

# Train Talks

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*Informal discussions by the Pennsylvania Railroad with its patrons on matters of mutual interest and concern.*

APRIL, 1937

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## Train Speeds . . .

### A Railroad Contribution to American Progress

**T**HE fast time made by American trains and how they are progressively bringing all sections of the Nation closer together are matters not generally realized.

A recent report of the Association of American Railroads showed more than 400 daily passenger trains, covering in excess of 19,000 miles a day, operating on scheduled runs of 60 miles an hour or better, as compared with 30 such trains, totalling 1,100 miles a day, in 1930.

Another study, covering 357 selected daily passenger runs averaging 60 miles an hour or over, showed that 165 of those analyzed were on the Pennsylvania Railroad, including 30 at 65 miles an hour or over, 8 at 70 miles an hour or over, and 2 at 75 or faster.



The Pennsylvania Railroad has for years devoted great effort to the quickening of its train schedules while, at the same time, constantly setting new and higher standards of safety and increasing the comfort of travel and the dependability of train movements.

Especially notable, in time saved for many busy patrons, is the quickened schedule of the electrically operated "Congressional", north and southbound, between New York, Philadelphia, Baltimore and Washington. This famous train now daily covers the 225 miles from terminal to terminal, in each direction, in 215 minutes, with six intermediate stops. Such fast over-all time, with the stops required to serve so many important intervening centers, makes this run one of the most outstanding in the World and is practicable because of the extremely quick acceleration or "pick-up" of the new streamlined electric locomotives designed and built for this service.

Since electrification of the Pennsylvania's trackage in this densely populated territory, a total of more than 2,600 minutes per day has been taken out of the schedules of 100 daily expresses, saving, in the aggregate, a vast amount of time for an average of 30,000 daily passengers.

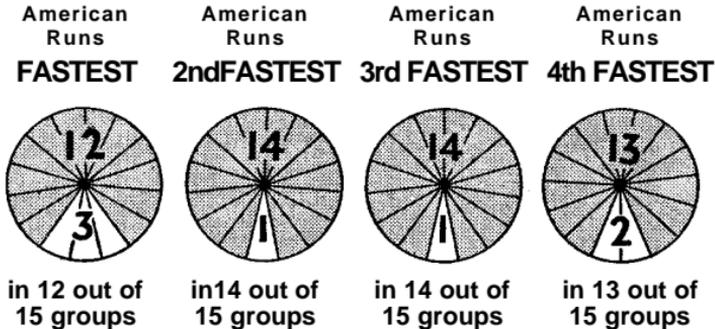
On the fastest schedules, New York and Philadelphia are now only one hour and 27 minutes apart, New York and Baltimore two hours and 54 minutes, Philadelphia and Baltimore one hour and 24 minutes, and Philadelphia and Washington two hours and 8 minutes.

## **Safe Tracks for Time-Saving Runs**

"The Congressional", "The President", "The Legislator", "The Senator", "The Representative", "The Constitution" and other swift trains in the Pennsylvania's electrified territory now cover long portions of their runs at 80 miles per hour

## AMERICA LEADS THE WORLD IN FAST TRAINS

Analysis of 199 Swift Runs Shows These Results:

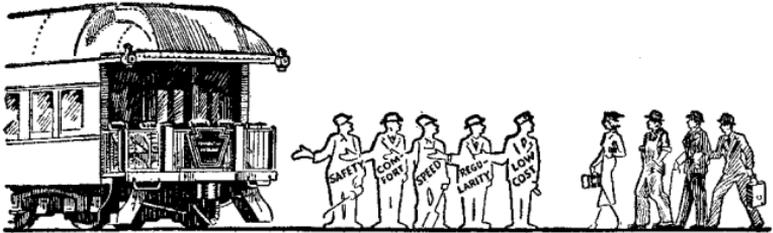


**NOTE:** The 15 groupings are based on a scale of various mileages covered.

A recent study of 199 notable passenger train runs in this country and abroad, made by the Railway Age, strikingly emphasized the supremacy in this respect of the railroads of the United States, which, as the diagram shows, were to the fore in an overwhelming proportion of instances.

and generally keep above a mile a minute except when slowing down for stops and picking up afterward, or when passing over designated areas where, for special operating reasons, lower speeds are required. In the high speed areas much of the track has been relaid with rails weighing 152 pounds to the yard, the heaviest in regular use by any railroad, American or European.

In test runs the Pennsylvania's electric locomotives, with trains of full weight all-steel cars, have been operated at speeds over 110 miles an hour without any attempt to reach the limit.



Because they provide service embodying those features which most strongly appeal to the public's taste and desires, railways remain by far the most heavily patronized of America's public carriers.

Recent tests with steam locomotives in the Pennsylvania's western territory, on the main line between Fort Wayne and Valparaiso, Ind., have shown maximum speed of more than 107 miles an hour, and average speed over the entire 104 miles of 90 miles per hour, including a slow-down for a water trough. According to the recognized records of the past, this latter is the highest average speed ever made by a railroad train, with standard equipment, over a distance of 70 or more miles. In these tests, again, no effort was made to run as fast as possible, as the purpose was not to break records but to observe certain features of the performance of steam trains running in the neighborhood of 90 and 100 miles per hour.

The trackage over which these tests were made, as in the case of other important main line sections in steam territory, has also been relaid with heavy section rail and otherwise strengthened and improved, and passenger trains now smoothly cover many miles at a stretch, with steam locomotives, at 75 to 80 miles per hour.

The quickening of Pennsylvania Railroad passenger schedules in recent years has not been confined to any one territory or region, but has been general over the entire system. During this era of improvement the following representative

savings in time have been effected between the eastern seaboard cities of New York, Philadelphia, Baltimore and Washington and various central western points:

To and From	Number of Schedules Affected	Total Time Saved Daily
Chicago .....	16	12 hrs.01 min.
St. Louis .....	10	9 " 41 "
Cincinnati .....	7	6 " 53 "
Cleveland.....	4	5 " 05 "
	37	33 " 40 "

These trains, on which daily averages of approximately 4,500 passengers receive the benefits of faster transportation over long distances, are typical of the Pennsylvania's east and west and north and south quickened through passenger schedules.

## World Leadership in Swift Train Travel

The fastest of the long-distance trains, "The Broadway Limited", now spans the miles between New York and Chicago in 16 ½ hours and Philadelphia and Chicago in 15 hours, reducing the journey to an overnight trip. A few years ago this premier train's New York-Chicago schedule was 20 hours and its Philadelphia-Chicago run 18¼ hours.

Between New York, Philadelphia and St. Louis the quickest schedules ever operated were recently initiated by the Pennsylvania on "The Spirit of St. Louis"—20 hours and 55 minutes from and to New York, and an hour and a half less in the case of Philadelphia.

225 MILES • • • 6 STO



The daily north and southbound runs of "The Congression of the World. Speeding between the Nation's Metropol famous train serves large intervening cities as well. T this fast schedule to be maintained wi

American railroads lead the world in passenger train speeds. One of the latest compilations of European and American records, made by the *Railway Age*, listed 199 fast runs, arranged in 15 groups according to the mileage covered by each. American trains held first place in 12 of the 15 groups, second place in 14, third place in 14, and fourth place in 13 out of the 15 mileage classifications.

### Freight Delivered 400 Miles Overnight

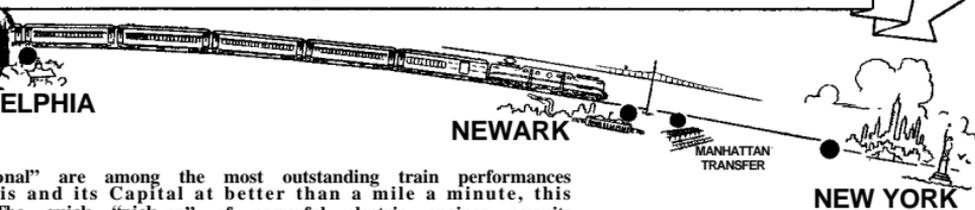
In the field of freight service, the greatly improved speeds of recent years, though less generally known to the public at large, are no less important. American railroads are currently carrying about one billion tons of freight annually, worth, conservatively, from ten to fifteen billions of dollars. Whatever contributes to the swift, safe and dependable transportation of so enormous a volume of tangible wealth is obviously a factor of consequence in promoting the Nation's economic progress.

Again taking the Pennsylvania as an illustration, its freight train operations have been virtually revolutionized within a



Freight currently being handled by the Pennsylvania Railroad e approximately 120,000 cars and would fill a single train over City across New Jersey, Pennsylvania, Ohio and Indiana, thr

**PS • • • 215 MINUTES**



onal" are among the most outstanding train performances  
is and its Capital at better than a mile a minute, this  
The quick "pick-up" of powerful electric engines permits  
th the convenient intermediate shops.

comparatively few years. Formerly, most freight moved forward from division to division as cars awaiting forwarding accumulated in the division yards. Now the Pennsylvania's entire freight service is so arranged that it moves by schedules like those of passenger trains. Many freight trains, notably those carrying merchandise, fresh fruits, vegetables, meats, live stock and dairy products, move at what would have been considered a few years ago to be creditable passenger speeds. In fact, speeds of 50 miles per hour are frequently attained in the regular daily operation of Pennsylvania Railroad "expedited service" freight trains.

Merchandise is now moved to destination overnight up to distances of 400 miles and more, and in connection with the pick-up and delivery service is transported not merely from terminal to terminal, but from door to door.

### **Days In Transit Saved Shippers**

In the longer hauls, as between the eastern seaboard cities and the railroad's western and southwestern terminals, such as Cleveland, Detroit, Chicago, St. Louis, Louisville and

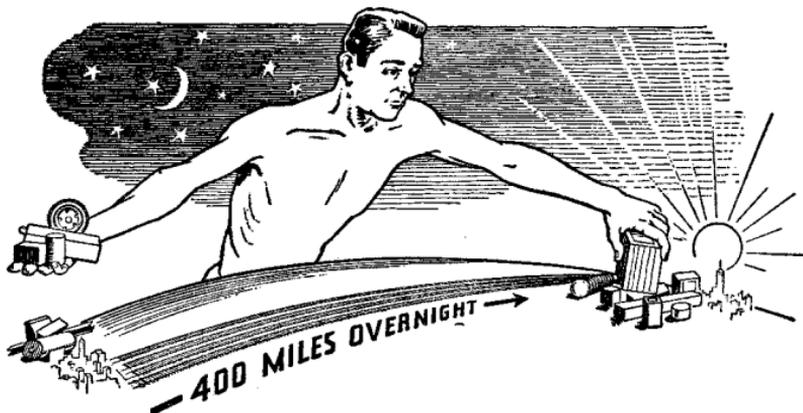


each week on its faster schedules requires for its transportation  
1,000 miles long. Such a train would extend from New York  
ough the City of Chicago and then across Illinois into Iowa.

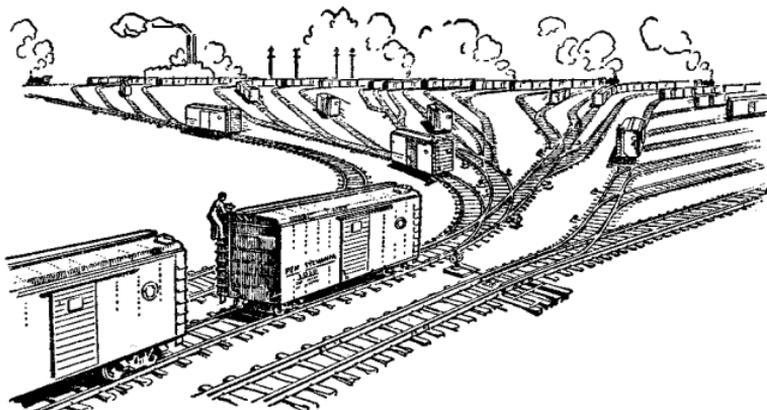
Cincinnati, not merely hours but days have been cut from the time freight now consumes in transit on the Pennsylvania's scheduled freight trains. Proportionate savings have been effected to and from intermediate centers.

Even since the scheduling of freight trains—in connection with which many were given appropriate names—very extensive savings in running time have been effected, as the following examples of representative trains show:

Name of Train	From	To	Old Schedule		Present Schedule		Time Saved	
			Hrs.	Min.	Hrs.	Min.	Hrs.	Min.
The Mercury.....	Chicago.....	Jersey City..	87	30	52	00	35	30
The Packer.....	Chicago.....	Jersey City..	80	00	47	30	32	30
Star Union Line..	Jersey City.....	Chicago.....	100	00	50	15	49	45
Uncle Sam.....	St. Louis.....	Jersey City..	105	00	47	00	58	00
The Ranchman ...	St. Louis.....	Jersey City..	111	15	51	00	59	15
The Comet.....	Jersey City.....	St. Louis.....	119	30	55	00	64	30
The Spark Plug...	Cincinnati.....	Jersey City..	85	00	44	00	41	00
The Arrow.....	Jersey City.....	Detroit.....	83	00	34	00	49	00
The Meteor.....	Jersey City.....	Cleveland....	74	30	28	00	46	30



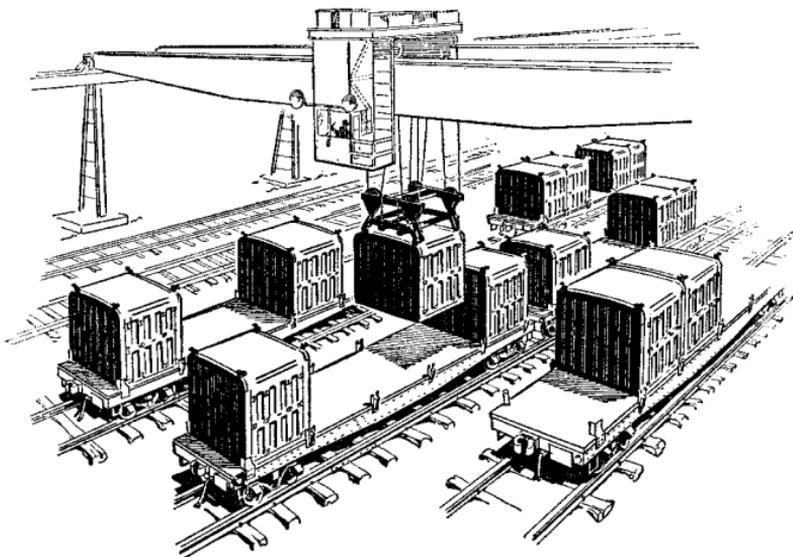
"Overnight" movement up to and even beyond 400 miles is now the rule in handling freight on the Pennsylvania Railroad, and, in combination with pick-up and delivery service, merchandise is given complete transportation from door to door.



Less time spent in yards and quicker classifying and dispatching of heavier freight trains, moving unbroken over longer distances, have been important factors in saving time on freight deliveries. Under modern methods certain Pennsylvania Railroad yards can now “put over the hump,” and classify to destination, a train of 100 cars in 20 minutes.

Faster speeds over the rails have been only one factor in providing quicker freight schedules. Equally important—perhaps more so—has been the adoption of improved methods by which time consumed in yards and terminals has been greatly reduced. By advanced practices in classifying and dispatching and the use of powerful locomotives, freight trains now move unbroken over much longer distances than formerly, eliminating the delays of rehandling at intermediate yards. So highly has work of this character been systematized that in some yards a train of 100 cars, bound for many different points, is “put over the hump” and reclassified, according to destination, at the rate of five cars a minute, or 20 minutes for the entire train.

Less-than-carload freight, in busy centers, is assembled in large lots at “concentration stations” for economical and



Steel freight containers, loaded on specially equipped flat car, are redistributed from car to car by overhead cranes to provide through service to destinations for which business is too light in volume for the operation of through box cars.

speedy forwarding in through cars, without rehandling or transferring from car to car en route. The use of portable steel containers, loaded in batteries of five and eight on specially equipped flat cars, also contributes to faster movement of merchandise freight where the volume is not sufficient to warrant through box cars.

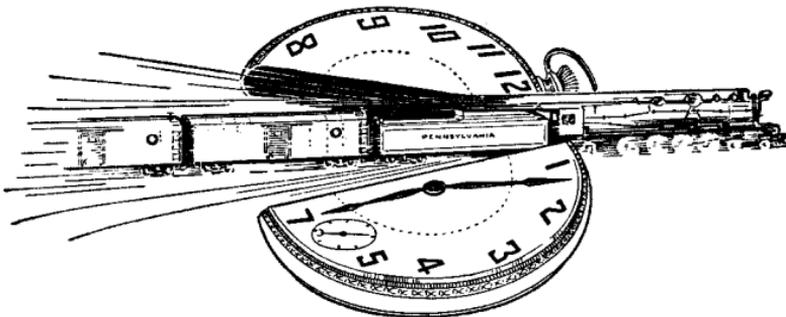
As a result of these and other refinements in methods of operation, adopted over a relatively brief space of years, the average speed of freight trains on the Pennsylvania Railroad has been quickened approximately 43%. Translated into concrete terms this means about 3 hours cut from the

average time required by a freight train in covering 100 miles of run.

## Quickens the Flow of Commerce

What does this signify in terms of saving to the public? Briefly, this:

The average distance a shipment of freight is carried on the Pennsylvania Railroad is in the neighborhood of 220 miles. A saving of 3 hours per 100 miles, therefore, means in round figures an average reduction of about seven hours in the time each shipment is on the road. The volume of freight at present moving on the Pennsylvania Railroad requires about 120,000 cars per week for its transportation. Obviously, an average saving of seven hours in the length of time each shipment is in transit, when applied to the handling of so large a flow of traffic, must constitute an important element in the prompt and efficient conduct of industry and trade in the Pennsylvania Railroad's own territory, and indeed throughout the entire country.



Improvements of recent years in Pennsylvania Railroad freight transportation methods save an average of 7 hours in the time each shipment spends in its journey over the railroad.

Accompanying the faster movement of freight have been important forward steps in the effectiveness and economy of the entire range of operations involved in its transportation. As an example, due to improved methods and equipment modernization (including the building of 17,000 new all-steel freight cars in two years, valued at over \$40,000,000 and embodying the most advanced features of design), the Pennsylvania could today move its nearly record freight traffic of 1929 with 27,000 fewer cars than were required at the time. From 1933 to 1936 the railroad's less-than-carload business increased 22.5%, but it was handled with 274,455 fewer box car loadings, or a saving of 27.9% in these operations.

### **Why Railroads Hold Leadership**

Despite all change and the entry of new agencies into the field, the railroads do the yeoman work of transportation in America, performing 70% of the freight and upward of 60% of the passenger service rendered for hire, between all points, by all agencies operating. They retain the place of leadership for but one reason, namely, that, for the great majority of purposes, they provide what the public considers to be the most advantageous and useful combination of safety, speed, comfort, regularity, frequency and low cost of service offered by any public carrier, together with the ability to operate practically without regard to weather conditions.

**F**OR these reasons, the wide-spread quickening of railroad service throughout the country, with the accompanying unbroken march of progress in the advancement of other standards of performance, constitutes an achievement of far-reaching importance to the Nation and all its people.