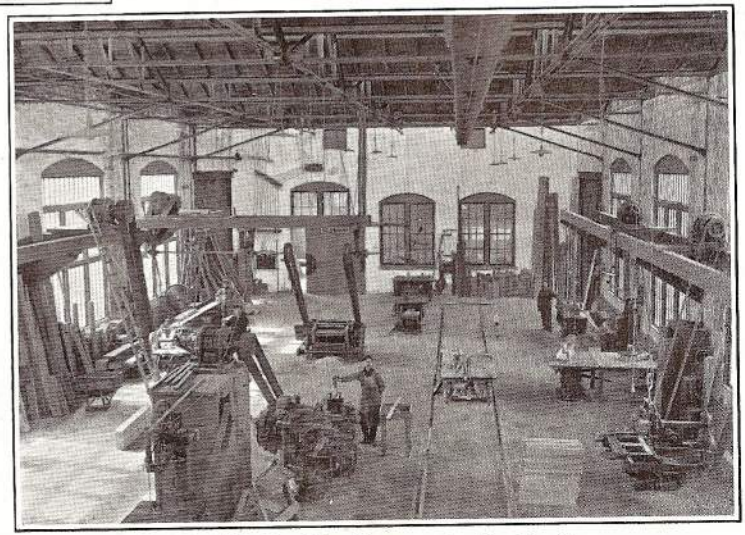
Type of Limited Car



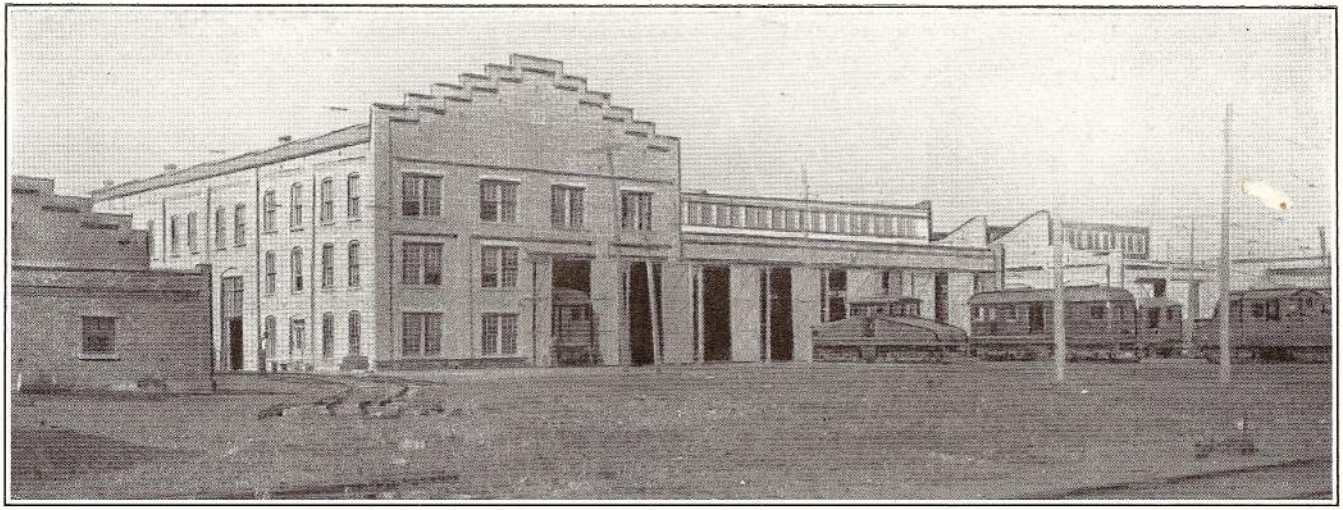
Sleeper Train



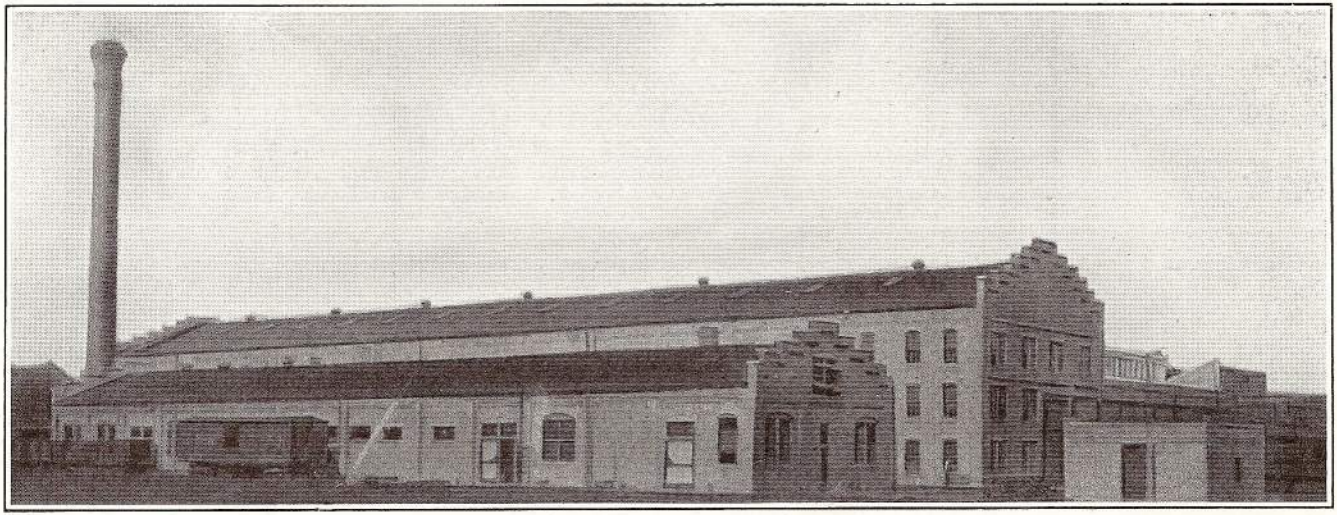
Interior of Decatur Shops



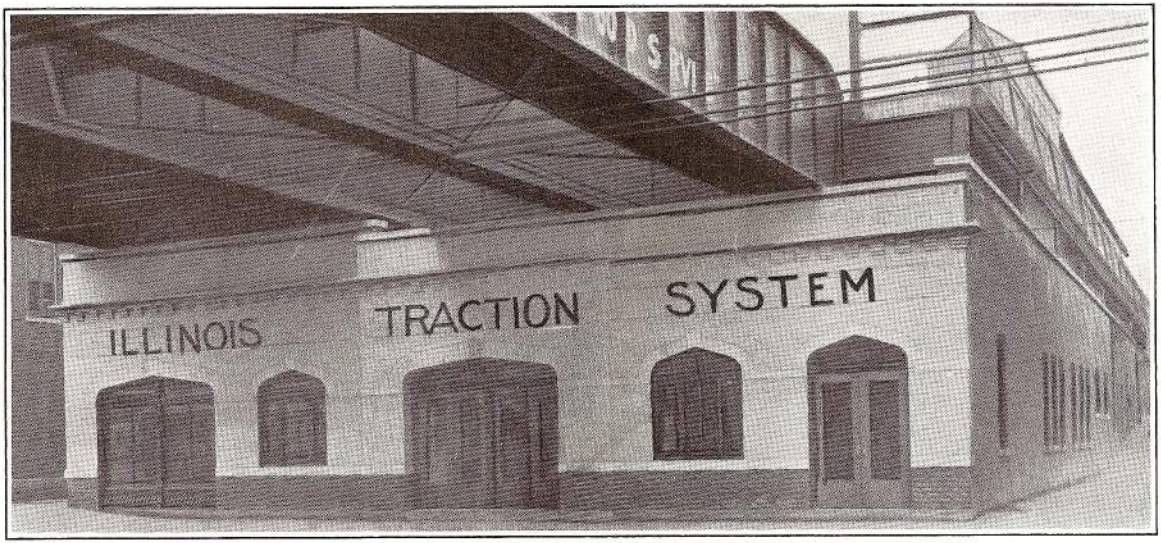
Interior Woodworking Department—Decatur Shops



End View, Decatur Shops



Main Building, Decatur Shops



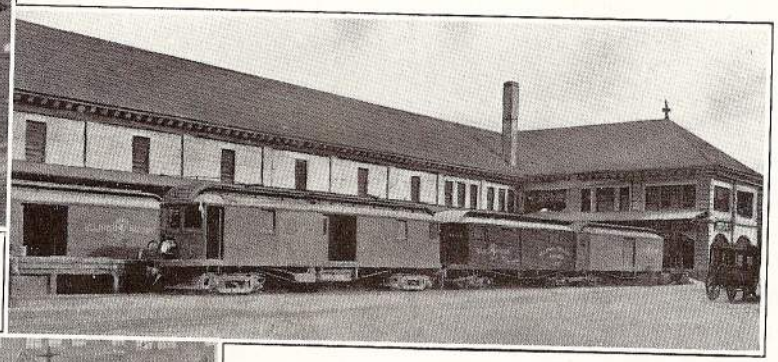
Exterior Bridge Station, St. Louis

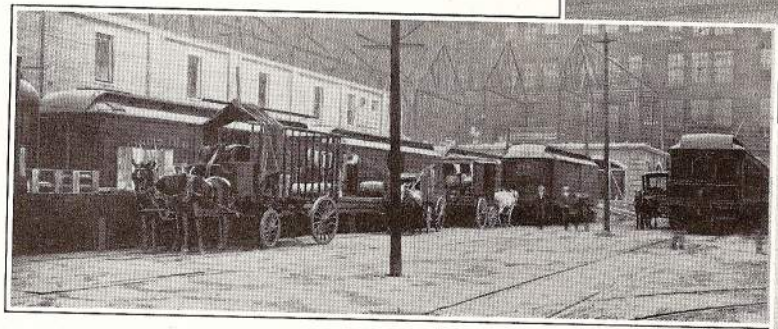
ing system is followed. All trains are operated under orders transmitted to the train crew by telephone from centrally located dispatchers. A complete system of signal semaphores to assist the dispatchers in controlling the movements of trains has been installed over the entire route, with the exception of a portion north of Springfield and Decatur, for which dispatchers' signals are now under contract. Every possible safeguard, such as double checking of orders, spelling out the names of meeting points and the use of high grade duplicate telephone apparatus, is employed to increase safety of operation.

The rules under which the trains are dispatched and operated have been based on the best experience in steam and electric railway service. These perfected rules in connection with the signals, which enable the dispatcher to display a "stop" semaphore at any siding and to call the train crew to the telephone, introduce more complete safeguards for the passengers than are to be found on most steam railroads.

AUTOMATIC BLOCK SIGNALS.

In addition to the foregoing system of safeguards, most comprehensive plans for the protection of trains by automatic block signals are now being executed. An extensive investigation was made into the relative merits of various signal systems, which resulted in the purchase of sufficient automatic block signal apparatus to protect fully one hundred and twenty (120) miles of track.

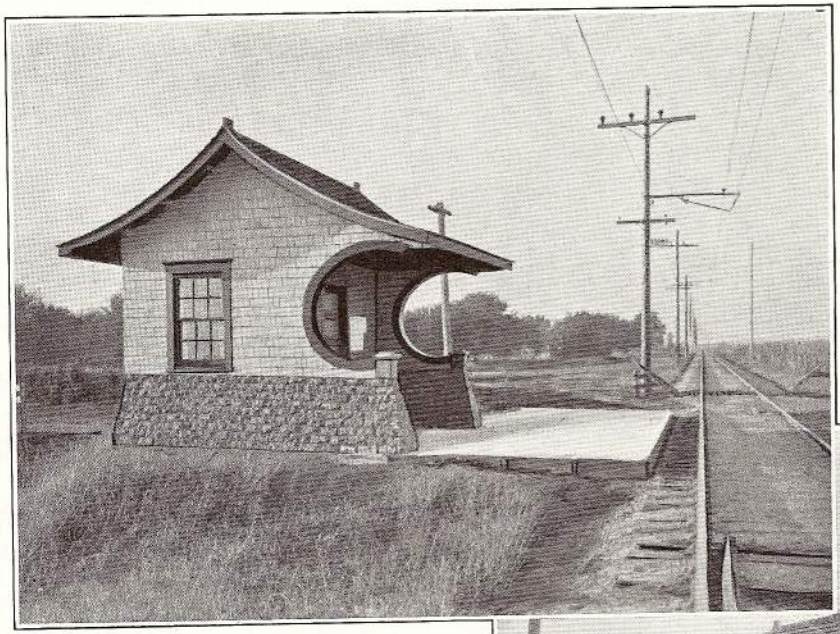




St. Louis Freight and Express Terminal

Interior Bridge Station, St. Louis

The New Station at Springfield, Ill.



Standard Shelter Shed

Type of Passenger and Freight Station

This signal equipment is made by the Union Switch & Signal Company, and attention is called to the fact that the automatic block signals adopted as a standard by this road are of the type which have given satisfaction on many thousand miles of steam railroad tracks of the larger trunk lines.

These signals are fully automatic and protect a train by displaying semaphores in the "stop" position at a sufficient distance in front and behind it to provide for ample braking distance in case there should be misinterpretation of the dispatcher's orders. They protect the meeting point of trains at sidings as well as curves and subways. They are also designed so that any derangement of the running rails, track bonds, signal wires or open switches would cause them to assume the "stop" position.

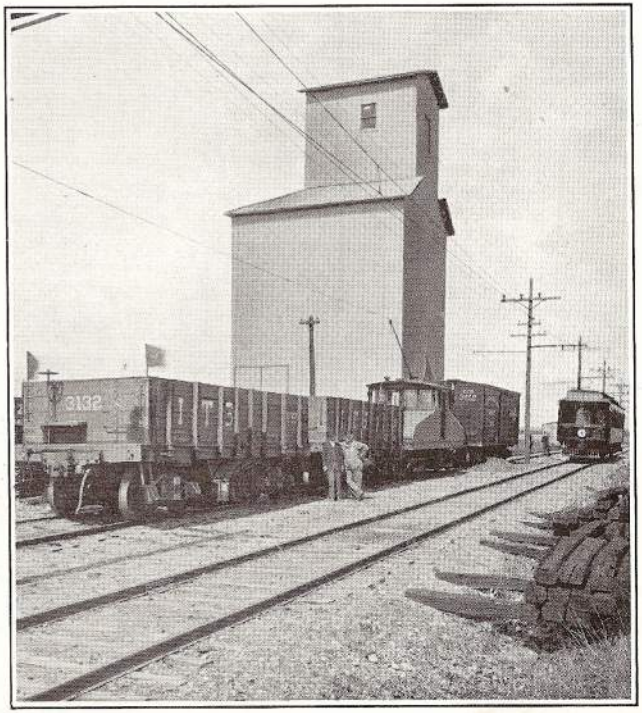
The workmanship of this signal installation has been executed with a view to obtaining the maximum safety as a first consideration combined with low maintenance cost.

The Illinois Traction System has made the first extensive application of automatic electric block signals to a single track interurban road, and with the completion of this installation its trains are more thoroughly protected than those of a great majority of the steam roads and practically all of the other electric roads.

TRANSPORTATION SERVICE.

The transportation service given by the Illinois Traction System is most excellent and affords a frequency of trains unexcelled by any of its competitors. The trains operated consist of limited and local passenger service, parlor and sleeping car service, fast merchants' dispatch freight service, general freight trains and the transportation of heavy freight, such as trains of grain and coal in carload lots.

The limited passenger trains, stopping only at the larger towns and cities, offer a service which, from the standpoint of speed, comfort and personal convenience, leaves little to be desired. These trains are supplemented by local trains stopping on signal at all country highway crossings. The



Type of Grain Elevator

Delivering Grain to Elevator on Illinois Traction System

Dispatcher's Desk

frequently of this service—one train in each direction every hour—combined with the ease of access in the rural districts, has won for the electric road a large proportion of the local and through passenger travel of the communities served by the Illinois Traction System.

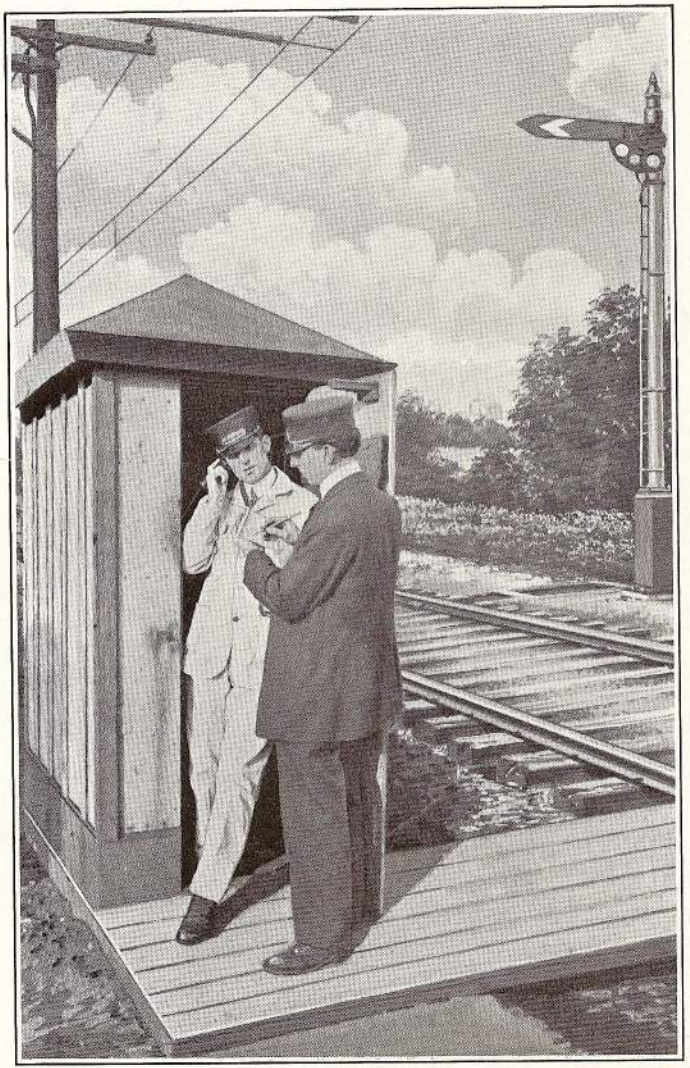
FREIGHT AND EXPRESS SERVICE

The service given by the freight and express department of the Illinois Traction System has been built up along the lines established by the steam railroads.

The tariffs are based on those established by the steam road. Interchange arrangements have been made with some of the steam roads furnishing shippers along the lines of the Illinois Traction with an outlet for their produce to the great railroad centers of the country.

In addition to the regular daily operation of freight and express trains over all sections of the electric road, a through service for package freight to and from Chicago is maintained by means of a physical connection with the Chicago & Eastern Illinois Railroad.

The connection point between this steam road and the interurban is at Glover, near Champaign, where a complete installation of connecting switch tracks has been made to facilitate interchange of traffic. The electric road, with



Taking Train Orders

its large locomotives, is in a position to handle freight economically in long trains of standard freight cars, and the active solicitation of this traffic is being aggressively carried forward.

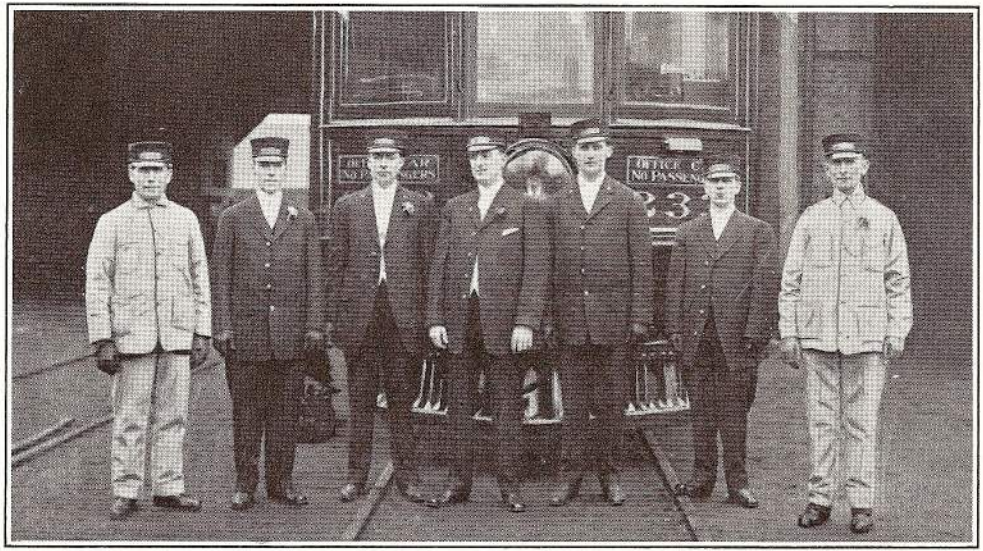
One very noticeable feature of this freight service is what is known as "Express service at Freight rates." By means of fast through express trains, freight received at any terminal point by 5:00 o'clock in the afternoon reaches its destination at any point on the Illinois Traction System early the next morning.

SURVEY OF TRAFFIC POSSIBILITIES.

The Illinois Traction System has enormous possibilities in the general freight field. St. Louis alone transports more than 1,500,000 tons of freight each year to and from the territory of this electric road.

The Illinois Traction System is the first railroad, steam or electric, to enter St. Louis over its own tracks and Mississippi River bridge, thus relieving its rates from the arbitrary freight charge imposed by the association owning the two other Mississippi River bridges and the freight terminals. Shippers have claimed for years that St. Louis business has been greatly hampered by the tolls charged on both freight and passenger traffic crossing the Mississippi River. Thus it is expected that the Illinois Traction System, which does not exact a toll for business transported over the McKinley Bridge, may become an important factor in handling St. Louis freight.

In the territory served by the Illinois Traction System 24,000,000 tons of coal and 114,000,000 bushels of agricultural products are produced each year. St. Louis alone receives 11,000,000 tons of coal each year from the Illinois fields, which embrace more than 8,700 square miles. The quantity



Group of I. T. S. Trainmen

of coal and grain which the Illinois Traction System may expect to handle thus is seen to be almost unlimited.

Offering, as it does, excellent freight handling facilities between the substantial cities of the central part of the State, the Illinois Traction System may look forward to a wonderful growth in local freight traffic, and the most sanguine expectations will more than be met when through traffic arrangements are completed with interconnecting trunk lines. Those interested in the welfare of the road are to be congratulated on its strong position from the traffic standpoint.

Mutual Confidence Exists

Superior transportation conveniences require both perfect service and ample revenue. It is the aim of the company to improve the service continually, while apparently on the part of the government and the people there is an appreciation of the right to equitable earnings. So long as this mutual understanding of justice exists, Illinois will have the best operating conditions, high grade roads and equipment and the advantages of low competitive rates with rapid and frequent service. This welcome condition can better be realized by an electric road than by a steam road. The electric road

Form 245. 7-1-10. 5000B. 21709. General Manifold Co., Pat. Jan. 8, 1901.

Illinois Traction System

Train Order No. 25 Nov 18 1910

To Conductor and Motorman:

Train Ex Car 1565 at Mackinaw Jct

Train Ex Car 1565 South and Train Ex Car 1563 North will meet at Union

Train Ex Car 1565 So and Train Ex Car 1057 No will meet at Wood

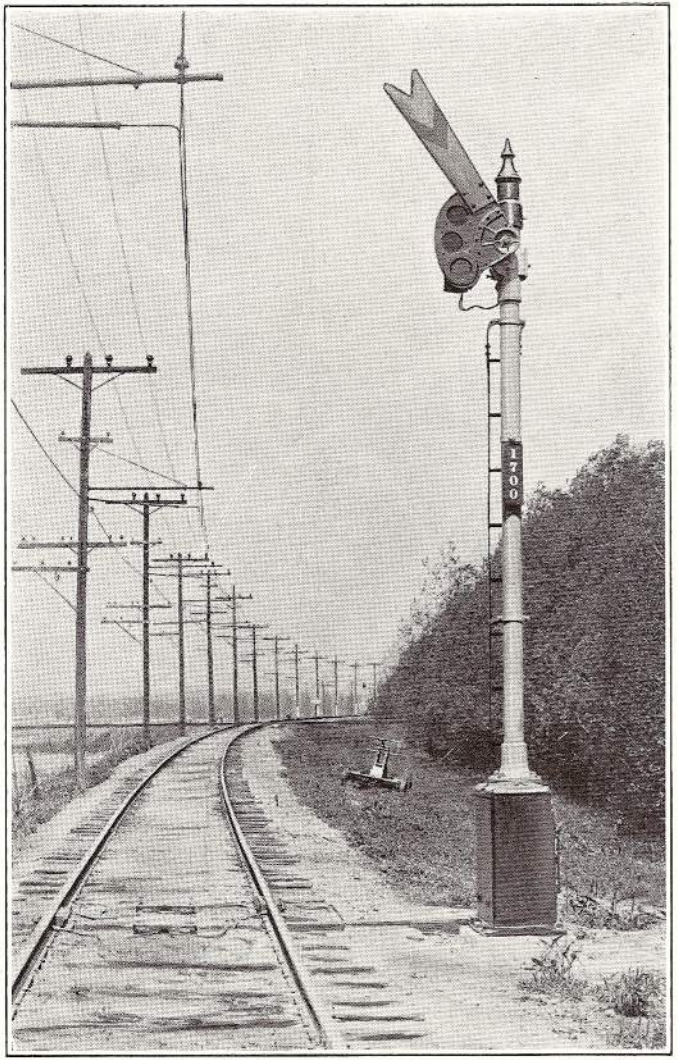
Train ____ Car ____ and Train ____ Car ____ will meet at ____

Train ____ Car ____ and Train ____ Car ____ will meet at ____

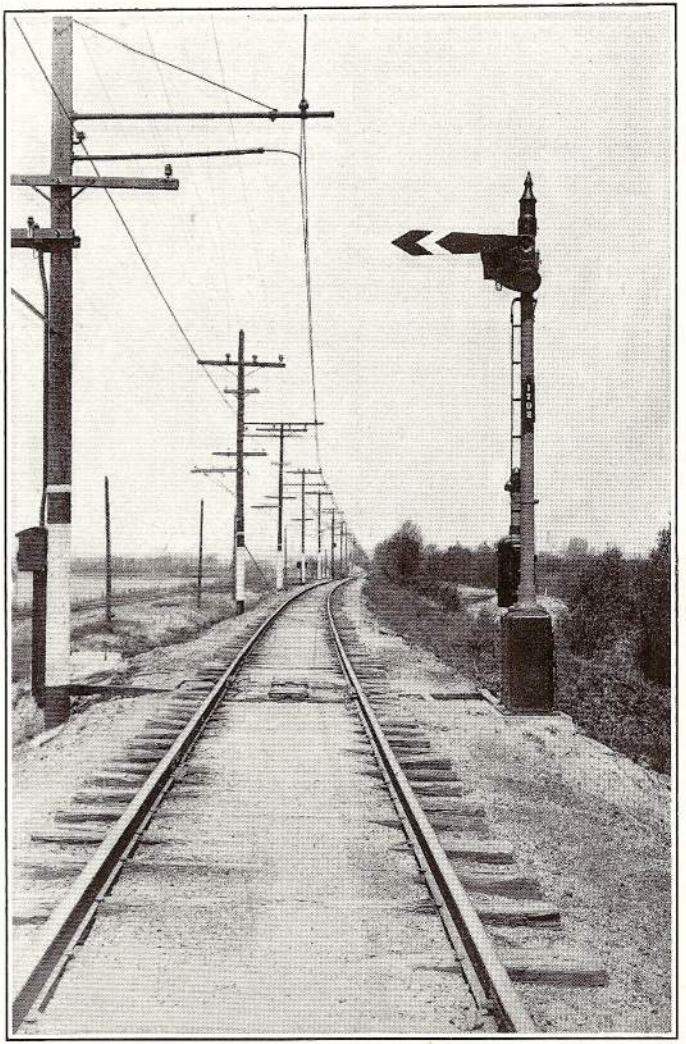
Eng. 1565 will run extra Mackinaw Jct to Starne

CONDUCTOR	MOTORMAN	TRAIN	Complete at	DISPR.
Stevens	Nave	Ex 1565	12 05 P	J.H.M.

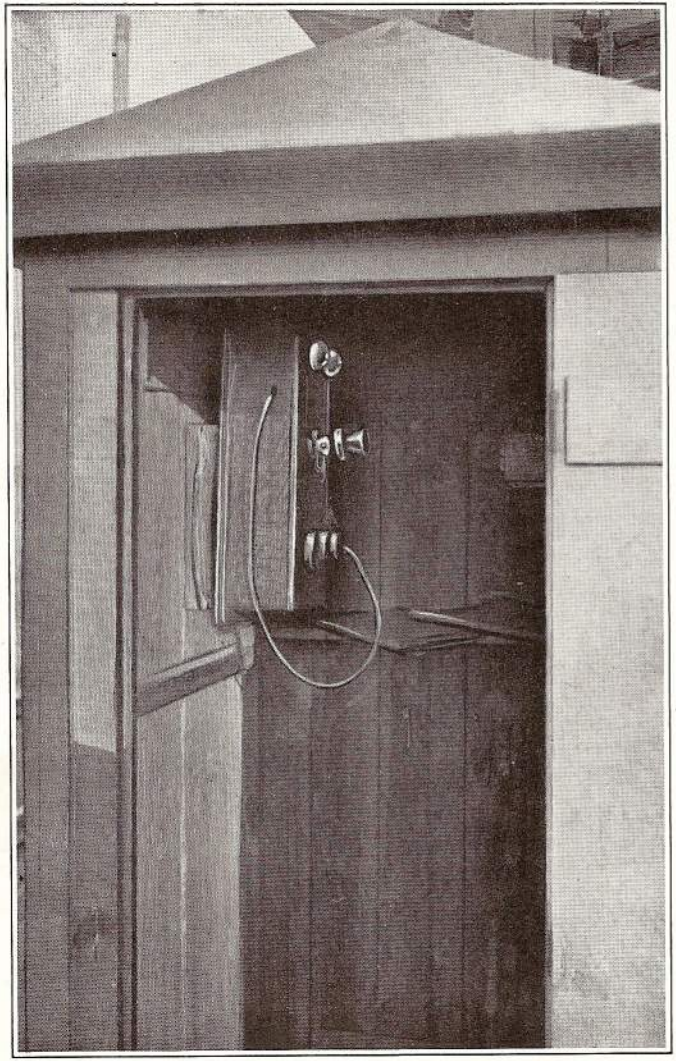
Train Order



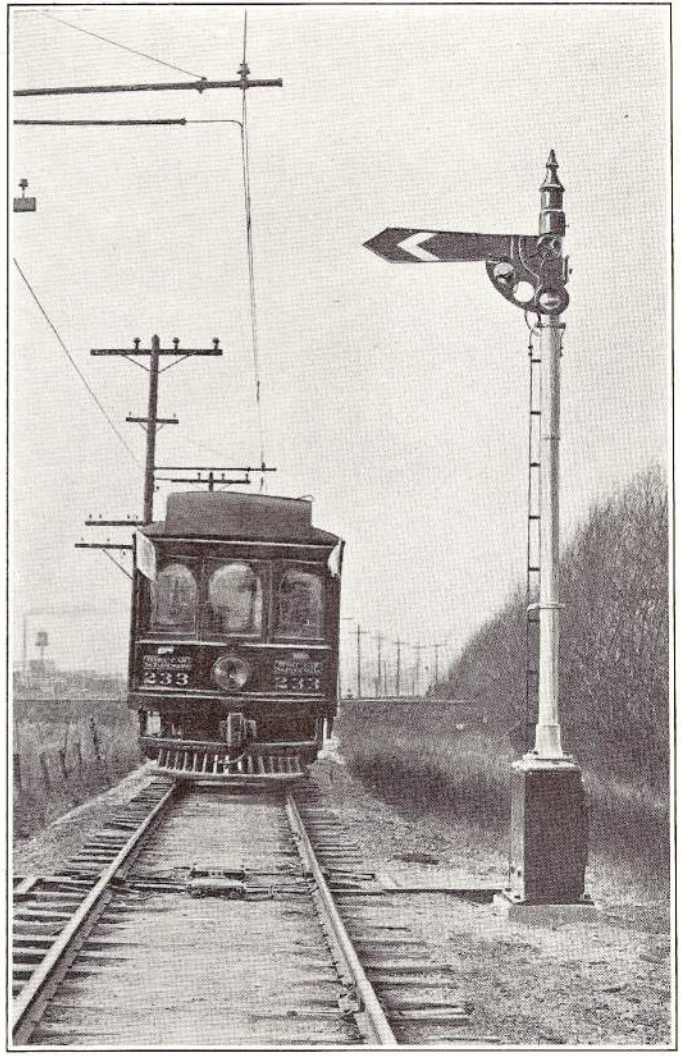
Distant Signal in "Clear" Position



Home Signal in "Stop" Position



Interior Telephone Booth



Signal at "Stop" Position

utilizes the most flexible means for the distribution of energy and can achieve the best results according to the capital invested.

Because of its attitude toward the public the Illinois Traction System not only has merited, but it has received, the good will of the people and their representatives. The public and its governing bodies have appreciated the right of the company to earn reasonable revenues for the investors and for the maintenance of the service and physical property at the highest standard.

TABLE No. 1.

Statistics of Passenger and Freight Traffic.

Passengers carried by interurban lines	10,000,000
Passengers carried by city lines	40,000,000
Total number passengers carried	50,000,000
Number passenger trains in year	220,155
Number of freight trains	21 765

Freight Proportions.

	Per Cent
Products of agriculture	4.57
Products of the mine	68.82
Products of the forest	4.23
Packing house products	.30
Live stock	.85
Manufactures and merchandise	5.93
Miscellaneous	15.30

TABLE No. 2.

Miscellaneous Statistics of the Interurban.

Number of miles operated	459.13
Number stations	100
Population of cities	1,070,021
Population of counties	1,525,565
Population served by road	2,500,000
Weight of A. S. C. E. rail per lineal yard, pounds	70
Gauge of road	Standard
Average width of right-of-way, feet	66
Number passenger cars	150
Number freight cars	600
Number express cars	128
Number central power stations	4
Number sub-stations	40
Number belt lines	4
Number miles protected by automatic block signal	120
Number passengers carried	10,000,000

Trackage of Railway Lines.

	Miles
Interurban lines—main track	417.15
Interurban lines—passing track	35.31
Interurban lines—double track	6.67
Total	459.13
City street railway	169.60
Total for all lines	628.73

McKinley Electric Bridge.

Total length	1.25 miles
Carrying capacity per lineal foot	12,000 pounds
Length of three river spans	523, 521 and 521 feet
Length of two shorter river spans	250 feet
Length, each, of three shore spans	150 feet
Length of Illinois approach	1,400 feet
Length of Missouri approach	2,700 feet
Width of bridge	65 feet
Clearance above low water	85 feet

TABLE No. 3.

Population of Cities and Towns on the Illinois Traction System, Showing Increase in Ten Years.

	1910	*1900*
Auburn	1,814	1,281
Bloomington	25,768	23,286
Benld	1,912	None
Bement	1,530	1,484
Broadwell	246	202
Brooklyn	1,569	1,119
Buffalo	475	531
Carlinville	3,616	3,502
Catlin	952	697
Cerro Gordo	876	1,008
Champaign	12,421	9,098
Chatham	666	629
Clinton	5,165	4,452
Danvers	593	607
Danville	27,871	16,354
Dawson	620	574
Decatur	31,140	20,764

TABLE No. 3—Continued.

	1910	*1900*
East St. Louis	58,547	29,655
Edwardsville	5,014	4,157
Elkhart	418	552
Fithian	396	309
Georgetown	2,307	988
Gillespie	2,241	873
Girard	1,891	1,661
Granite City	9,903	3,122
Heyworth	681	683
Hillsboro	3,424	1,937
Homer	1,086	1,080
Illiopolis	849	744
Lincoln	10,892	8,962
Litchfield	5,971	5,918
Madison	5,046	1,979
Mackinaw	725	859
Maroa	1,160	1,213
Mechanicsburg	417	476
Monticello	1,981	1,982
Morton	1,004	894
Muncie	251	324
Mt. Olive	3,501	2,935
Nilwood	401	424
Niantic	685	654
Normal	4,024	3,795
Oakwood	423	None
Oakley	81	99
Peoria	66,950	56,100
Peoria Heights, Suburbs of Peoria	582	309
Averyville, Suburbs of Peoria	2,668	1,573
East Peoria, Suburbs of Peoria	1,493	899

TABLE No. 3—Continued.

	1910	1900
Ridge Farm	967	933
Riverton	1,911	1,511
Sawyerville	445	None
Springfield	51,678	34,159
Staunton	5,048	2,786
St. Joseph	681	637
St. Louis, Mo.	687,029	575,238
Thayer	1,012	None
Tilton	710	474
Union	432	322
Urbana	8,245	5,728
Venice	3,718	2,450
Virden	4,000	2,280
Wapella	498	442
Westville	2,607	1,605
Williamsville	600	573
Worden	1,082	544
	1,082,909	850,426

St. Louis industrial district in Missouri and Illinois has about 900,000 inhabitants.

TABLE No. 4.

Population of Counties Traversed by Illinois Traction System, Showing Increase in Ten Years.

	1910	1900
Vermilion	77,996	65,635
Champaign	51,829	47,622
Piatt	16,376	17,706
Macon	54,186	44,003

TABLE No. 4—Continued.

	1910	1900
DeWitt	18,906	18,972
McLean	68,008	67,843
Tazewell	34,027	31,288
Peoria	100,255	88,608
Logan	30,216	28,680
Sangamon	91,024	71,593
Macoupin	50,685	42,256
Montgomery	35,311	30,836
Madison	89,847	64,694
St. Clair	119,870	86,685
Total	838,536	706,421

Adding the population of St. Louis, 687,029, the population immediately tributary to the Illinois Traction is 1,525,565. The above figures are for counties traversed by the lines. As traffic is derived from counties adjacent to the above not immediately on the lines, it is fair to estimate the population served by the Illinois Traction as 2,500,000.

TABLE No. 5.

Normal Production of Coal in Counties Traversed by Illinois Traction System.

Counties.	*Tons.*
Vermilion	2,016,153
Macon	197,633
McLean	129,614
Tazewell	183,500
Peoria	696,341
Logan	343,582
Sangamon	5,283,857

TABLE No. 5—Continued.

	Tons
Macoupin	4,350,537
Montgomery	1,474,635
Madison	3,245,824
St. Clair	3,265,747
Total	21,187,423

Eleven counties traversed by the Illinois Traction produce coal, and the principal mining cities on the road are: Peoria, Lincoln, Decatur, Bloomington, Westville, Danville, Virden, Gillespie, Staunton, Mt. Olive, Carlinville, Hillsboro, Litchfield, Thayer, Springfield, Riverton, Worden and Edwardsville. In connection with system are operated mines, producing about 700,000 tons a year. There are rare opportunities for the development of manufacture on the railway. The importance of St. Louis as a great manufacturing center is due largely to the facilities emanating from the coal field of Illinois.

TABLE No. 6.

Typical Production of Wheat, Corn, Oats, Rye and Barley of Counties Located on the Illinois Traction System by Reports of 1909.

County	Wheat Bushels	Corn Bushels	Oats, Rye and Barley, Bushels	All Grains Bushels
Vermilion	56,000	5,800,000	2,000,000	7,856,000
Champaign	20,000	950,000	4,500,000	14,020,000
Piatt	71,000	2,200,000	1,800,000	4,071,000
Macon	137,000	5,400,000	1,300,000	6,837,000
DeWitt	71,052	3,422,014	1,158,628	4,651,694
McLean	126,000	10,400,000	1,500,000	12,026,000
Tazewell	590,000	4,300,000	1,600,000	6,490,000
Peoria	334,000	2,400,000	1,600,000	4,334,000
Logan	165,000	5,000,000	1,900,000	7,065,000

TABLE No. 6—Continued

County	Wheat Bushels	Corn Bushels	Oats, Rye and Barley, Bushels	All Grains Bushels
Sangamon	1,200,000	7,200,000	900,000	9,300,000
Macoupin	1,000,000	3,300,000	600,000	4,900,000
Montgomery	572,792	2,404,325	626,698	3,603,815
Madison	1,000,000	2,400,000	150,000	3,550,000
St. Clair	1,100,000	1,200,000	80,000	2,380,000
Total	6,442,844	56,376,339	19,715,326	91,084,509

TABLE No. 7.

Financial and Trade Items of St. Louis.

St. Louis has a population of	687,029
St. Louis district has a population of	900,000
St. Louis bank clearings aggregate	$3,727,949,379
St. Louis trade amounts to more than	2,000,000,000
Annual freight traffic aggregates, tons	51,918,100
Cash shipped to country banks	$64,000,000
Street railways carry yearly, passengers	341,086,168
Grain receipts, bushels	67,149,123
Flour received, barrels	2,678,040
Cattle received, number	1,356,232
Hogs received, number	2,548,480
Sheep received, number	776,665
Horses and mules received, number	136,724
Coal received, tons	10,235,143

Fourth largest city in America.
Ranks fourth in manufacture and finance.
Greatest jobbing center in America.
One of the greatest industrial centers.

Only those items which might bear directly on the affairs of the Illinois Traction System are enumerated. St. Louis has the coal, raw material, geographical situation, railroad rates and transportation facilities to stand as one of the very foremost industrial centers in the world.

"THE ROAD OF GOOD SERVICE"