

ELEVATED RAILROADING.

Facts and Statistics Relative to New York's Rapid-Transit System.

A Survey of Its Practical Operations in Detail.

From the New York Mail.

There is hardly any corporate interest of more importance to the people of New York than the practical management of the elevated railways...

You have the common sense exactly right," replied Col. Hain, "and if you place before the people of New York statistics which will help them to understand the magnitude of the task which they rely upon the elevated railways to perform I shall be glad...

THE OFFICERS AND THEIR SUBORDINATES.

"How many men are there in the employment of the Manhattan company?"

"There are 3,400 on the pay roll."

"Who selects them?"

"That is one of my duties."

"Do you spend your whole time in your office each day, Col. Hain?"

"No, I go out over the road just as often as I can get away from duties here."

"Who are your chief assistants?"

"Well, there is Mr. C. L. Green, the superintendent, and—"

"Is he an old railroad man?"

"He is not much more than 40 years of age, but he has been a railway man half his life. He was for many years a passenger conductor on the Pennsylvania railway, and left that service to become trainmaster of the New Jersey Central railway. He left that position for a similar one under the Manhattan company, where he was promoted to the office of superintendent. His office is at No. 4 Front street, so that all four of the rapid transit lines terminate almost at his door, now that the Sixth avenue line has been extended to the battery. Next under Mr. Green are Trainmasters Wetmore and Herber, of the east and west divisions respectively, each with a corps of train dispatchers; the roadmaster is Robert Black, the master mechanic is T. W. Peoples, the engineer is R. J. Sloan, and then there are station inspectors, road supervisors, engine dispatchers and subordinate officers of various other classes. The ordinary employes include the trainmen, the station agents, the gatemen and the workmen on the tracks and in the shops."

THE TRAINS AND THE MEN WHO RUN THEM.

"Who decides upon the number of trains to be run?"

"A schedule is made out weekly by Mr. Green and myself."

"The numbers of trains are not the same at all seasons of the year, then?"

"No. Our business fluctuates somewhat. It is better in the autumn months than in the summer, and there are special events to be provided for, such as some great convention along one of the lines, which causes a temporary increase of traffic. The growth of our business from year to year requires an increase in the permanent number of our trains."

"What is the average number per day?"

"On the Third avenue line, 1,750; on the Sixth, 800; on the Second, 500; and on the Ninth, 350."

"Who is directly in charge of them?"

"The trainmasters and their assistants, the train dispatcher, the former being directly responsible to Superintendent Green. There are in all twenty-two train dispatchers, enough to furnish one for each end of each line both day and night. No train starts from a terminal station without an order from a train dispatcher. Such a system has prevented accidents which might have otherwise occurred."

"Who is in command on board each train?"

"The conductor, of course, although an engineer is not bound to obey an order to move his train when to do so would be dangerous. The conductor is required to keep his train on schedule time, and the guards are responsible to him while on the train. Each conductor has his regular force of guards, and by working together the train men are able to do their work much more satisfactorily than they could otherwise."

"What is the whole number of trainmen?"

"There are 250 conductors and 400 guards."

"Have they been in your service long?"

"Most of our employes remain in their places from year to year, and the operation of the trains is more satisfactory on that account."

THE 203 ENGINES IN MID AIR.

"Now, as to the locomotives, Col. Hain. Who commands the department of motive power?"

"The master mechanic is Mr. Peoples, a man of 48 or 50 years of age, who has had thorough training in his business. He was a long time in the shops of the Pennsylvania railway at Harrisburg, across he was master mechanic of the Jersey Central railway when he accepted his present position. He reports directly to me, but he receives special orders from the superintendent, in addition to general instructions from this office. He is responsible for the management of the shops, which are on the Third avenue line, at Ninety-ninth street. It requires 300 engines and 300 firemen to operate the engines day and night."

"How often are the engines sent to the shops?"

"Whenever they need repairs. If in good condition they are kept on the sidetracks when not in use, but few such are idle, now that the Sixth avenue trains run all night. The engines of all four lines are in Mr. Peoples' care, and he is responsible for sending them out in good condition."

"How many are there?"

"Just 203, and they consume about 1,000 tons of coal a month."

"How does he know when engines need to be taken off for repairs?"

"Through the road foremen and dispatchers of engines, who receive information from engineers whenever the latter see any defect in their engines. They must see that the engines are inspected at the end of each trip, and they are responsible to the master mechanic for condition of all engines on the road, being required to superintend the work of the engineers."

"Does the master mechanic employ the engineers?"

"Yes, with the approval of the general manager. He also reports them to this office for dismissal if they disobey orders."

THE MAKING UP OF TRAINS.

"Who is charged with the duty of making up the trains?"

"The yardmasters. They receive their instructions from the trainmaster and his assistant, or directly from the superintendent, and they are responsible for the movement of trains in the yards and on the sidings. They must see that engineers and trainmen are in their places on each train they make up, and it is their duty to see that every train leaves on time."

"They must inspect the men as well as the engines and cars, then?"

"Yes, they must not permit a train to start with an engineer, conductor or guard unfit for work. Our careful system of selecting employes and of bringing them under the direct supervision of the chief and his assistants in each department, should prevent the necessity of any inspection of the force upon each train as it is made up, but to make assurance doubly sure, the yard dispatchers are required to see that each train is in good condition as to men as well as to rolling stock."

"How often are the cars inspected?"

"At the end of every trip."

"In all cars are there?"

"In all, 612, the number in daily use being 674."

"How many car inspectors?"

"There are 69. They are required to examine the running gear on each train passing their stations, and they must report to the master mechanic the number of any car needing repairs. It is also their duty to see that the cars are properly cleaned, there being 140 cleaners to wash the cars."

"The master mechanic seems to have a large number of men under his direction?"

"Yes, his position is one of great responsibility. He must administer his office so that every engine and every car on the road will be kept in good condition, and to do that he must have a large number of subordinates under good discipline."

MANAGEMENT OF STATIONS AND SWITCHES.

There are four station inspectors in the service of the Manhattan Company, one on each line. They are responsible to the superintendent and general manager for the men at the 161 stations of the company. For example, Mr. C. S. Stevenson, station inspector on the Third Avenue line and the Grand Central and the Thirty-fourth street branches, must see that each of his stations is supplied with agents, gatemen and porters, both day and night. His office is in the station at Thirty-fourth street ferry. He is at his desk at 6:30 a. m. each day of the week, prepared to assign an extra man to a post whenever the regular man is reported absent. He has telegraphic communication with the stations and is immediately notified of events in them which demand his attention. There is a change of agents and gatemen every twelve hours, and he must see that each station is properly equipped at 7 o'clock, both morning and evening. He reports to the Superintendent and General Manager, and all the work and property at the stations in his district are in his care. He can suspend his subordinates for neglect of duty, and much executive ability is required on his part. Mr. Stevenson is regarded as a thorough disciplinarian, and a man in his position needs to be."

"Who has the supervision of the switches?"

"The switch tenders are under the supervision of the superintendent and trainmaster, except those in the yard, who receive orders from train dispatchers. But there are very few switches in use, you know. Those at the ends of the lines are the only ones to use outside of the yard, except those in Fifty-third street, at Sixth and Ninth avenues. The absence of switches is one of the excellent features of the rapid transit system. Our switch tenders are selected with much care, and the discipline to which they are subjected is very rigid."

THE CARE OF THE TRACK.

"How many miles of track are there in your lines?"

"In all four lines there are thirty-two miles."

"What force is employed to keep the tracks and the structures supporting them in good condition?"

"There are 470 mechanics employed by the company, a part of them working in the shops. However, Mr. Robert Black, the roadmaster, has charge of the iron structure above ground, and of everything pertaining to it. Under him are the road supervisors, and under them are the foremen of structure repair, and under them are workmen who make the necessary repairs. All the officers in the department are required to pass over their respective divisions, examining each part of the structure to see that its condition is perfect. For safety on our trains seldom are inspectors passing over the lines, but there are no other railway tracks in the country which are examined as many times a day as ours. Every rivet and screw is kept tight, and the

almost care is used to preserve the whole structure."
THREE OR FOUR TONS OF TICKETS A MONTH.
Mr. C. P. McFadden, the general ticket agent of the company, has an office on the floor above General Manager Hain's, and in it are to be seen many clerks at work upon the accounts of the department. The tickets are printed in long strips, which are tied up in packages of 500 tickets each. Each of the 161 stations has a compartment in Mr. McFadden's office, in which the tickets having its distinctive marks and numbers are kept. Four men are constantly employed in delivering the tickets to the agents at the stations and in making collections from the gatemen's boxes. The tickets thus collected are taken to Mr. McFadden's office, where they are torn to shreds in a machine kept for the purpose, and are then sold to paper dealers, their weight aggregating between 3,000 and 4,000 pounds a month. In any case where dishonest practices on the part of agents and gatemen are suspected, the tickets taken from the boxes of the stations are carefully inspected and the fraud, if any exists, is soon detected.
The earnings of the Manhattan company during the year ending October 31, 1881, were \$5,279,536.76, the average price paid by the 75,575,245 passengers having been 6.98-100 cents.

PROF. SIMMONS' PLAN.

"What significance is there in Prof. Simmons' visit to New York to the rapid transit system?"

"Col. Hain."

"He wishes to introduce the electric motor as a substitute for our steam engines, and his visit to New York was probably for the purpose of arranging to do so. He will return here from Canada shortly, and he may then inspect our lines more thoroughly than he has yet been able to do."

"Are the officers and owners of the road favorable to this scheme?"

"President Galloway, Messrs. Field, Gould, Sage, and several others of them had an interview with Professor Simmons and went over the lines with him, desiring to hear his opinion as to what he can do. He thinks the use of electricity for motive power would save the company \$1,000 a day. Of course, if he can effect such a saving it would be folly to reject his proposition of an opportunity to do so."

"Do you expect to have a substitute for your steam motors soon?"

"It would be rash to predict how soon, but we are prepared to test any plan which promises such a substitute. We recently experimented with a motor worked by compressed air, and if the expense of compressing air were not so great such motor might be introduced. If electricity can be made to move our trains satisfactorily, we shall be glad to introduce it. Any plan that can increase the efficiency of the rapid transit system will certainly be promptly adopted by the Manhattan company."

Liquid Gold.

Dan'l Plank, of Brooklyn, Toga county, Pa., describes it thus: "I rode thirty miles for a bottle of 'Thomas' Eucalypti Oil, which effected a complete cure of a crooked limb in six applications; it proved worth more than gold to me."

THE "INDEPENDENT" HAS THE FOLLOWING.

"When progress in the world is to be made, it is time for conservatism to be bestirring itself. So think the special conference that met near Arcanum, Ohio, to raise their voice against conformity to the world. What conformity to the world is may be judged from their printed resolutions, of which the first reads as follows, with all its primitive grammar: 'Be it, therefore, Resolved, That we more strictly adhere to the self-denying principles of the apostles, as practiced by our ancient brethren and as set forth in our petition of 1880, to which we wish to hold. With this amendment as the petition mentions popular Sunday schools and revival meetings, the way they are generally conducted, to be more clearly understood, we say that we feel to suffer none in the brethren's church and that we will be sure to have no trouble with them. No Sunday schools, no high schools, no revival meetings, no paid ministers, no missionary parties, no mission boards, as now granted by Annual Meeting. No money soliciting or begging to carry out such plans, no single mode of fast-wearing, no musical instruments, as pianos, melodions and organs, etc. No lawful interest to oppress the poor.' The second resolution attacks that other matter most important, it seems, equally to the true saint and the dandy-clothes: 'Resolved, That the brethren wear a plain, round-brimmed coat, with standing collar; hat, overcoat and everything else to correspond. A plain way of wearing the hair and beard, no fashionable moustaches and no orached or shingled hair. The sisters are also to wear a plain, modest dress and bonnet; also a plain white cap in time of worship or on going abroad. In short, that the brethren and sisters let their light shine as a light on 'candlestick,' and not as a light under the bushel; but to show to the world that we try to possess what we profess. How lovely it would be if every saint could thus indicate by his clothes where his light was and that he possessed what he professed. Then the tailor should give us our passport to heaven."

Bucklin's Arnica Salve.

The best salve in the world for cuts, bruises, sores, ulcers, salt rheum, fever sores, tetter, chapped hands, chilblains, corns, and all kinds of skin eruptions. It is also a sure and speedy cure for the most obstinate and violent cases of skin itching, and is in every case or money refunded. Price, 25c per box. For sale by J. & C. McMAHON, Omaha.

CONSUMPTION Positively Cured.

All sufferers from this disease that are anxious to be cured should try DR. KISSNER'S Celebrated Consumptive Powders. These Powders are the only preparation known that will cure Consumption at all stages of the Throat and Lungs—indeed, so strong is our faith in them, and so long we have used them, that we will forward to every sufferer, free of charge, a free trial box. If you are afflicted with this disease, you can perfectly cure your consumption. If your life is worth saving, don't delay in getting these Powders, a trial, and surely you will be cured. Price, for large box, \$4.00, sent to any part of the United States or Canada, by mail on receipt of price. Address, General Agent, J. J. BARNARD, 320 Fulton St., Brooklyn, N. Y.

Advertisement for Tarrant's Seltzer Apertent, describing its benefits for indigestion and stomach ailments.

Advertisement for Gentle Women hair product, claiming to make hair glossy, luxuriant, and free from dandruff.

Advertisement for Gray's Specific Medicine, a cure for various ailments including rheumatism and neuralgia.

Advertisement for W. J. Connell, Attorney-at-Law, located at 10th and Howard Streets, Omaha, Nebraska.

Advertisement for The Occidental, a general store or business establishment.

Advertisement for J. I. Paynter, Proprietor, located at 10th and Howard Streets, Omaha, Nebraska.

Advertisement for No Changing Cars, promoting the convenience of the Omaha & Chicago Railway.

Advertisement for The Short Line via Peoria, highlighting the route between Omaha and Chicago.

Advertisement for For St. Louis, South, and New Line for Des Moines, Rock Island, and other destinations.

Advertisement for the Omaha & Chicago Railway, detailing routes and services.

Advertisement for the Omaha & Chicago Railway, focusing on the Chicago & North-Western Railway.

Advertisement for the Omaha & Chicago Railway, mentioning the Imperial Palace Dining Cars.

Advertisement for the Omaha & Chicago Railway, discussing the benefits of the new line.

Advertisement for the Omaha & Chicago Railway, providing information on fares and routes.

Advertisement for the Omaha & Chicago Railway, emphasizing the quality of the service.

Advertisement for the Omaha & Chicago Railway, listing various stops and connections.

Advertisement for the Omaha & Chicago Railway, detailing the amenities of the dining cars.

Advertisement for the Omaha & Chicago Railway, providing contact information for agents.

Advertisement for the Omaha & Chicago Railway, featuring a map of the region.

Advertisement for the Omaha & Chicago Railway, highlighting the Imperial Palace Dining Cars.

Advertisement for the Omaha & Chicago Railway, discussing the benefits of the new line.

Advertisement for the Omaha & Chicago Railway, providing information on fares and routes.

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Advertisement for the Omaha & Chicago Railway, detailing the amenities of the dining cars.

Advertisement for the Omaha & Chicago Railway, providing contact information for agents.

Advertisement for the Omaha & Chicago Railway, featuring a map of the region.

Advertisement for the Chicago & North-Western Railway, featuring a map and promotional text.

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Advertisement for the Chicago & North-Western Railway, providing contact information for agents.

Advertisement for the Chicago & North-Western Railway, featuring a map of the region.

Advertisement for Edholm & Erickson, Jewelers, offering watches, clocks, and silverware.

Advertisement for Edholm & Erickson, Jewelers, highlighting their expertise in watchmaking.

Advertisement for Edholm & Erickson, Jewelers, providing information on their services.

Advertisement for Edholm & Erickson, Jewelers, listing various jewelry items.

Advertisement for Edholm & Erickson, Jewelers, emphasizing the quality of their work.

Advertisement for Edholm & Erickson, Jewelers, providing contact information for their store.

Advertisement for Star Tinted Spectacles, offering a variety of eyewear.

Advertisement for Star Tinted Spectacles, highlighting the benefits of their lenses.

Advertisement for Star Tinted Spectacles, providing information on their services.

Advertisement for Star Tinted Spectacles, listing various styles of eyewear.

Advertisement for Star Tinted Spectacles, emphasizing the quality of their work.

Advertisement for Star Tinted Spectacles, providing contact information for their store.

Advertisement for M. Hellman & Co., offering a wide range of clothing and accessories.

Advertisement for M. Hellman & Co., highlighting their expertise in tailoring.

Advertisement for M. Hellman & Co., providing information on their services.

Advertisement for M. Hellman & Co., listing various clothing items.

Advertisement for M. Hellman & Co., emphasizing the quality of their work.

Advertisement for M. Hellman & Co., providing contact information for their store.

Advertisement for St. Louis Paper Warehouse, offering a variety of paper products.

Advertisement for St. Louis Paper Warehouse, highlighting their extensive inventory.

Advertisement for St. Louis Paper Warehouse, providing information on their services.

Advertisement for St. Louis Paper Warehouse, listing various paper types.

Advertisement for St. Louis Paper Warehouse, emphasizing the quality of their work.

Advertisement for St. Louis Paper Warehouse, providing contact information for their store.

Advertisement for C. Graham Paper Co., offering high-quality paper products.

Advertisement for C. Graham Paper Co., highlighting their expertise in paper manufacturing.

Advertisement for C. Graham Paper Co., providing information on their services.

Advertisement for C. Graham Paper Co., listing various paper types.

Advertisement for C. Graham Paper Co., emphasizing the quality of their work.

Advertisement for C. Graham Paper Co., providing contact information for their store.

Advertisement for Dexter L. Thomas & Bro., offering a variety of stationery and printing services.

Advertisement for Dexter L. Thomas & Bro., highlighting their expertise in printing.

Advertisement for Dexter L. Thomas & Bro., providing information on their services.

Advertisement for Dexter L. Thomas & Bro., listing various stationery items.

Advertisement for Dexter L. Thomas & Bro., emphasizing the quality of their work.

Advertisement for Dexter L. Thomas & Bro., providing contact information for their store.

Advertisement for Max Meyer & Co., offering a variety of tobacco products.

Advertisement for Max Meyer & Co., highlighting their expertise in tobacco processing.

Advertisement for Max Meyer & Co., providing information on their services.

Advertisement for Max Meyer & Co., listing various tobacco types.

Advertisement for Max Meyer & Co., emphasizing the quality of their work.

Advertisement for Max Meyer & Co., providing contact information for their store.