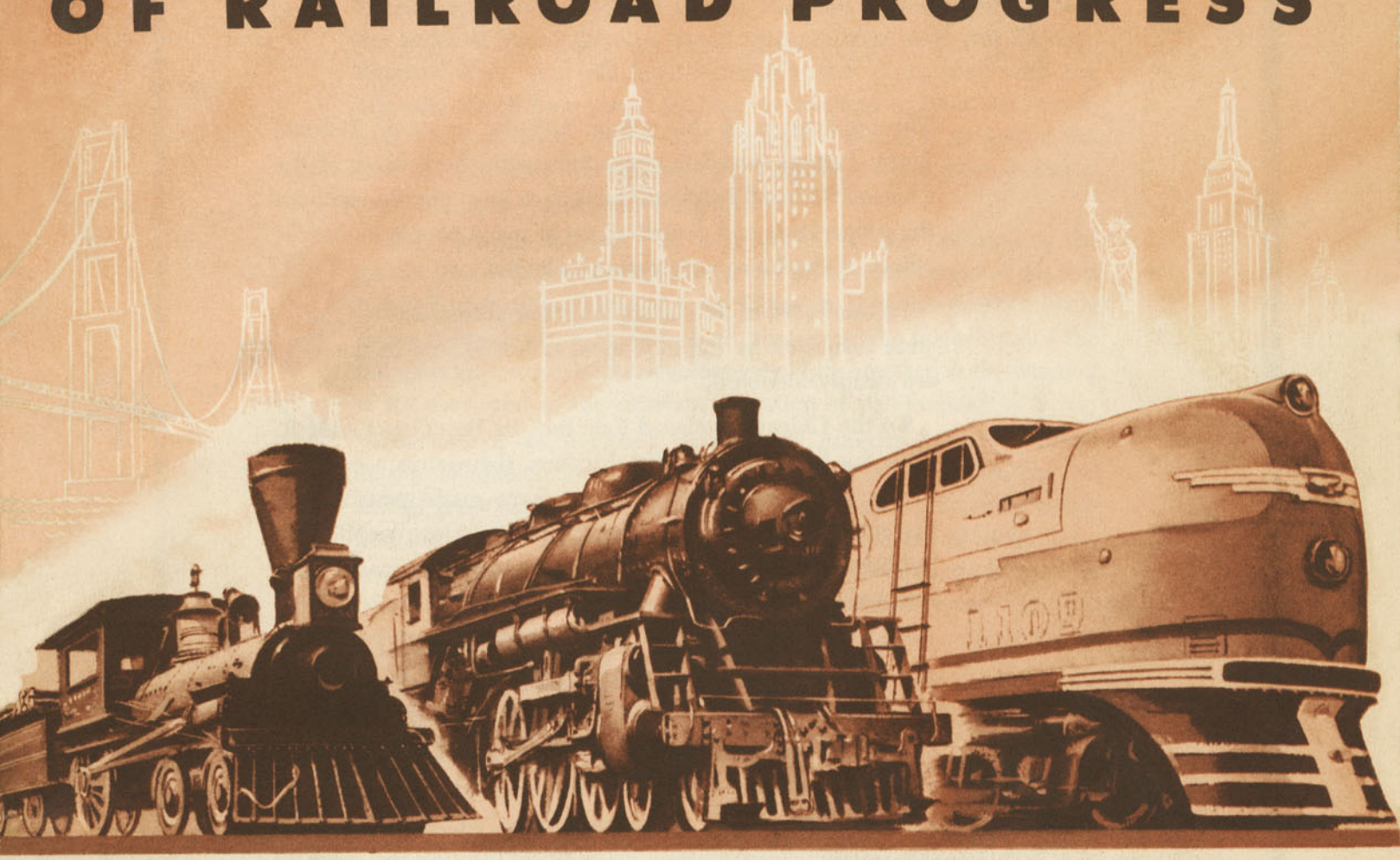
100 YEARS
OF RAILROAD PROGRESS



RAILROAD POSTER STAMP ALBUM

PUBLISHED IN COOPERATION WITH THE

CHICAGO RAILROAD FAIR

CHICAGO, ILLINOIS

1848 • 1948

The publication of this Album and the series of Railroad Poster Stamps issued in connection with the holding of the Chicago Railroad Fair would not have been possible without the cooperation and contributions of many people in various offices of the Fair-participating railroads.

Pictures used in the stamps and their accompanying stories were furnished by the individual railroads, and to them we are deeply indebted.

To the Chicago Railroad Fair Inc., its President Lenox R. Lohr, his fellow officers and directors, themselves executives of the cooperating railroads who have made possible the presentation of the Exhibition to the American public, the publishers are also much in debt for their encouragement and assistance.

To all and any of the men and railroads that brought the West into being and fulfillment and contributed to 100 years of railroad progress and the progress of our nation, and to the many Americans, to all young people, to railroad amateurs and enthusiasts, whose imaginations have been stirred by the history of railroading or whose hearts have quickened at least once or many times through the years at these most grandly fascinating mechanisms conceived by man . . . railroad locomotives . . . this material is dedicated.

100 YEARS OF RAILROAD PROGRESS

FOREWORD

When you have assembled in this Railroad Poster Stamp Album the series of Poster Stamps issued in connection with the Chicago Railroad Fair, you will have become better acquainted with the railroads which have joined together in celebrating 100 years of railroad progress. Never before has the legend of the West and of the men and railroads that followed the Paths of Empire, been depicted in such a unique and interesting manner.

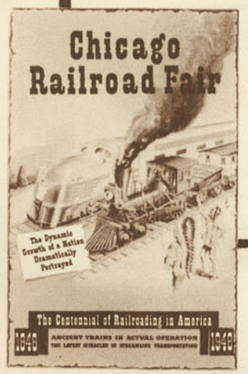
The Chicago Railroad Fair is presented by the railroads of the nation. The occasion it celebrates is the 100th anniversary of the first railroad operation westward from Chicago. It is designed to bring home to hundreds of thousands of Americans the contributions the railroads have made in the development of our country, in the winning of its wars, and in the constant elevation of its standard of living.

Themselves an inspiring example of America's many brilliant accomplishments, our railroads have played a stellar role in the rise of this great nation. From the days of 1829 when those early wood-burning locomotives first explored the possibilities of swift, safe, mechanically powered land transportation, the railroads have been constantly the probing fingers feeling farther and farther into the future, making possible and assisting at every turn, the rapid development and expansion of this great continent.

Your visit to the Chicago Railroad Fair will prove an inspiring adventure in the appreciation of our national heritage.

L R Lohr

PRESIDENT
Chicago Railroad Fair, Inc.



THE ATCHISON, TOPEKA and SANTA FE RAILWAY SYSTEM

In the 1940's the most romantic call in America still was "Booo-ard!" It was sung every day by a thousand conductors, echoed by ten thousand trainmen and Pullman porters, re-echoed by half a million passengers. It was almost the oldest call in the country and to most people it still means adventure and hope and new horizons.

It meant a surging rush over singing steel, the wail of a chime whistle and the rhythmic click of the rail joints. It conjured up pictures of the west wind whipping waves across prairie grass and grain, of white clouds drifting across blue sky, of snowpeaks and tawny deserts, echoing canyons and lush, timbered valleys. As a creator of pleasant images of things to come it had no equal in all the world.

The Southwestern United States was built by tough, daring men who bound her leagues together, first by foot trails and wheel trails in the sod, and then with steel track. Over this track they sent people and goods rolling back and forth, more and more, faster and faster. ...Trappers in buckskin, Indians in breechclouts, explorers in shining armor, soldiers in crimson and gold and blue: these led the way.

But men in denim and leather built the empire with timber and iron, the hiss of steam and the whirr of wheels.

This great empire, from the Missouri and Mississippi to the South Pacific Coast, from the Arkansas River to the Mexican border, was built by railroads—and the greatest builder of all was the Santa Fe.

The Santa Fe's builders were not inspired idealists, nor did they build the system to carry the torch of civilization into the West. It was a business for some, and an investment for others. Some of them made money, some didn't. But, they all gambled their time, their money and their brains in an era when it wasn't even certain the Union would keep on existing. They went through years of heartache and grim disappointment. The engineers and surveyors lived hard, tough, dangerous lives in wild country. Construction crews took their chances with Indian raiders, bad water and the rabble that followed the track. Train crews, operators, station agents lived and worked in peril, not only from evil men, but from cloudburst, blizzard and buffalo herd.

The Santa Fe started as a little prairie project in a Kansas frontier town. It fought for its life against the things the settlers battled, and, like most of them, it won. It took its steel track high into the snowpeaks of the Rockies, the Sierras, the Sangre de Cristos and the Glorietas, along the friendly Arkansas, the Rio Grande and the Brazos. It threw steel across the Mississippi and the Missouri, the Canadian and the Colorado, the Red and the Cimarron, the Illinois and the Des Moines.

It fought its way across blazing deserts through rock canyons and prairie hills to blue water on the Gulf and the Pacific and the Lakes. It planted towns on the plains and in the hills and peopled them with pioneers with the will to fight and live.

It lugged the necessities and the small luxuries of life to the grangers, and hauled their wheat, corn and cattle back to market. When they went broke in drought or grasshopper plague or Indian uprising, it hauled them and their plows, furniture and stock back to the settlements, free, so they could refit and go West to try again.

Settlers might quit, but the Santa Fe never quit.

It battled its way to the Pacific and the Gulf and the Rockies. It went broke and tried again—and won.

When the new war came it transformed itself overnight into a great steel shuttle between the rivers and the Lakes, the West Coast and the Texas shore, highballing ever-mounting tonnages at ever-increasing speed. While it did this, it managed, somehow, to build for itself and the nation a better, more efficient transportation machine so that no matter how tonnage figures mounted, no matter how many new thousands of people poured into its trains, there always was just a little leeway between what it had to do and what it could do. Demand raced with capacity.

Capacity always won—thanks to the men and women who built and operated the machine that rolled more tons more miles than they'd ever been rolled before.

As victory came to the nation the Santa Fe was able to take stock and found that it had met every demand made upon it during World War II. At war's end the picture was encouraging. The system was in good physical shape. During the war, despite the enormous overload its trains had carried, the plant had been improved, new facilities constructed, motive power built up and the financial position strengthened. There was a need for new rolling stock, but this was on order and in production. The system was set for a fast, profitable run through the peacetime years ahead.

The latest achievement of the Santa Fe has been the inauguration of daily service on the Super Chief and El Capitan between Chicago and Los Angeles and the addition of a new streamlined luxury train between Chicago and Galveston, the Texas Chief.

The Super Chief, the all-Pullman luxury train, and El Capitan, all streamlined chair-car train, operating since May 12, 1936, and February 22, 1938, respectively, have a running time between Chicago and Los Angeles of 39¾ hours. Both are Diesel powered and started daily service Feburary 29, 1948.

The daily Super Chief is an all-room train—each room being equipped with electronic equipment which makes available a radio channel, popular music, semi-classical music, and public address system in the lounge and room accommodations throughout the train.

El Capitan, the all-chair-car train operating between Chicago and Los Angeles, carries the specially designed revolving-reclining and adjustable chairs, with form-fitting contours for the foam rubber cushion, back and head rest. The cars are manned by one chair-car attendant for each two cars and the train carries a Courier Nurse, who is a registered nurse, for helping mothers with small children and to aid in a general over-all program of the Santa Fe to give the passengers as much service and comfort as they desire.

The operation of the new fast streamliner, the Texas Chief, started April 3, 1948, and has a running time of 26 hours and 15 minutes between Chicago and Galveston. It carries Pullman accommodations and chair cars with the latest innovations, including the leg rests which fit in a fixed position beneath the seat when not in use. The Texas Chief is equipped with electronic equipment the same as the Super Chief, making available to the passengers their choice of a radio channel, popular music, semi-classical music and public address system in the lounge, dining and Pullman through cars.

The long string of silver cars slides out of Chicago, swinging the curves, swaying at the crossovers, and then lines out on the arrowflight track to the Southwest. The firm, skillful hands of Octave Chanute lift her across the Illinois and the Grand, the Des Moines and the Mississippi and the Missouri. The old ferryman at Westport Landing leans silently on his long steering oar as she rushes along the Kaw, past the ghosts of the pioneers of long ago.

In the darkness, the erect figure of Colonel Holliday (the man who started the Santa Fe) stands, his silvery beard windblown, left hand on his goldheaded cane. He lifts his high hat with a touch of fatherly pride and a smile of modest triumph as the train sings along the steel rail.

Santa Fe progress is portrayed with Old-Timer, Engine #2414, that saw service back in '98, alongside a new, 5400 H.P. Diesel locomotive.

An array of Santa Fe Diesel power standing outside the engine house at Barstow, California, an important Santa Fe terminal and division point.

New 6000 H.P. Diesel-electric engine rolling its train in Cajon Pass, California. Many gold seekers trailed through here in 1849.

The steel steam beauties here on each side of a sleek, streamlined Diesel-powered beauty indicate the evolution of motive power.

The Santa Fe, 3460 series, is of the 4-6-4 type, an improved Pacific type.

THE BALTIMORE & OHIO RAILROAD COMPANY

Giant Mallet locomotives—pride of Baltimore & Ohio's freight fleet—can each move 15,000 tons at an average speed of 30 miles an hour.

Sentinel Service, inaugurated by the Baltimore & Ohio March 3, 1947, has brought Siding-to-Siding Dependability to the movement of fast carload freight.

121 YEARS OF PROGRESS ON THE B & O

"Look at that beautiful train!" How many times we hear an exclamation like this as one of the Baltimore & Ohio's blue-and-gray streamliners flashes by. Watching such a train in its modern dress and swiftness, it may be difficult for us to visualize its humble forerunner of a hundred and twenty-one years ago. Yet, that long-forgotten puffing pioneer bears the same relationship to the Baltimore & Ohio of today as the rugged America of 1827 bears to today's leading world power.

Through the years, the story of the Baltimore & Ohio Railroad has paralleled the story of the United States—in the overcoming of obstacles, in the tapping of new territories, in the building up of powerful industrial strength. With the nation, the Baltimore & Ohio has participated in five major wars: and with her, too, has constantly expanded its area, until today there are 11,000 miles of B & O track serving thirteen great states and the District of Columbia.

With the honor of being, literally and historically, America's first railroad, the Baltimore & Ohio has striven to maintain that honor in many other ways: through the constant improvement of schedules, through the development of finer equipment, and by doing anything which would increase the pleasure of travel for passengers and the efficiency of service for shippers.

Nowadays, air-conditioning in railroad cars is taken for granted; yet that, too, required a pioneer, and the Baltimore & Ohio was the pioneer. The first mechanical air-conditioned passenger car (the Martha Washington diner) was placed in regular and continuous service by the B & O in 1930. On May 24, 1931, the first train—B & O's Columbian—completely equipped with air-conditioned cars, was put in service between New York and Washington. The success of air-conditioning was immediate, for it brought the solution of two great travel problems of those days: how to keep cool and how to keep clean. Year-round comfort—surpassing even the comfort of the average home—was achieved.

Today, the B & O is known as the "Route of the Diesel-Electric Streamliners," and most of its principal trains are powered by giant Diesels. Here, too—in the application of a modern motive force to rail transportation—railroad history must credit the B & O with another "First"; for it was this progressive railroad that, on August 22, 1935, placed in service the first Diesel-electric locomotive ever to haul passengers on a long distance run. Many a person today, as he glides along behind a great Diesel, thanks the initiative of the B & O for this substantial contribution to the smoothness of rail travel.

Nor has the history of Baltimore & Ohio enterprise been confined to passenger service. The years have seen a constant speeding up of freight schedules, and a continual replacement of freight equipment with improved, more modern types. In recent years, the great B & O locomotive fleet has been augmented by powerful Mallet coal-burners as well as Diesels. And on March 3, 1947, came Sentinel Service, the most recent example of the Baltimore & Ohio's progressive thinking.

Sentinel Service has brought to shippers that long-wished-for feature: siding-to-siding dependability on fast carload freight. This is accomplished through an ingenious coordination of published cut-off and and latest placement times with established schedules, and is further supported by a system of automatic records, which immediately notify consignee and consignor of cut-outs and reforwardings. This innovation has received enthusiastic comments from shippers all over the country.

The Baltimore & Ohio was the first Eastern railroad to introduce Stewardess-Nurse service. That was eleven years ago; and, today, the attractively uniformed Stewardess-Nurse is a friendly and familiar figure on most B & O feature trains. Since the inauguration of the service, these carefully trained Stewardesses have traveled 22,000,000 miles—lending their assistance wherever needed. They're specially helpful to infirm persons and the elderly, to mothers with babies and children traveling alone. They'll mail letters, send telegrams, point out places of interest. They've put another personal touch into B & O travel that has brought thousands of letters of appreciation.

Invariably, each progressive step that has punctuated Baltimore & Ohio history through the years has benefited B & O's patrons. Right now, the talk of travelers is the new train-telephone on the Royal Blue. By means of this remarkable device, passengers riding between New York and Washington can make telephone calls while en route—and receive them as well!

The service is made possible by a combination of radio and wire transmission. Voices travel by radio from the Royal Blue to the nearest Bell mobile receiving station, and from there by wire. Voices are similarly relayed to the train. This has proved a great boon to businessmen—a modern service worthy of the age of radar and atomic power.

And, although the Baltimore & Ohio is proud of its modern equipment, and of the even more modern equipment on the way, it is equally proud that certain of its features remain as always. One of these is courteous service—the smile that accompanies information given, a conductor's friendly "good morning," the extra effort of a waiter to please. Another is its delicious meals—with the specialties made famous by B & O chefs: Maryland Spoon Bread, Corn Bread Pie, Hush Puppies, and others. A third is the ability to get passengers to their destinations on time. For the first five months of 1948 Baltimore & Ohio feature trains made the outstanding record of nearly ninety percent on time.

As the B & O puts it, "Come Diesels and Strata-Domes, we will never change these traditional features." And the policy is a good one for these features have contributed greatly to the building of the Baltimore & Ohio's nation-wide popularity.

No story of the B & O would be complete without a mention of its scenic and historic route. Passengers are thrilled by the views they see—of beautiful farmlands and rugged mountains, of rivers sparkling like silver. Names such as Harper's Ferry bring back memories of forgotten days, as the trains wind their way through country where once sounded the tread of British regiments and the whoops of painted warriors.

This history is necessarily brief—touching but a few of the highlights. It serves to point out, however, the background and breadth and resourcefulness of the Baltimore & Ohio—a railroad with a great past and a greater future.

The first Diesel-electric locomotive to haul passengers in long distance service was used on a Baltimore & Ohio train—August 22, 1935.

Two-thirds of the bituminous coal mined in the United States is mined in territory served by the Baltimore & Ohio lines.

The "Cincinnatian," Baltimore & Ohio's first post-war Streamliner, made its initial run between Baltimore-Washington-Cincinnati on January 19, 1947.

BOSTON & MAINE RAILROAD

It was the B & M's Antelope, a 13-ton, 35-horsepower locomotive which had been built to order in England, that in 1848 made the 26 miles from Lawrence into Boston in 26 minutes, the first mile-a-minute run of history.

Classic 8 wheelers, the American type 4-4-0's, even after the turn of the century, hustled over the rails of the Boston & Maine between Boston and Reading Highlands.

Some locomotives due to design are better at hauling light trains at high speeds or dragging heavy freights at lower speeds. The Mountain types, 4-8-2's, are dual service machines, used for both passenger and freight.

On June 24, 1835 – seven years after the building of the first railroad in the United States – a primitive locomotive, built by George Stephenson, pulled out of Boston for Lowell, Massachusetts, 25 miles away, dragging behind it three "stage-coaches on flanged wheels" painted in vivid colors – the first steam-powered railroad train in New England. This marked the beginning of what is now the far-flung Boston and Maine system.

The Boston and Lowell Railroad was chartered in 1830, and became one of the 165 railroad properties eventually merged into the Boston and Maine. It was taken over by lease in 1887, and later bought outright. It is now a small part of the New Hampshire Division of the Boston and Maine system.

Actually the conception of the Boston and Maine occurred in the town of Andover, about eight miles off the line of the Boston and Lowell, early in 1833. That community desired a connection with the Boston & Lowell, and obtained a charter under the name of the Andover and Wilmington on March 15, 1833, for the building of an eight-mile track for this purpose. Even before construction began, however, the directors had visions of a road which would eventually reach to Maine and their plans were made accordingly. The builders used English rails instead of the fishbelly type found on the B & L line, and this first road also had cedar crossties. The financial times were not the best for this new venture but on August 2, 1836, the line was opened with two locomotives, the "Andover" and the "Haverhill."

The names of these two locomotives suggested the future plans for the road, since in 1835 its name was changed to "Andover and Haverhill" and a nine-mile extension to Bradbury, across the river from Haverhill, was finished in October, 1837. Meanwhile, expansion to Portsmouth, N. H., and to the Maine boundary to connect with the Portland, Saco & Portsmouth, was being considered and towards this end a charter was obtained in New Hampshire under what was to become a great name in railroad history, the "Boston and Maine."

By 1840 the line had developed to Exeter, and was known as the Boston & Portland, the name of Boston & Maine being used for the planned Maine extension. The connection with the Portland, Saco & Portsmouth at South Berwick, Maine, was made in 1842. Through all of these expansions, the B & L lines from Boston to Wilmington were being used by the B & M trains, but this arrangement was not entirely efficient and the B & M in 1844 began building its own tracks into Boston. This job was completed in 1845, the tracks leading into a new brick station at Haymarket Square.

When the road first entered the city of Boston, a station was built in Haymarket Square and to reach it the tracks crossed several streets. By ordinance of the city government, steam locomotives were not permitted to cross these streets and horses were employed to haul the cars in and out of the station. Long after this practice was discontinued, passenger coaches of the old Boston and Maine still had ring-bolts at each corner to which the horses had been hitched.

Over the years of its existence, the B & M has acquired a total of 165 railroad properties and the story of its growth is therefore one of constant expansion and development of its holdings. One of the early large mergers was with the Eastern Railroad of Massachusetts, a line which ran from Boston to Portsmouth, N. H., and joining with the Portland, Saco and Portsmouth road. The Eastern Railroad itself has an interesting history and it was in 1884 that it was leased to the B & M, being merged entirely in 1890. This union almost doubled the mileage of the B & M and in addition gave the B & M control of all the territory west and southwest of Portland.

Railroads providing high-ball freight and merchandise trains from terminals to terminals almost as swiftly as passenger trains are turning to modern Diesel locomotives for power.

A super-deluxe post-war Streamliner is the "Kennebec," which runs the 115 miles nonstop between Portland, Maine, and Boston on a fast schedule.

Another acquisition was the Fitchburg railroad in 1900, a road which ran through the famous Hoosac Tunnel. The Fitchburg had begun the tunnel in 1851, to connect Troy, N. Y., with Greenfield, Massachusetts. The tunnel was a tremendous task, one that eventually required for its completion $20,000,000 and twenty-five years of time. The story of the tunnel, now a part of the B & M, is in itself of particular note for this was the first great railroad tunnel in the United States, being almost five miles in length, and was a gigantic undertaking, the magnitude of which was not fully realized when it was begun. Since 1900, electric locomotives have been used in the tunnel zone.

The Boston and Maine, as far as can be ascertained, ran the first mile-a-minute train in the United States. Charles Minot, in 1846, was superintendent of the B & M, and was an able and experienced engineer. Only 18 years after the building of the first railroad in the country, Minot built a locomotive which he believed could travel at 60 miles an hour. This locomotive was named the Antelope, weighed 13 tons, and its drivers were 5 feet, 6 inches in diameter. The Antelope was properly named, for on its trial run between Boston and Lawrence, a distance of 26 miles, it required but 26 minutes for the trip, pulling two coaches and traveling over a carefully patrolled track whose switches were spiked.

Progressiveness has marked the career of the B & M from its inception. In 1872 the road was one of the first to adopt Miller platforms and couplers. In the same year, Pullman parlor cars were put in use on its through trains. The use of telegraph lines was begun in 1861 and by 1872 the B & M had a complete system of telegraphic train dispatching with day and night service. At this time the vacuum brake was also used on all passenger train equipment.

In the early days of railroading, all locomotives were named. Gradually, this practice ceased and prosaic numbers replaced the more individual names. The Boston and Maine was among the last to abandon the naming of locomotives, but in recent years it has revived the practice, frequently making it the privilege of the public to suggest the names. In fact, the B & M has an outstanding reputation for its interest in and relations with its patrons, carrying on an unusual program of newspaper advertising in the last few years to further this interest.

The now famous and widely copied Snow Trains had their conception on the Boston & Maine. Several years ago it was suggested that Sunday trains to take city dwellers to the snow-clad hills and fields of Northern New England for a day of winter sports might be feasible. The plan was tried out, in a small way, and was immediately successful.

Other special services are now offered by the B & M for its clientele, such units as the Hike and Bike trains for bicyclists and nature lovers, Iron Horse Gallops for railroad fans, and many others.

The "Flying Yankee" of the B & M was the first stainless steel streamlined train east of the Mississippi River, and the second to be placed in regular service in the United States.

The B & M has made tremendous progress since the early days of the little eight-mile line first planned by its founders, and it has done so with a spirit of friendliness and cooperation with the cities and communities in its territory. It bids fair to maintain this same spirit in continuing to develop its heritage.

Burlington Route

BURLINGTON LINES

C.B.&Q. No. 9 was a wood-burning locomotive, typical of the steam power on the infant western railroads in the 1850's and 60's.

A modern Burlington Diesel-powered freight train is pictured on Horseshoe Curve in Wyoming. Massive Diesels such as these speed America's freight.

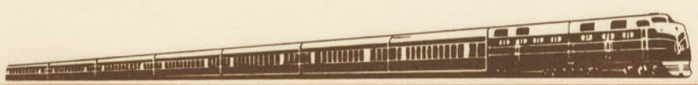
America's first Diesel-powered streamlined train was introduced by the Burlington in 1934. That year it ran 1015 miles non-stop Chicago to Denver, averaging 77.6 m.p.h.

"Old Eli" rolled Burlington's crack Kansas City-Chicago passenger train of the 1880's, carrying Pullman Palace Sleeping Cars, resplendent with rare wood inlays, plush upholstery and Pintsch gas illumination.

The new Twin Cities Zephyrs are the world's first Vista Dome trains in regular service. They were introduced by Burlington in 1947, bringing traveling America a new travel perspective.

The Burlington Lines system, comprising almost 11,000 miles of railroad in 14 states, had its origin in the Aurora Branch Railroad when a group of forward looking citizens of Aurora on February 12, 1849, obtained a charter to build a 12-mile railroad from Aurora to Turner Junction, Illinois, to connect with the Galena and Chicago Union Railroad for entry into Chicago.

In 1852 the Aurora Branch Railroad's name was changed to the "Chicago and Aurora"; the line being extended westward to Mendota the following year. As the "Central Military Tract Railroad" the line was built to Galesburg in 1854, and in 1855 the road had crossed Illinois to the edge of the Mississippi River, opposite Burlington, Iowa, with a total mileage of 177. During that year the Chicago and Aurora, Central Military Tract, and Peoria and Oquawka railroads were joined, forming the Chicago, Burlington and Quincy Railroad. Early the following year a branch from Galesburg to Quincy was completed, the new title exactly describing the location of the property.



BURLINGTON LINES

With the C. B. & Q. headed for the Mississippi just across from Burlington, Iowa, citizens of that town, with the cooperation of the C. B. & Q., started building the "Burlington and Missouri River Railroad" to the West in 1854 and, save for interruption by the Civil War, they kept going until the Missouri River was reached at East Plattsmouth in 1870.

The people of Missouri were thoroughly railroad-minded from the beginning of the railroad era. In 1846 the Hannibal & St. Joseph Railroad was chartered and by 1859 had completed a line across Missouri from Hannibal to St. Joseph.

Following the close of the Civil War the Hannibal & St. Joseph continued to improve its property. On November 9, 1868, the road obtained a direct physical link with the C. B. & Q. when a bridge was completed over the Mississippi River, and in 1869 the company opened the first bridge to span the Missouri River and establish through service into Kansas City. In 1883 the famous "St. Joe Line" was purchased by the C. B. & Q., becoming an integral part of its system.

The Hannibal & St. Joseph had the unique distinction of inaugurating the first United States Railway Postoffice. Wm. A. Davis, assistant to the postmaster at St. Joseph, conceived the idea that if the mail could be sorted on the train it could be transferred to the Pony Express immediately upon arrival, and thus permit an earlier start on the long overland race against time en route to California. Two mail cars were built in the Hannibal & St. Joseph shops at Hannibal, Missouri, and sorting the mail in transit began on July 28, 1862, with Fred Harvey, who later headed the great system of railway restaurants, as one of the two mail clerks on the initial run. The new method immediately proved a great success, and thus the great United States Distributing Railway Postoffice Service was born.

Meanwhile the Burlington had continued its expansion westward, across Nebraska and Colorado, reaching Denver in 1882, providing through service from Chicago. The expansion westward through Iowa, Nebraska and Colorado is the story of a whole generation, for it was almost 30 years from the time the first constituent road was projected west from the Mississippi until it reached its goal at Denver, Colorado. Into those years were packed the trials and hardships of frontier life, the difficulties of wartime operation, the dramatic episode of colonization, a major financial crisis, and finally, the period of robust prosperity that saw the great corn and wheat country come into its own.

Large-scale railroad building eventually gave the Burlington a main line from Chicago to St. Paul-Minneapolis; another main line from Kansas City through St. Joseph and Lincoln to Billings, Montana; another line of railroad from Denver to Billings through Central Wyoming; and a major extension of its Illinois lines to the coal fields of Southern Illinois. During this same period of construction and in the years that followed the Burlington either built or acquired scores of branch lines tributary to its main lines, forming rail networks over the rich agricultural regions of Northern Illinois, Southern Iowa, Northern Missouri, and Southeastern Nebraska.

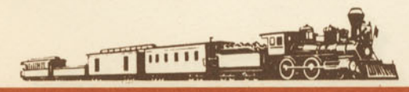
Today the Burlington's rails reach almost every important commercial center in the Middle West from the Great Lakes to the Rockies. It serves the great market cities along the Missouri River, the important industrial cities of the Mississippi Valley from Minneapolis to St. Louis. Chicago, Peoria, and St. Louis, marking the eastern boundary, are the great crossroads between all the East and all the West. Denver, at the other end, is the gateway through which moves eastward the fruit and vegetables, the minerals, timber and a large share of the oil of the West.

Acquisition of the Colorado and Southern lines from Denver to Galveston by Burlington in 1908, and its connections at Billings with the Great Northern and Northern Pacific, provide a tidewater to tidewater line from the Gulf Atlantic to the Puget Sound Pacific—the only diagonal, transcontinental, through route in America.

Hundreds of modern Burlington steam and Diesel locomotives have replaced the "tea kettle" engine of Lincoln's day; thousands of freight cars bear the Middle West's commerce; and hundreds of passenger cars carry millions of people each year.

The Burlington was the first to introduce the Diesel streamlined train in regular passenger service. This forerunner of today's modern streamlined trains ran 1015 miles non-stop between Chicago and Denver in 1934 at the amazing average speed of 77.6 MPH. Today, Burlington's famous fleet of luxurious streamlined Zephyrs speed passengers between important cities on its system.

In July, 1945, the Burlington introduced the first Vista Dome car, and in 1947 inaugurated the world's first Vista Dome train in regular passenger service, the new Twin Cities Zephyrs, bringing to the traveling public a new conception of passenger transportation.



CHICAGO GREAT WESTERN RAILWAY

The Chicago Great Western Railway commenced regular train service into Chicago in 1887. This was about the time when the North had recovered from the setback caused by the Civil War, ended 22 years earlier. The Confederate States had been readmitted to the Union and the U. S. consisted of 38 states. Colonization, business and progress were again on the march.

The system is known, appropriately, as the Corn Belt Route because its lines traverse our nation's most important corn producing area, a territory the most fertile for its size in the world, and highly developed with great industrial activities.

What is known today as The Chicago Great Western Railway had its beginning with a Minnesota charter issued on March 4, 1854, to the Minnesota & Northwestern Railway. Nothing was done, however, under this charter for thirty years; nothing was accomplished as to organization or construction until it was acquired by Alpheus Beede Stickney, one of the great railroad pioneers who lived in the age of empire builders that engaged in the development of the Middle West and of the West.

Great Western's contributions to the growth and development of the great agricultural region which it serves and its services to the industrial enterprises and cities along its line are a tribute to the vision and courage of Mr. Stickney, the road's founder and first President, who so early in the history of American railroads conceived, planned and established the Chicago Great Western Railway in a territory in which there have subsequently been such tremendous agricultural wealth, industrial expansion and growth of population.

From the company chartered to build a railroad from Lyle to St. Paul, a distance of 109 miles, all located within the confines of the State of Minnesota, the Chicago Great Western has grown to a system with main and branch line tracks of approximately 1500 miles serving directly the states of Missouri, Kansas, Minnesota, Illinois, Iowa and Nebraska, with terminals at such important cities as Kansas City and St. Joseph, Missouri; Minneapolis and St. Paul, Minnesota; Omaha, Nebraska, and Chicago, Illinois. The road directly touches such other important cities in this area as Dubuque, Waterloo, Marshalltown, Des Moines, Fort Dodge, Mason City and Council Bluffs, Iowa; Leavenworth, Kansas, and Rochester, Minnesota.

The construction of the first unit of track from Lyle to St. Paul was begun in September, 1884, and the line was completed October 2, 1885. Subsequently the road, by construction, through consolidations and by acquisitions was extended to Chicago, Illinois, in 1887, to St. Joseph and Kansas City, Missouri, in 1889 and to Omaha, Nebraska, in 1904.

What is now the main line of the Chicago Great Western Railway was first known as the Chicago, St. Paul and Kansas City Railway Company, which extended from Des Moines, Iowa, to St. Joseph, Missouri, a distance of 159.26 miles. Building took place during the years 1887 and 1888. Construction of the line was carried to completion in the fall of '88 and operation began on January 1, 1889.

The physical growth of the road has placed it in the rank of a Class I railroad of the United States. The Chicago Great Western Railway is today one of America's efficient transportation agencies.

Modern practices are a necessary part of the growth of any railway and the Great Western has kept pace with demand for modern facilities and motive power. It is a far cry from the Mogul "Red Stack" locomotives of yesteryear to the giant Diesel-powered 4500 H.P. locomotives of today that pull Great Western's highball fast freights over the road around the clock every day. Additional Diesel-powered locomotives, both for road haul and for switch service, are on order and when received these will complete the 100% Dieselization of the road's motive power. Improvements are continually being made by Great Western to develop the most modern transportation facilities which will provide the traveling and shipping public with rail service as efficient and modern as it is humanly possible to make it.

Ancestor of today's power Diesels were these 4-4-0's used in the early days on the Great Western.

Surging over the rails with a cargo of livestock, these C G W trains roll into the Chicago Stock Yards on regular schedules.

Badly needed by railroads today are thousands of new high-speed cargo carriers such as these 1948 boxcars being used by C G W.

Fast freights shuttle food, fuel, raw materials and finished goods to and from the four corners of the country, providing low-cost mass transportation on which mass production depends.

Diesel power on this C G W is the mark of progress and evidence of the road's continuing program for keeping pace with requirements of modern rail transportation.

CHICAGO and NORTH WESTERN RAILWAY SYSTEM

The gallant PIONEER—one of the oldest existing American-made locomotives intact today—was the first steam locomotive to puff in Chicago, 100 years ago, 1848.

"City of Los Angeles," gay Streamliner with a sister Streamliner, "City of San Francisco," made debuts in 1936, for deluxe luxury travel, Chicago to West Coast.

When first introduced on January 2, 1935, the "400" trains with oil-burning steam locomotives captured the attention of the public with mile-a-minute schedules between Chicago and Minnesota's Twin Cities. Today they are sleek, streamlined Diesel-powered beauties.

North Western with its great fleet of Diesel-powered Streamliners has a very modern Diesel servicing and repair plant at the railroad's Chicago shops costing well over $1,000,000.

The modern, streamlined, Diesel-powered Peninsula "400" is pictured at Milwaukee enroute to North Wisconsin and the upper Michigan peninsula.

Chicago . . . wonder city of the world! In 1848 it had its first railroad and its first railroad station when the Galena and Chicago Union Railroad, forebear of the Chicago and North Western, began operations. On October 25th in that year a second hand locomotive, appropriately named the PIONEER, which had been purchased in the East and shipped to Chicago on the brig *Buffalo*, was fired up, headed out on iron-capped wooden tracks, and made a run of 5 miles westward and return.

The Galena and Chicago Union Railroad had been chartered by the Illinois legislature in 1836 but it remained on paper for 12 years. Spearheaded by Wm. B. Ogden, Chicago's first mayor, as its president, construction from Chicago toward the West had begun in 1848.

Already from the East, three railway lines were building toward Chicago. Far-seeing men envisioned their village of Chicago, at the foot of Lake Michigan, as a potential railway center, destined as it was to become the world's most important crossroads of commerce. Cincinnati at this time was the most important western center, its prestige and growth having been enhanced by its rail line connection with the Great Lakes at Sandusky which had been opened in 1848. Cincinnati's population was 115,000; Chicago 30,000; St. Louis 78,000; and Louisville 43,000. Chicago loomed large as the gateway to the West—the great unknown West beyond the Mississippi—beyond which lay the Pacific Ocean.

The hope of Chicago rested with the invention of the steam locomotive. Chicagoans knew that railroad mileage had expanded in the East from 2,800 miles in 1840 to nearly three times that mileage and they eagerly contributed their 5 miles to the total of 1,400 miles which had been built in the whole of the United States from the first of the year up to October, 1848.

Came the big day, when the PIONEER on the tracks of the Galena and Chicago Union Railroad, forerunner of the North Western, made the first run out of Chicago for five miles to what is now Oak Park, Illinois. Thus began a century of progress and achievement in railroad development which gave this nation its great arteries of transportation.

Within a few weeks after its maiden run, the PIONEER brought the first sacks of grain and the first hogs and cattle by rail into Chicago, marking the year that Chicago began to change from a village of retail merchants to a produce trading center.

By 1864, the Galena and Chicago Union had become the Chicago and North Western Line. It had expanded from 10 to 800 miles, Chicago-Milwaukee service had been opened in 1855 and its tracks now extended from Chicago as far west as the Mississippi and were reaching north and northwest into the great states of Wisconsin and Minnesota. Another three years of construction, consolidations and acquisitions and the Chicago and North Western, enhanced by feeder lines, also reached across Iowa to Council Bluffs on the Missouri.

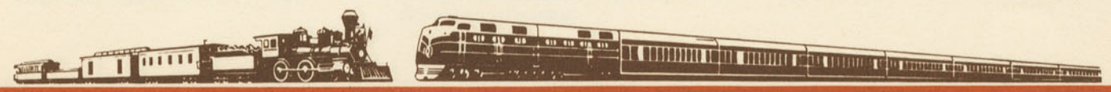
Opposite Council Bluffs on the Nebraska side of the river, was Omaha. Ground had been broken there on December 3, 1863, for the construction of the Union Pacific Railroad. The provision for quick and dependable transportation between the East and the Pacific was soon to be realized. The North Western assisted in this building by hauling great quantities of materials to Council Bluffs for delivery to the Union Pacific. Some of these were hauled by the Pioneer locomotive which had introduced railroading to the West several years earlier. The Central Pacific (now the Southern Pacific) was building eastward from Sacramento to meet the Union Pacific. On May 10, 1869, the two roads met at Promontory, Utah, and five months later, trains were in regular service to the Pacific Coast!

Ever since that time the North Western, Union Pacific and Southern Pacific have cooperated in operating through trains over what is now known as the Overland Route.

Such was the beginning of the pioneer road of Chicago and the West, but pioneering has been part and parcel of North Western's development during the past 100 years, evident in its record of efforts and accomplishments.

By 1926 North Western's expansion had about run its course. It was a vast system of more than 9,000 miles of road, serving nine states direct, its through trains over connecting lines reaching from Chicago to the west coast cities of Portland, San Francisco and Los Angeles. That same year it pioneered the use of a Diesel-electric locomotive in Chicago, the first used west of New York City. In 1935 the North Western introduced a mile-a-minute long distance train in the steam-powered, oil-burning "400," so named because it covered the 400 miles between Chicago and the Twin Cities of St. Paul-Minneapolis in 400 minutes. In 1936, in conjunction with the Union Pacific, Dieselized streamliners were put in service to the west coast, marking a new era for railroading in America. In 1939 the "Twin Cities 400" became the first sleek yellow and green streamliner, operating on even faster schedules. In 1942 the "400" became a streamliner fleet which today serves Wisconsin, Minnesota and Upper Michigan with such trains as the Peninsula "400," Valley "400," Shoreland "400," Capitol "400," Commuter "400," City of Milwaukee "400," and others.

This great fleet of modern streamlined trains is today's counterpart of the Pioneer of 1848 which first brought to Chicago and the West the many benefits of that fascinating and useful invention, the locomotive.



CHICAGO ROCK ISLAND and PACIFIC RAILROAD

Like most of Midland America's pioneer railroads, the Rock Island came into being as a cooperating unit with the waterway traffic of the Mississippi River system.

The founders met at Rock Island, Illinois, in 1845. A railroad was planned from there to La Salle, Illinois, head of steamboat navigation, to receive the traffic of the Illinois River. The "Rock Island and La Salle Railroad" was incorporated under a special act of the Illinois legislature two years later and Judge James Grant, of Davenport, Iowa, was named its first president.

Before construction of this new railroad began, however, an event of far-reaching importance occurred in California—gold was discovered! With the beginning of the Gold Rush, the founders realized that they had a means of transportation which would assume tremendous proportions in the development of the new western lands. Accordingly, Chicago suddenly became the potential railway center as a gateway to all the lands beyond the Mississippi. Three railroad lines were then being built towards Chicago from the east and on the obvious fact that these new lines would need connections beyond Chicago, the Rock Island & La Salle incorporators enlarged their plans and named the road the "Chicago & Rock Island."

Henry Farnum, a New England engineer and contractor who had built railroads in the East, was sent to survey the possibilities of a direct line from Chicago straight westward across Illinois to the Mississippi River. Returning, Farnum reported that such a direct route would be ideal and the stockholders of the railroad met in the old Tremont House, in Chicago, on December 22, 1851, to act upon this newly recommended route.

At the time of this historic meeting, actual construction on the road had already begun, starting at 22d Street in Chicago. Under the supervision of Henry Farnum, the Rock Island's roadbed continued to advance over the prairies of Illinois. The rails came from England, crossties from forest lands where Evanston, Illinois, now stands. On the advice of Farnum, the track was built with a 4-foot, 8½-inch gauge, as recommended by the English inventor and locomotive builder, George Stephenson, which measurement was the width between axles of the easy-riding English stagecoach. This width between rails eventually became the standard American gauge.

The pioneer builders pushed on over the Illinois terrain, sometimes over swampy prairie and muddy creeks and sometimes through tangled forests, bridging the Des Plaines River with a trestle, and finally reaching Joliet. Beginning in 1852 the railroad provided service from Chicago to Joliet, a distance of forty miles. The first run was made on Sunday morning, October 10, 1852, by a six-car train pulled by the original "Rocket," a wood-burning engine with a bulge smokestack and 4-foot 6-inch driving wheels. As a matter of interest, one of the first passenger locomotives ever operated over rails was named the "Rocket," a stately, and in its day in England, a thoroughly practical machine.

Meanwhile, the track builders pushed the rails on to Morris and La Salle, which had at first been planned as the eastern terminus of the road, and then to Peru, Bureau and Moline. On February 22, 1854, Farnum laid tracks into the heart of the town of Rock Island and the big job was done. To celebrate the great occasion, special trains were run, newspapers boasted of the event, and the then ex-President Millard Fillmore and Charles A. Dana, New York publisher, joined the crowds which traveled out to Rock Island.

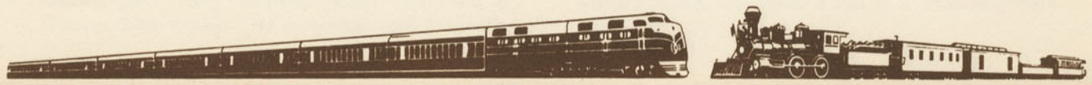
Thus by 1854 the goal of the founders to connect Chicago and the Mississippi River by rail had been fulfilled. The road had justified its name, the "Chicago & Rock Island."

At the same time, other railroad building was being undertaken on the western side of the Mississippi. From Davenport, Iowa, the "Mississippi & Missouri" road was being directed to the West. John A. Dix was president and William Ogden, vice-president of the road, and Antoine LeClaire, a picturesque part-Frenchman, part-Indian and all-American, had given vast tracts of land inherited from his Indian forebears for this new road. The financial interests of the railroad and that of the Rock Island were nearly identical, and the two worked in cooperation with the realization that the M & M was to be an extension of the C & R I.

The joining of the two roads was inevitable. But the Mississippi River was between them and thought by many to be an insuperable barrier. Notwithstanding, the pioneer builders announced they would erect a bridge to carry their trains across the river and formed a company for this task in January of 1853.

The bridge was finished in 1856, a tremendous mass of wood superstructure resting on stone piers which spanned the river in 250-foot leaps, carrying a single track. It was man's first bridge across the supposedly impassable Mississippi!

After the Rock Island crossed the Mississippi, its western terminus became Council Bluffs, on the western border of Iowa. To celebrate the arrival of the Rock Island at Council Bluffs, the road purchased the "Silver Engine America." This magnificent engine had been built by the Grant Locomotive Works of Paterson, N. J., for the International Exposition in Paris in 1867, where it won the highest award.



The engine was trimmed in German silver, with real silver handles and gadgets, and was on impressive display at Chicago's La Salle Street Station in May, 1869. On June 4 of that year, the Silver Engine pulled a special seven-car train from Chicago to the newly completed Missouri River terminal at Council Bluffs, Iowa, for her maiden trip.

By 1866, the Rock Island and the "Mississippi & Missouri" roads had been united. During 1871, the road expanded in Missouri. By 1877, Kansas had been added to the Rock Island roll of states and today the line to Colorado, and the line down to the Gulf of Mexico, and the southwestern line toward California via Tucumcari, New Mexico, all traverse that state.

Between 1886 and 1888, the company built into Oklahoma, Nebraska and Colorado. Not until 1890, however, did the Rock Island make direct connection from Council Bluffs to Fairbury, thus forming what is today the main line to Colorado. The Oklahoma-Texas border was reached in 1892; the following year the line reached Fort Worth, the Texas unit being known, at first, as the "Chicago, Rock Island & Texas."

In 1852 the entire rolling stock of the Rock Island consisted of the six-car train, three engines and forty freight cars. It was an inauspicious beginning compared with the modern array of units. Today 17 streamlined, stainless steel, Diesel-powered trains comprise the road's ROCKET Fleet.

The ROCKET fleet was born in Texas on August 29, 1937, when the TEXAS ROCKET went into service between Fort Worth, Dallas and Houston, establishing the first streamliner service in the Southwest.

Other great trains such as the GOLDEN STATE and the IMPERIAL make up the Rock Island's safe, fast train service. The GOLDEN STATE, a modern streamlined train, operates between Chicago and Los Angeles.

Thus the modest little road which had started out as a short line to connect the village of Rock Island on the Mississippi River with the steamboat service on the Illinois River at La Salle had, within 100 years since its inception, grown to be the huge 8000-mile system which today serves the Midlands, the South, the West, the Southwest and the Northwest. It does in truth connect the Mississippi with the Illinois River, as the founders intended, but in addition it joins the Great Lakes, the Pacific Ocean and the Gulf of Mexico!

A mighty web-like mass of wood superstructure resting on stone piers which took the river in 250-foot leaps was the first bridge built by man to cross the Mississippi River, completed in 1856.

The "America" on her maiden trip on June 4, 1869, pulled a special seven-car train from Chicago to Council Bluffs, Iowa, to celebrate the opening of Rock Island's Missouri River terminal.

An example of locomotive development is this oil-burning steam engine with 4-8-4 wheel arrangement; overall length with tender, 108 feet, 10 inches.

The Rocky Mountain Rocket is a sumptuous streamlined Diesel-powered train between Chicago and Denver-Colorado Springs, an example of modern, up-to-the-minute railroading.

The new Chicago-Arizona-Los Angeles "Golden State" is postwar deluxe travel at its streamlined, Diesel-powered finest.

C M ST P & P . . . THE MILWAUKEE ROAD

Built in 1848, this was the first locomotive of The Milwaukee Road. Old No. 1 was a wood-burner, measured 43 ft. overall, and weighed 46,000 lbs.

A great railroad in a great land, The Milwaukee Road salutes Chicago and its forward looking citizens in celebrating 100 years of railroad progress in the greatest railroad town in the nation. Marking this event, The Chicago Railroad Fair points up the distinguished position of railroad transportation in the development of our country and the development of Chicago as the country's most important transportation hub.

In another two years, The Milwaukee Road will look back on its first hundred years, and embark on its second century of progress imbued with the confidence of its founders.

Although The Milwaukee Road was chartered in the State of Wisconsin in 1847 as the Milwaukee and Waukesha Rail Road Company, it was not until its name had been changed in 1850 to The Milwaukee and Mississippi Rail Road Company that construction was begun. The company, under its charter signed by Gov. Henry Dodge of Wisconsin, had been granted the right to "locate and construct a single or double track railroad" between Milwaukee and Waukesha, Wisconsin, "to transport, take and carry property and persons upon the same, by the power and force of steam, of animals, or of any mechanical or other power, or of any combination of them."

Construction was carried on during 1850. By November of that year, five miles of track had been laid to Wauwatosa, and a number of prominent citizens were given a ride over the line.

The Milwaukee *Sentinel* chronicled the event in its news columns as follows:

FIRST RAILROAD RIDE IN WISCONSIN
EXCURSION TO WAUWATOSA

Yesterday afternoon, pursuant to an invitation from the officers of the Milwaukee & Mississippi Railroad Company, a number of our citizens took a ride on the cars as far as Wauwatosa. The company included the Mayor and Common Council, the President and Directors of the R.R. Company, a representative from each of our city papers, and a few other invited guests; making about two car loads in all. The Locomotive *Wisconsin* started with her freight shortly before 4 o'clock, and in *twelve* minutes bro't up at Spurr's Tavern in Wauwatosa, going at the rate of 30 miles an hour, without any special effort. The track was found to be in capital order, solid as rock, and comparing favorably in all respects with the best made Eastern roads. Among the guests we must not forget to mention our esteemed friend and former Mayor, Solomon Juneau, the founder and first settler of Milwaukee, who yesterday, for the *first time* in his life, saw a Locomotive and enjoyed a ride on a *Railroad!* He *did* enjoy it, emphatically, and where our readers remember that but *sixteen* years ago he was the only white man living here, when now we can show a city of 22,000 inhabitants, with *five* plank roads and *one* railroad "penetrating the interior," they will admit, we think, that he had good cause to do so. After a brief stop at Wauwatosa, and with a fair addition to their number, the guests were whisked back to the city, in a quarter of an hour, all highly pleased with the excursion, and proud of so good a beginning for our Railroad to the Mississippi. We heartily congratulate the intelligent and energetic President and Directors of the Road, at their successful progress thus far, and cordially wish them God speed in their great work. The enterprise is one which commends itself to the good wishes and hearty help of every citizen of Wisconsin.

—Mil. Sentinel

Thus was begun a mighty railroad system which today employs about 38,000 people and operates over 10,685 miles of line in twelve States from the Great Lakes to the Pacific Coast at Seattle and Tacoma, Washington.

On May 29, 1935, on the heels of the Chicago Century of Progress Exposition, The Milwaukee Road introduced its first Hiawatha between Chicago and St. Paul-Minneapolis, supplementing other fine trains in service between those points.

Improved again and again over the years, the Morning and Afternoon Hiawathas celebrated their 13th Anniversary on May 29, 1948, by stepping out with new equipment from end to end. There are brighter, handsomer coaches . . . radio-equipped Tip Top Tap cars for beverages and snacks . . . spacious 48-seat dining cars . . . luxurious parlor cars with new type drawing rooms and, for the first time, glass-enclosed Sky Top Lounges for sky-high scenic views.

The new Twin Cities Hiawathas are part of The Milwaukee Road's great building program that began with the presentation of the Speedlined Olympian Hiawatha between Chicago and the Pacific Northwest in June 1947. This year, nearly two and one-half miles of new passenger train cars will go into service. With new members being added to the Hiawatha fleet and existing Speedliners being re-equipped, this program will result in the modernization of almost all Milwaukee Road through trains.

1948—IT'S A HIAWATHA YEAR!—1948

The Milwaukee Road in 1948 is a far cry from the little line that so valiantly pointed its way west toward the Mississippi in 1850. Byron Kilbourn, Solomon Juneau and the other intrepid souls who launched the destiny of their little railroad could hardly have envisioned the magnitude of the achievement of their successors in welding together so vast a transportation system in less than 100 years from its beginning as a line between Milwaukee and Waukesha, Wisconsin.

Built in 1944, #266 was designed for freight or passenger train service. It measures 110 ft. overall and weighs 824,100 lbs. The tender carries 25 tons of coal.

Bi-Polar gearless electric motor #10250 is of the type used in passenger train service across the Cascade Mountains. This motor is 76 ft. long and weighs 512,000 lbs.

This 6000 h.p., 3-unit Diesel-electric was placed in service in 1947 on the Olympian-Hiawatha. It weighs 980,000 lbs., is 195 ft. long and is capable of speeds in excess of 100 m.p.h.

A brand new idea for sightseeing! These Sky Top Lounge cars are now in service on The Milwaukee Road's Twin Cities Hiawathas. Similar type cars will soon be on the Olympian-Hiawatha.

ERIE RAILROAD

The Erie Limited, drawn by a 4500-horsepower Diesel-electric locomotive, winds around a bend on its scenic New York-to-Chicago route.

6000-horsepower Diesel-electric and Series 3300 steam locomotives speed freight and passenger trains over the Erie Railroad System.

A powerful Series 3300 Erie Railroad locomotive completely spans the turntable of a roundhouse where it receives periodic maintenance.

Starrucca Viaduct, 100 years old, carries the heavy traffic on the Erie Railroad's main line across a valley near Susquehanna, Penna.

Carloads of perishable food move across New York Harbor aboard a float towed by an Erie Railroad tug. The Erie fleet has 236 vessels.

ERIE RAILROAD

The Erie Railroad, operating between Chicago and New York City, was chartered in 1832 as the New York and Erie Railroad Company. It was started to provide the communities in the southern tier counties in New York State with the transportation benefits which the Erie Canal was bringing counties in the northern part of the State. Surveys showed construction of second canal was not feasible but that a railroad could be built.

The original route of the Erie, a distance of 464 miles between New York and Dunkirk, Penna., was completed in 1851. At that time, it was the longest railroad in the United States and the second longest in the world. Not only was it the longest, but in the beginning, it was also the widest with a gauge of six feet.

It prided itself as a deluxe railroad because of its wide gauge tracks in those early days. It still does because, while track gauge has been narrowed to the standard 4 feet 8½ inches, the wide original road bed gives Erie freight trains an advantage of greater clearances to handle wider and heavier loads.

While it was not the first railroad to operate in the United States, the Erie is noted as having pioneered a number of operations which have become standard practice on other routes and thus contributed to the development of railroads in America.

During the early days, one of the Erie's conductors rigged up a rope from the coaches to the engine as a means of signaling the engineer to stop the train. The engineer resented receiving orders from the conductor and persisted in cutting the rope. After several instances, the conductor went to the front end and soundly thrashed the stubborn engineer. From that day, the conductor is in charge of a train's movements—a precedent in railroading established by that early incident.

According to railroad history, one of the Erie trains carrying the party of celebrities on the inaugural run over the newly completed route developed engine trouble. The general superintendent met the emergency by using the telegraph line along the tracks to wire instructions to the next station for a new engine. A few months later, he sent the first train order over telegraph lines. As a result of these experiences, he put a dispatcher in charge of train operations over each division—a universal practice in railroading today.

Radio communication between separated points on the train as well as to and from stations is now providing supplemental control of railroad operations.

At one time, the Erie had the biggest locomotive in the world—the Matt H. Shay. This powerful monster was capable of hauling 640 cars loaded with 50 tons of freight—equal to a train 4½ miles long.

It is also reported to be the first railroad to utilize Diesel power. In 1926, the Erie installed two 600-horsepower switch engines at New York City. Since then, additional Diesel locomotives, freight, passenger and switching types, have been added to take care of new requirements and as replacements for retired steam equipment.

The Erie Railroad is known as the "Route of the Perishables." It is the pioneer carrier of transcontinental fresh fruits into Eastern markets. Today, the Erie handles more than 90 percent of the transcontinental auction fruit arriving in the New York Terminal market. This perishable business has been built up over the past 50 years and special facilities and handling methods have been installed for its benefit. The NY-98, pride of the Erie freight service, rolls out of Chicago and has priority on the rails in order that fresh fruits and vegetables reach the tables of Eastern residents in perfect condition. The Erie's handling of perishables has helped to take California fruits and vegetables off the luxury list for residents of Eastern states.

More than 100 years ago, the Erie made it possible for dairy farmers in New York State to send whole milk into the city homes instead of churning it into butter for easier transportation. This was the beginning of the long familiar milk trains which raised the standard of living by improving the diet of city dwellers.

Erie rails end in Jersey City. In order to deliver shipments of goods into New York City and aboard ocean-going vessels tied up at the hundreds of piers in the harbor, the railroad maintains a navy which includes 236 tugs, ferries, lighters, barges, car floats and other vessels.

Passenger service of the Erie is also constantly being improved. With the addition of Diesel-electric locomotives, faster schedules have been made possible. Coaches and other facilities are continually being purchased or modernized to provide the traveling public with many comforts enroute.

These accomplishments and many others have brought recognition from railroad users to the Erie's diamond emblem. It has become known as the "Mark of Progress in Railroading."

GREAT NORTHERN RAILWAY COMPANY

Northwest's first train operated in Minnesota in 1862. Its wood-burning William Crooks still is Great Northern Railway's honored No. 1 locomotive.

This locomotive in 1907 powered Great Northern's Oriental Limited between St. Paul, Minn., and Seattle, Wash.—forerunner of today's Oriental Limited.

Back in 1862 a then-big but now-small woodburning locomotive and two passenger cars chuffed and clattered from St. Paul, Minn., to St. Anthony village, which later became Minneapolis.

This diminutive locomotive—the William Crooks—and its cars constituted the first train operated in Minnesota and a considerable adjacent area. The ten-mile journey was historic, too, as the groundwork for today's Great Northern Railway, with its 8,333 miles of length and 12,141 miles of tracks, its 834 locomotives and nearly 47,000 freight and passenger cars.

When the pioneer locomotive came to Minnesota in 1861 by Mississippi river steamer the St. Paul & Pacific Railroad was building that ten miles of line. The locomotive, named for William Crooks, chief engineer of the St. Paul & Pacific, still ranks as No. 1 on Great Northern's motive power roster. With its two cars it is on display at the Chicago Railroad Fair.

Six years before history was made by the William Crooks and its inaugural train a young man named James J. Hill left his farm birthplace in eastern Ontario. Aspiring to be a sea captain in Oriental commerce he headed west and en route planned to visit a friend at Fort Garry, now Winnipeg, Man.

When he arrived in St. Paul, head of navigation on the Mississippi, the season's last ox cart caravan had left for the north. He had to find work for the winter and did, as shipping clerk for a river steamboat company. That launched his career in transportation.

In 1865 Mr. Hill entered the field on his own account by representing a steamboat line connecting with eastbound rails at lower river points. A year later he was a railway agent. By 1870 he did general business in wood, coal and commissions and was in a Red River of the North steamboat enterprise.

With three associates, he acquired the St. Paul & Pacific in 1878. A year later the properties were reorganized as the St. Paul, Minneapolis & Manitoba Railway.

Settlers came into the new country. By 1881 the Manitoba operated 695 miles of track. Colonization progressed and traffic grew. Montana was reached by the line in 1887 to connect with others operating to the Pacific Northwest.

The Great Northern Railway Company, with "Jim" Hill as guiding genius, came into being in 1889 and in 1890 took over lines and properties of the Manitoba. When 1890 ended 3,260 miles were being operated.

The Rocky Mountains loomed ahead of westward expansion to the Pacific Ocean. John F. Stevens, an engineer bent on determining an easy, low-altitude route over the mountains, found Marias Pass at the headwaters of the Marias River in Montana in 1889. A bronze statue of him stands at Summit, Mont., 5,213 feet above sea level and now the highest point on Great Northern's transcontinental line.

Construction of the Pacific Coast extension westward from near Havre, Mont., began in 1890. Crews worked eastward, too. The final spike was driven near Scenic, Wash., early in 1893 to complete the transcontinental project, and by midsummer of that year Seattle and the East were linked by regular service.

Other development in the territory moved ahead with main and branch line construction, for success of "Jim" Hill's plan depended upon quick and sound colonization. Without development of the territory there would be no traffic for his trains. He had to "sell" the country, to make good after the settler moved in. Only then would more settlers come.

He ran immigrant trains, sold land, showed farmers how to improve methods, advocated crop diversification.

An example of the heavy duty four-unit Diesel-electric locomotives of 5400 horsepower in freight train service on Great Northern Railway.

Moving Great Northern freight trains is this giant articulated steam locomotive with 2-8-8-2 wheels. Over-all length is 120 feet.

Great Northern's new streamlined "Empire Builder" operates on a 45-hour schedule between Chicago and Seattle-Portland.

He sold and set up Minnesota's first threshing machine, and handled the first shipment of Minnesota-grown wheat. From brown office paper he cut the stencil for the label on the first barrel of Minnesota-milled flour. He imported the region's first purebred stock. He laid his rails, then labored to create traffic for them.

"Jim" Hill's cross-country venture was unique in that it went forward without land grants or other government aids. Only government lands ever received were those attached to 600 miles of Minnesota railway constructed by predecessor companies and acquired by purchase.

When mileage exceeded 5,000 by 1901 an outlet to and from Chicago was needed. To provide this, Great Northern and Northern Pacific jointly acquired control of the Chicago, Burlington & Quincy Railroad in that year.

Great Northern continued to develop and so did its territory as the years passed, and as both are doing today.

The railway in 1905 began operating its first famed Oriental Limited passenger train between St. Paul & Seattle. In 1924 the new Oriental Limited, finest train of its day just as the earlier one had been, went into service.

The 7.79-mile Cascade tunnel in western Washington, longest in the Western Hemisphere, was completed in 1929 to provide an easier crossing of the Cascade Mountains. Seventy-five miles of line in this area is electrified, including the tunnel.

Great Northern is known as the route of the Empire Builder. The basis is dual. It pays tribute to the memory and achievements of James J. Hill, widely known as "the Empire Builder" before his death in 1916 and since. It also distinguishes the Empire Builder, the line's leading passenger train.

In 1929, following completion of the Cascade project, the Empire Builder went into service as the line's top transcontinental passenger train. This name in 1947 passed to a five-train fleet of completely new streamliners, which operate in daily service on a 45-hour schedule between Chicago and Seattle-Portland. Great Northern was the first northern transcontinental line to usher in this 45-hour service. The Oriental Limited also operates between the same eastern and western terminals, on a slower schedule.

Great Northern trains carry freight, passengers, mail and express in the vast, diversified, and productive area between the Great Lakes and the Pacific. The railway operates in Wisconsin, Minnesota, North Dakota, South Dakota, Iowa, Montana, Idaho, Washington, Oregon, California and the Canadian provinces of Manitoba and British Columbia.

At Superior, Wis., Great Northern owns and operates the world's largest iron ore docks. Its Department of Agricultural and Mineral Development is active in behalf of the railway's territory. An Industrial Department fosters industrial opportunities and development.

Great Northern is the only railway serving Glacier National Park in Montana. The affiliated Glacier Park Company operates hotels and other services in the park. The Rocky Mountain goat, often seen by park visitors, is the well-known trade mark of the railway.

Always recognized as progressive and soundly managed, Great Northern has many railway "firsts" to its credit, in operating, engineering, equipment and other fields.

New equipment is being added steadily for freight and passenger service. Included are three streamliners for Seattle, Wash.-Vancouver, B. C., and St. Paul-Grand Forks, N. D., runs, delivery of which is expected in 1949.

100 YEARS HISTORY IN GRAPHIC OUTLINE

★WISCONSIN 30TH. STATE. ADMITTED TO THE UNION.	JAMES K. POLK 11TH PRESIDENT OF THE UNITED STATES	1848	C & NW's "Pioneer," first Locomotive in Chicago, opened the gates to the West on its initial run Oct. 25th.
GOLD RUSH TO CALIFORNIA.	March 5, 1849	1849	Burlington chartered to connect Aurora, Ill. with Chicago.
U. S. POP. 23,191,876.	ZACHARY TAYLOR 12TH PRESIDENT	1850	First Federal Land Grant made to Illinois Central.
★31ST. CALIFORNIA.	July 9, 1850 MILLARD FILLMORE	1851	Land Grants to railroads under Fillmore, 8,000,000 acres.
TRADE TREATY OPENS JAPAN.	13TH PRESIDENT OF THE UNITED STATES	1852	Rails from Detroit into Chicago completed.
WORLD'S FAIR OPENS. (N. Y.)		1853	Railroad Land Grants under Pierce totaled 19,000,000 acres.
N. Y. CHICAGO JOINED BY RAIL.	March 4, 1853	1854	Rock Island reached Quincy, Ill. on the Mississippi.
DRAFT TREATY WITH CANADA.	FRANKLIN PIERCE 14TH PRESIDENT OF THE UNITED STATES	1855	C & NW opened Chicago to Milwaukee service.
ATLANTIC CABLE STARTED.		1856	Rock Island completed 1st bridge across the Mississippi River.
DRED SCOTT DECISION.		1857	First iced box car shipment of meat, Chicago to New York.
★32ND. MINNESOTA.	March 4, 1857	1858	Pennsylvania Railroad bought State Railways in Pennsylvania.
★33RD. OREGON.	JAMES BUCHANAN 15TH PRESIDENT OF THE UNITED STATES	1859	First oil well in U.S. at Titusville, Pennsylvania.
U. S. POP. 31,443,321.		1860	30,626 miles of railroad in U.S.
★34TH. KANSAS.	March 4, 1861	1861	Due to Panic of 1857 only 700 miles of road built this year.
WAR BETWEEN STATES.		1862	Burlington operated 1st U.S. Railroad Post Office car.
★35TH. WEST VIRGINIA.	ABRAHAM LINCOLN 16TH PRESIDENT OF THE UNITED STATES	1863	Land Grants to railroads exceed 31 million acres.
★36TH. NEVADA.		1864	George M. Pullman built his 1st sleeping car.
THE CIVIL WAR ENDS.	April 15, 1865	1865	C & NW builds bridge across Mississippi.
ATLANTIC CABLE COMPLETED.	ANDREW JOHNSON 17TH PRESIDENT OF THE UNITED STATES	1866	Iron rails produced by Chicago Rolling Mills.
★37TH. NEBRASKA. ALASKA.		1867	Rock Island bought silver engine "America."
JOHNSON'S IMPEACHMENT FAILS.		1868	First Air Brake patent issued to G. B. Westinghouse.
U. S. BUREAU OF EDUCATION.	March 4, 1869	1869	Transcontinental rails joined at Promontory, Utah. "Golden Spike."
U. S. POP. 38,558,371.		1870	First train to run cross country, Boston to San Francisco.
CHICAGO SWEPT BY GREAT FIRE.	ULYSSES S. GRANT	1871	7,379 miles of railroad built this year.
FRENCH START PANAMA CANAL.	18TH PRESIDENT OF THE UNITED STATES	1872	Canal traffic showed first decline.
CUSTER'S ARMY MASSACRED.		1873	Northern Pacific reached West to Missouri River.
STEAM TURBINE INVENTED.		1874	Lincoln abolished slavery by proclamation.
ICE-MAKING MACHINE INVENTED.		1875	China began laying railroad track.
★38TH. COLORADO.		1876	90% of East West commerce now handled by railroads.
FIRST RAILROAD STRIKE.	March 5, 1877	1877	Rock Island builds into State of Kansas.
NORTHEAST PASSAGE VOYAGE.	RUTHERFORD B. HAYES 19TH PRESIDENT OF THE UNITED STATES	1878	Water route around Cape Horn still carried 75% tonnage to Calif.
FRENCH-U. S. CABLE LAID.		1879	148 Narrow Gauge railroads in 34 states. 4,188 miles of track.
U. S. POP. 50,155,783.	JAMES A. GARFIELD 20TH PRESIDENT	1880	93,296 miles of railroad in U.S.A.
TRADE & UNIONS ORGANIZED.	Mar. 4, Sept. 19, 1881	1881	Sante Fe and Southern Pacific join for 2nd transcontinental route.
CHINESE EXCLUSION ACT.	CHESTER A. ARTHUR 21ST PRESIDENT OF THE UNITED STATES	1882	U.S. railroads built 11,569 miles of new track.
AM. RED CROSS ORGANIZED.		1883	All clocks set to "Standard Time."
U. S. BUREAU OF LABOR.		1884	Railroads now carrying 75% tonnage into California.
STEAM TURBINE INVENTED.	March 4, 1885	1885	Nickel Plate cuts time on passenger run—Buffalo to Chicago.
STATUE OF LIBERTY (FRANCE.)	GROVER CLEVELAND 22ND PRESIDENT OF THE UNITED STATES	1886	Railroads build 12,983 miles of new lines in year.
100TH. ANNIV. OF CONSTITUTION.		1887	Government acted to regulate commerce.
EDISON'S ELECTRIC CAR.	Cleveland's first term	1888	First refrigerated oranges brought from Florida to New York.
★★★★39TH. 40TH. 41ST. 42ND.	March 4, 1889	1889	First "Ice Boxes on wheels" carry California produce to N.Y.
U. S. POP. 62,622,250.	BENJAMIN HARRISON	1890	163,597 miles of railways in U.S.
★★43RD. IDAHO 44TH. WYOMING.	23RD PRESIDENT OF THE UNITED STATES	1891	Canadian Pacific railroad completed.
TEMPLE AT SALT LAKE BUILT.		1892	Boston & Maine adopts Miller platforms and couplers.
COLUMBIAN EXPOSITION CHGO.	March 4, 1893	1893	Engine 999 set world's speed record @ 112.5 m.p.h.
CHICAGO RAILROAD STRIKE.	GROVER CLEVELAND 24TH PRESIDENT OF THE UNITED STATES	1894	Rock Island completes line to Gulf Ports in Texas.
ELECTRIC POWER AT NIAGARA.		1895	Railroad airbrake testing laboratory set up at Purdue U.
★45TH. UTAH. KLONDIKE GOLD.	Cleveland's second term	1896	New York wheat exports drop to 50% of 1893.

HAWAII, PALMYRA ANNEXED.	March 4, 1897	1897	Foreign commerce revives.
P. RICO, GUAM, PHILIPPINES.	WILLIAM McKINLEY	1898	Demands on railroads for service cause congestion.
ISLAND OF SAMOA ANNEXED.	25TH PRESIDENT OF THE UNITED STATES	1899	Wheat exports from N.Y. increased to 40 million bushels.
U. S. POP. 75,994,575.		1900	193,346 miles of railroad in U.S. "Casey Jones" dies.
BUFFALO N. Y. EXPOSITION.	September 14, 1901	1901	Rebate practices of railroads damaging to revenues.
MME. CURIE DISCOVERS RADIUM.		1902	Elkins Amendment to Act to regulate commerce proposed.
PANAMA CANAL ZONE BOUGHT.	THEODORE ROOSEVELT	1903	Longest R.R. bridge completed across Salt Lake—12 miles.
N. Y. CITY SUBWAY OPENED.		1904	Utter Collapse of export business by end of year.
AIRPLANE FLIGHT WRIGHT.	26TH PRESIDENT OF THE UNITED STATES	1905	Death Valley Scotty's ride. Los Angeles to Chicago.
SAN FRANCISCO EARTHQUAKE.		1906	Milwaukee Road began extension of Missouri to Seattle lines.
★46TH. OKLAHOMA.		1907	Passenger business doubled over that of 10 years ago.
TARIFF PROBLEMS RISE.		1908	Railroads have 191,800 bridges with total length of 3,860 miles.
BLERIOT FLIES ENGLISH CHANNEL.	March 4, 1909	1909	Milwaukee Road completes own rails Chicago to Seattle.
U. S. POP. 91,972,266.	WILLIAM HOWARD TAFT	1910	U.S. population & R.R. mileage both increased 50% of that in 1890.
I. C. C. RAISES RAIL RATES.	27TH PRESIDENT OF THE UNITED STATES	1911	Railroads hauled 1 ton of freight 1,900 miles per person in U.S.
★★47TH. 48TH. TITANIC SINKS.		1912	Total mileage of railways in U.S., 250,000 miles.
(NEW MEXICO.—ARIZONA).	March 4, 1913	1913	New Grand Central Station in N.Y. city opened to public.
WORLD WAR STARTS.		1914	Employees of U.S. Railroads total 1,815,239.
TRANSCONTINENTAL TELEPHONE.	WOODROW WILSON	1915	Construction of Government R.R. in Alaska begun.
AMER. NEUTRALITY VIOLATED.	28TH PRESIDENT OF THE UNITED STATES	1916	8 hr. day established for Railroad Trainmen.
WAR WITH GERMANY.		1917	Government took over operation of railroads as war measure.
ARMISTICE SIGNED NOV. 11TH.		1918	Type "D" automatic couplers became standard railroad equipment.
WILSON 14 PT. PEACE PLAN.		1919	Government turns back operation of railroads to Private Control.
U. S. POP. 105,710,620.		1920	Total mileage of railways in U.S., 252,845. Expansion complete.
LEAGUE OF NATIONS ACTS.	March 4, 1921	1921	Railroads hauled 1 ton of freight 5,000 miles per person in U.S.
FIVE POWER NAVAL TREATY.	WARREN GAMALIEL HARDING 29TH PRESIDENT	1922	Class I railroads in U.S. use 1,346,000 miles of Tel. & Tel. wires.
U. S. TROOPS LEAVE GERMANY.	August 3, 1923	1923	Stockholders in U.S. Railroads approximate 450,000.
SOLDIER'S BONUS PASSED.	CALVIN COOLIDGE	1924	American Locomotive Co. builds 1st Diesel-electric engine.
PAN AMERICAN CONFERENCE.	30TH PRESIDENT OF THE UNITED STATES	1925	Great Northern builds the longest Tunnel, the Cascade, 7.79 miles.
BYRD FLIES TO NORTH POLE.		1926	Erie buys 2 Diesel Switch Engines C. & N.W. pioneers in Chicago.
LINDBERGH FLIES ATLANTIC.		1927	Fair of the Iron Horse held in Baltimore. Centennial of the B. & O.
BYRD OVER SOUTH POLE.		1928	Car Retarder for downgrade runs controlled by magnetic gears.
WORLD DEPRESSION.	March 4, 1929	1929	100th Ann. of "Tom Thumb." 1st Diesel-electric pass. engine. N.Y.C.
U. S. POP. 122,775,046.	HERBERT CLARK HOOVER 31ST PRESIDENT OF THE UNITED STATES	1930	First air-conditioned passenger car on B. & O.
POST, GATTY FLY WORLD.		1931	Famous "DeWitt Clinton" made initial run 100 yrs. ago.
1ST DISARMAMENT CONFERENCE.		1932	New 70 ton aluminum body hopper cars lighten car weight.
CENTURY OF PROGRESS.	March 4, 1933	1933	National Labor Board created.
GOLD RESERVE ACT.		1934	"City of Portland" cross country Los Angeles to N.Y. 57 hrs.
MUSSOLINI SEIZES ETHIOPIA.		1935	Railroad Retirement Act approved by Supreme Court.
DROUTH AND DUST RUIN CROPS.	FRANKLIN DELANO ROOSEVELT	1936	U.P. & N.W. Dieselized streamliners, Overland Route to Calif.
UNEMPLOYMENT INSURANCE.		1937	Pennsylvania electrified between Philadelphia and Harrisburg.
LABOR RELATIONS ACT.	32ND PRESIDENT	1938	100th anniversary of first train operated on Wabash Railroad.
N. Y. WORLD'S FAIR.	OF THE	1939	P.R.R. freight engine hauls 1200 tons @ 100 M.P.H.
U. S. POP. 131,669,275.	UNITED STATES	1940	Railroad track mileage now 400,000 miles.
PEARL HARBOR.		1941	Pennsylvania largest railroad with 24,960 miles of track.
DOOLITTLE JAPAN RAID.		1942	Santa Fe, longest railroad with 13,092 miles of road operated.
U. N. R. R. A.		1943	2,000,000 freight cars operated by U.S. railroads.
FOURTH TERM ELECTION.		1944	Fuel bills for U.S. railroads exceed $500,000,000.
WORLD WAR II ENDS.	April 12, 1945	1945	Penn's fastest record run of 1905, 127 m.p.h., unbroken.
INFLATION GOES UNCHECKED.	HARRY S. TRUMAN	1946	41,000 steam locomotives, 4,300 Diesels on U.S. railroads.
JEWS SEEK PALESTINE.	33RD PRESIDENT OF THE UNITED STATES	1947	Railroads of U.S. run 17,500 passenger trains daily.
		1948	Chicago, world's greatest railroad center with 22 Class I railroads, celebrates Chicago Railroad Fair, 1848-1948.

ILLINOIS CENTRAL RAILROAD

The Illinois Central Railroad consists of 6,582 miles of line, represents a property investment of approximately $620,000,000, and operates in fourteen states.

The Illinois Central Railroad Company was chartered in February, 1851, by the general assembly of Illinois. The charter conveyed to the company it created the two and one-half million acres of public lands granted to the state by an Act of Congress of September, 1850, and provided for the "construction of a railroad from the southern terminus of the Illinois and Michigan Canal to a point at or near the junction of the Ohio and Mississippi rivers, with a branch to Chicago on Lake Michigan, and another via the town of Galena to Dubuque in the State of Iowa."

In 1852 the citizens of New Orleans were aroused to action and the New Orleans, Jackson and Great Northern Railroad was organized for the construction of a line from New Orleans northward to Canton, Miss., with the object in view of later projecting a line to connect with the Illinois Central at Cairo, Ill. The New Orleans road reached Jackson, Tenn., in 1861 and in 1873 reached East Cairo, Ky., where a connection was established with the Illinois Central by means of a train ferry across the Ohio River. The Illinois Central Railroad acquired the line from New Orleans to East Cairo in 1882 and the through rail route was completed in 1899 by construction of a rail bridge across the Ohio River at Cairo.

This through line of 921 miles between Chicago and New Orleans, affording a double-track or its equivalent the entire length, constitutes the backbone of the present Illinois Central Railroad, supported by a vast network of supplementary lines which add greatly to the economic strength of the system.

These supplementary lines carry the Illinois Central to Fort Dodge, Sioux City, and Omaha in the west; Albert Lea, Minn., and Madison, Wis., to the north; and Louisville, Ky., to the east. A network of branch lines over the system are located to serve coal and oil producing areas, forest products and lumber mills as well as livestock and grain territories.

Geographically, the Illinois Central is located almost in the heart of the North American continent. The fourteen states of the Mississippi Valley in which it operates embrace one-third of the total population of the United States. It connects with many of the great commercial centers of the region, including Chicago, second largest city on the continent, and in many respects the leading commercial city of the world; St. Louis, the great manufacturing and distributing center; New Orleans, the second largest port in the country; Birmingham, the "Pittsburgh of the South"; Memphis, the world's leading hardwood market; Omaha, the manufacturing and commercial metropolis of Nebraska, and such other important cities as Sioux City, Sioux Falls, Fort Dodge, Waterloo, Louisville, Jackson, Miss., and Baton Rouge.

Unlike many railroads which have to depend on single crops or industries for their tonnage and therefore suffer seriously when those crops or industries suffer reverses, the Illinois Central traverses a region the agricultural, mineral, lumbering and manufacturing production of which is highly diversified. It is consequently little affected by the failure of any one harvest or the slowing down of any one industry. The fourteen states in which the road operates embrace only 26% of the total land area of the United States, but they produce approximately 35% of the nation's bituminous coal, 30% of its lumber, 40% of its cotton, 45% of its tobacco, 65% of its corn, 30% of its wheat and 45% of its livestock. They contain 37% of the country's mileage, or one-eighth of the total railway mileage of the world.

At Michigan Avenue and Roosevelt Road in Chicago looms Central Station, headquarters of the Illinois Central Railroad.

COURIERS OF COMMERCE – Five fast merchandise express trains leaving Congress Street Yards of the Illinois Central.

This pioneer in Diesel-powered streamline trains was placed in service in 1936 as the "Green Diamond," operating between Chicago and St. Louis.

The wide range of climate traversed by the Illinois Central has an important bearing on the traffic which flows over its lines. The northernmost extremity of the system is at Albert Lea, Minn., with a mean temperature in January of about 14° and in July of about 73°, and an annual precipitation of about 25 inches. The southernmost extremity is at New Orleans with a mean annual temperature in January of about 54° and in July of about 82°, and an annual precipitation of about 57 inches. So wide is the climatic variation that while the northern part of the railroad is blanketed in snow and ice and experiencing subzero weather, fields of strawberries and vegetables are ripening under the Louisiana sun at the southern end of the railroad, and peach trees are in bloom along the Gulf Coast. Many of the agricultural and forest products of the south are native to that region and can not be raised in the north, and many of the hardier agricultural products of the north do not thrive in the sub-tropical climate of the southern states. The interchange of these products between the north and the south furnishes the railroad with an important part of its tonnage. The ever-growing importance of Latin American trade and the development of New Orleans as the key port between North and South America are also beginning to make some very substantial contributions to the railroad's traffic.

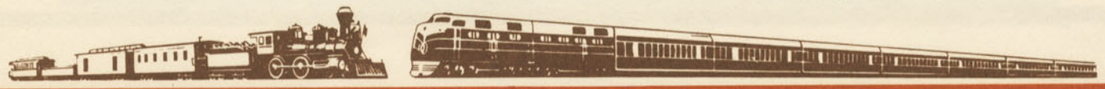
At Chicago the Illinois Central terminal occupies a location along the Lake front immediately adjacent to the downtown business district, a property that could not be obtained today by a railroad at any price. When this right-of-way was acquired, Chicago had a population of 30,000. The railroad had obtained a right-of-way along the Lake front through the town of Hyde Park to the southern limits of Chicago, near what is now Twenty-second Street, and sought a right-of-way into the city along the south branch of the Chicago River. The city was experiencing considerable difficulty in preventing the encroachment of the Lake upon Michigan Avenue, between Park Row and Randolph Street. It was costly to save the shore line. Neither the city nor the state was financially able to undertake the work. While negotiations over the right-of-way were in progress there occurred a severe storm which created further damage and led to the adoption of an ordinance requiring the Illinois Central to build into the city along the Lake front, construct a breakwater and relieve the city of all further expense in protecting the shore line. The railroad accepted the terms of the ordinance and spent several million dollars in constructing and maintaining the breakwater. Thus the shore line was saved, and the Illinois Central came into possession of a property which today is probably worth several times the entire cost of construction of the original Illinois Central Railroad. At the same time the railroad acquired by purchase the unimproved land upon which its freight yards, dock and other facilities are located between Randolph Street and the Chicago River.

Development in freight service has also progressed since the war. The Illinois Central in the past year has constructed approximately 2500 new freight cars to meet the demands of its shippers. Experimental work has been carried on in trying to develop equipment that is durable, economical and able to do a good transportation job.

The Illinois Central ranks fourteenth in average miles of railroad operated; ninth in total operating revenues; ninth in total freight revenues; seventh in passenger revenues; tenth in net railway operating income; and tenth in gross ton miles handled compared with the other railroads in the country.

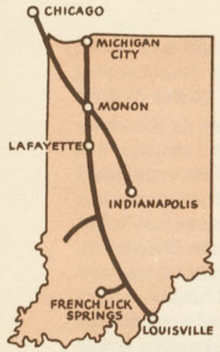
One of the newest of modern streamline trains in the Illinois Central fleet is the dayliner "City of New Orleans"—

Pride of the Illinois Central is the famous all-Pullman Panama Limited, operating between Chicago and New Orleans on an over-night schedule.



The New MONON . . . . . The Hoosier Line . . . . .

The LIFELINE of INDIANA



When a passenger steps aboard a sleek, shiny new Monon streamliner his ticket entitles him to enjoy the very *last word* in modern travel luxury. For the Monon of today is indeed NEW in every respect, and completely modern.

Monon streamliners, bearing the new Monon insignia, are pulled by the newest type Diesel-electric-powered locomotives.

The cool, immaculately clean, completely air-conditioned coaches include improved reclining seats and other modern travel comforts and conveniences. Observation-parlor cars with "picture" windows invite relaxation. Dining-bar lounge cars offer luxurious ease, and snack-bar refreshments.

Dining cars, radiating Hoosier hospitality, serve the wonderful meals for which the Monon has long been famous.

The whole aspect of these completely NEW Monon streamliners—their speed and smooth riding—their sense of quiet and security—reflect the highest degree of modern progress in travel-by-rail accommodations—making of the Monon a state-size *super-railroad* serving Indiana, its people and guests, at the hub of Industrial America.

It was back in 1848, just one hundred years ago, that the turning of a spadeful of earth at New Albany, Indiana, started construction of the New Albany and Salem railroad, predecessor of the MONON.

From the very beginning even in its early "steam-wagon" days, the Monon has been a *personal* thing with Indiana folks—a "Hoosier" road—beloved and enshrined by such famous Hoosier authors, poets, composers and cartoonists as Booth Tarkington, James Whitcomb Riley, George Ade, John T. McCutcheon and others. For they have all thought of it and spoken of it, with the same sense of personal ownership that prompts Hoosiers to speak of "our town"—"our school"—"our team"—"our church"—"our State House."

The Monon quickly became a part of the Indiana scene—a section of "Hoosier" life moving on wheels and track—the train a Hoosier used whenever possible because it was a Hoosier institution—because it was a bit of "home" on wheels.

Thousands of people now come to Indiana each year to visit her famous state parks and forests—her beautiful resort lakes—her game reserves—and many, many historic spots.

Each year thousands of students from Indiana and throughout the nation as a whole attend Indiana's great schools, colleges and universities. To students of Purdue at Lafayette, Indiana University at Bloomington, Wabash College at Crawfordsville, DePauw at Greencastle, and others, the Monon is "our" railroad. So through its entire century of service the Monon has been haloed with romance.

Today the Monon is, relatively, one of the most *improved* railroads in the United States. It has two main lines—Chicago to Louisville and Chicago to Indianapolis with branches to Michigan City and French Lick, site of French Lick Springs, world famous American spa and vacation paradise.

As the "Lifeline of Indiana," the Monon serves American industries—shipping into or by way of Indiana. In addition it carries raw materials from farms, mines and quarries and many finished products, from point to point throughout the state, and makes of Indiana a "corridor" which connects the Great Lakes with the South.

"In the past one hundred years Monon has not always met the highest ideals of railroad service. It has had shortcomings, of course. But the same friendly road has served the people of Indiana for one hundred years which is, in itself, deserving of recognition. For, be it human, animal or mechanical, nothing can *live* for one hundred years without having something basically sound within it."

John W. Barriger
President

Yes, the NEW Monon, completely reorganized, rehabilitated and modernized, is today doing its part as a recognized factor in the nationwide network of America's railroads serving shippers and travellers—the greatest transportation system in the world.

CHICAGO, INDIANAPOLIS AND LOUISVILLE RAILWAY COMPANY

Just 100 years ago construction was begun on the New Albany and Salem Railroad, now the NEW, streamlined MONON—"The Hoosier Line."

Famous for its "circle" and its annual Motor Speedway Race, Indianapolis is served by the NEW Monon Streamliners—"Hoosier" and "Tippecanoe."

Celebrated around the world as the popular American spa, beautiful French Lick Springs caters to many distinguished guests. Served direct by Monon Streamliners.

Northernmost station stop for new Monon Streamliners is Chicago, "Queen of the Mid-West"

City of hospitality and romance, home of the famed Kentucky Derby, Louisville takes pride in the new, modern Monon Streamliners—"Thoroughbred" and "Bluegrass."

NEW YORK CENTRAL

On the ninth of August in 1831 a tiny, four-wheeled woodburning locomotive puffed into a new era of American history when it pulled the first steam-drawn passenger train in the State of New York. With the opening of its throttle the now famous DeWitt Clinton locomotive began an operation which has continued through more than a century in the building of the vast New York Central System. From this single train of the Mohawk & Hudson Rail Road with its 17 miles of track between Albany and Schenectady the System has grown to an 11,000-mile network with some 4,000 locomotives, more than 5,000 passenger cars, 172,000 freight cars and 135,000 employees.

The development of the New York Central has gone hand in hand with the progress of America. Westward from the Atlantic seaboard went pioneering railroaders constructing lines that bore the proud names of communities and local areas they served. These in turn through consolidations and reorganizations became the important railroads which make up the New York Central System of today. Their names are still bywords among travelers everywhere – Michigan Central, Big Four Railroad, Boston & Albany, West Shore Railroad, Pittsburgh & Lake Erie Railroad and others. Through its predecessor roads the New York Central became the first railroad to enter Chicago from the East.

Today the engineering foresight of those railroaders gives the New York Central more multiple track than any other railroad in the world. All of the main lines are protected by dependable automatic block signals and for most of their mileage by train control operation. These, plus other modern safety devices and employee training programs, have made possible Central's enviable contribution to the outstanding safety record of the railroads of America.

Noted for its smooth Water Level Route, the Railroad follows gentle river valleys and the shores of the Great Lakes between East and West. Its Great Steel Fleet of passenger trains bears such famous names as 20th Century Limited, Commodore Vanderbilt, Pacemaker, Southwestern Limited, James Whitcomb Riley, New England States, Mercury, Detroiter, Empire State Express and dozens of others.

Within the eleven states and two Canadian provinces served directly by the New York Central lie the world's richest markets, the largest cities and seaports, the great industrial centers and fertile farm lands—plus many of America's historic shrines and favorite holiday resorts, and Central's through car services span the nation from the Atlantic to the Pacific—from the Great Lakes to the Gulf states.

Whether you start in the East from Grand Central Terminal in the wonder city of New York; from South Station or Back Bay in New England's Boston…or from the West through the busy railroad gateways of Chicago on Lake Michigan or St. Louis on the Mississippi or from the Ohio River city of Cincinnati – you will enjoy the scenic beauty and smoothness of Central's famed Water Level Route.

Trains travel for miles along the very edge of such story-book rivers as the majestic Hudson and the historic Mohawk. They pass through Adirondack and Berkshire valleys en route to Montreal and Boston – they skirt the shores of the Great Lakes to Detroit, Toledo, Cleveland and Buffalo – pass within an easy, free side trip to Niagara Falls, "Queen of Wonders."

Following the same steel trails as the famous streamliners are the long thundering freights which criss-cross the northeastern area over Central's network. These vital trains provide an endless conveyor belt for the great industries that line its path. Coal flows over the rails from mines in half a dozen states, ore from busy lake docks – finished and semi-finished products speed from the steel centers to processors and markets throughout the land. Grains, meats and other products of farm and forest are carried by the trainload in specialized cars to feed America's cities and to load at ocean ports for shipment abroad.

Continuing the pioneering started by the diminutive DeWitt Clinton and renowned engine "999" which set the world speed record of 112.5 miles an hour back in 1893, New York Central has developed many outstanding types of equipment. The high speed "Hudson" locomotive for passenger service has long been the rail fan's favorite. In 1946 the fleet of new giant double-duty Niagara class locomotives went into service—fast enough for passenger streamliners, powerful enough for long merchandise freights. Thousands of specialized freight cars and luxurious passenger cars speed day and night across the nation paying constant tribute to the Railroad's engineers and designers.

Central has embarked on a post-war improvement program totaling $290,000,000. This includes the largest passenger car equipment order ever placed—the equivalent of 52 new streamlined trains . . . a great new Diesel electric locomotive fleet . . . major track improvements, new stations, dock facilities and continuing research for future progress.

Because employee courtesy is such an important part of service—the Railroad's only product—Central has placed great emphasis on public relations training

NEW YORK CENTRAL

The DeWitt Clinton, built in 1831, was the first locomotive of the New York Central System.

The Niagara, built in 1946, is a giant 4-8-4, double duty freight and passenger locomotive.

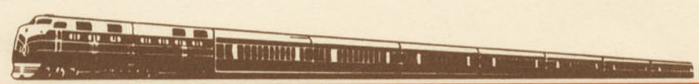
The famous 999 achieved 112.5 m.p.h. with the Empire State Express in 1893. It held the world's speed record for many years.

Diesel Electrics of the type shown are the latest addition to New York Central's motive power fleet.

New York Central's Streamliners as they Pass in the Night.

courses. Already more than 50,000 New York Central men and women have attended public relations round table discussions, and thousands of others have completed special instruction and brush-up courses to help them better serve the public.

Thus, through more than a century of progress, the New York Central System and its pioneering lines have served the nation. New trains—new facilities—new methods are constantly being added to strengthen the life lines of America to guard peace and liberty in the years ahead.



NEW YORK, CHICAGO & ST. LOUIS RAILROAD COMPANY

Many stories have been told about the origin of the nickname "Nickel Plate Road." It appears that the first reference to the "nickel-plated road" appeared in the columns of the Norwalk, N. J., *Chronicle* on March 10, 1881, when the railroad company was being organized. It was used in the sense of a popular saying of the day to describe a good thing.

Regardless of the origin of the name, it struck public fancy and has stuck to the road through its history. Comparatively, The New York, Chicago & St. Louis Railroad is somewhat of a youngster among the railroads of the country. Construction (from Buffalo to Chicago) was begun in 1881 and through trains were running over its lines on October 23, 1882.

This N Y, C & St. L Engine #1 chuffed around considerably in 1881 when construction of the road began.

It was in 1922 that the NYC&StL consolidated the lines of the Lake Erie & Western and "the Clover Leaf Route"—the Toledo, St. Louis & Kansas City R.R. "Nickel Plate's" 1687 miles of first track is divided into three districts each bearing the name of the original railroad from which it came, making it a road running to Toledo, Sandusky and Cleveland from the three midwestern gateways of St. Louis, Peoria and Chicago to its terminal at Buffalo, N. Y.

Progress through modernization of facilities, equipment and services is one of Nickel Plate Road's most cherished watchwords. By actual accomplishments and definite plans for the future, NKP can assure those it serves that it is fully aware no railroad can rest on its laurels but must improve its services month by month and year by year.

During the past five years important improvements in passenger comfort and services have been made. This is also true in freight service and the varied commodities

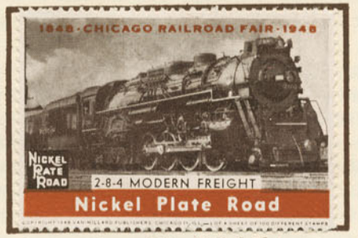
In the old tradition, "modernized" Brooks such as N Y, C & St. L #202 were used to hustle passengers and produce through the gay 90's.

which the railroad carries are now being handled with greater efficiency.

Much new equipment has been added to NKP ownership. New 2,000 HP passenger Diesel units were recently acquired and through main line passenger trains are now Dieselized with these streamlined locomotives. In addition, new 1,000 HP Diesel switching locomotives and a large number of new freight cars have been acquired and more are on order. In NKP's own Frankfort, Indiana, shops, 10 aluminum box cars were built. These have up-to-the-minute features which fit them for use in freight or passenger trains. These features include roller bearings, steam and air signal lines, special trucks and passenger type air brakes. In addition, NKP shops have completed a portion of a program of modernizing equipment which in the past would have been retired.

Considerable streamlined passenger equipment of various types is on order. This includes air-conditioned sleeping cars, air-conditioned dining-lounge cars and air-conditioned coaches.

Welcomed for more and better freight service is the 1948 delivery of new box cars such as those being placed in service by the Nickel Plate.



Over the iron of the Nickel Plate run many of the 2-8-4's heading freight trains operating by timetable authority.

A modernization program has been completed at Bellevue, Ohio, focal point of the Nickel Plate Road, where a large number of trains are handled daily. A 110-foot turntable serving a new 18-stall round-house was installed there in 1946. Other new installations there include a modern shop, boiler house and office building housing the telegraph and teletype office, General Superintendent's office, yard office, locker and meeting rooms. The westbound yard was rebuilt by moving it eastward.

Several line and grade revisions have been undertaken. Important among these was the realignment and grade change through the DeGrief Cut, between Oakland, Ohio, and Hales, Indiana, a distance of 7 miles. This reduced the number of curves from 14 to 7, reduced the total amount of curvature from 441 to 148 degrees and the total rise and fall from 153 to 101 feet. Improvements such as these permit trains to carry greater loads at higher speeds.

New installations of Centralized Traffic Control are another important feature of NKP modernization program. Already in use on several sections, Centralized Traffic Control will be installed over more mileage. The following are now served by Centralized Traffic Control: The Chicago Division, between Hadley and Claypool, Indiana (35 miles); the Buffalo Division, between Brocton, N. Y., and Thornton Junction, Pa. (56 miles); the Cleveland Division, between Madison and Euclid, Ohio (28 miles) and between Vermillion and Kimball, Ohio (21.5 miles); the Fort Wayne Division, between New Haven, Ind., and Arcadia, Ohio (79 miles, of which 40 is in service); and the Sandusky Division, between Arcadia and St. Marys, Ohio (62 miles)—with the territory between Frankfort and Muncie, Ind. (62 miles) under construction.

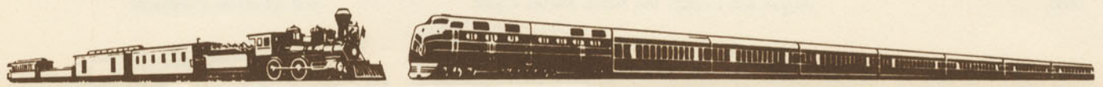
Additional automatic signals, new bridges, additions to sidings and track and yard facilities at various points, new interlocking plants, teletype from Buffalo, N. Y., to Chicago, Ill., and to Frankfort, Ind., yard office and car repair buildings, new Coach Yard building at Cleveland, Ohio, extension of roundhouses at several points, Diesel shops at East 75th Street, Cleveland, Ohio, modernization of machines and tools at various shops and machines used in mechanization of track work and a new storehouse at Lima, Ohio, are other improvements the road now cites as either accomplishments or underway.

Last summer the Nickel Plate opened a new passenger reservation bureau at Chicago, one of the most modern offices of its size and type in the country. The railroad is also served by efficient reorganized reservation facilities at the Cleveland Union Terminal.

In the field of research and in an effort to improve yard operations, NKP is experimenting with radio communication which permits engine crews to talk to yardmasters without having to go to telephone stations.

The Nickel Plate will continue its policy of improving and enlarging its plant to better and more efficiently serve its patrons.

The pride of the railroad, proudly bearing the name "Nickel Plate Limited," speeds between Chicago and Buffalo, N. Y.



NORTHERN PACIFIC RAILWAY COMPANY

The history of the Northern Pacific Railway, "Main Street of the Northwest," teems with romance, courage and industry. It was on July 2, 1864, that President Lincoln approved the act of Congress creating the Northern Pacific. One of the incorporators was General U. S. Grant. Jay Cooke, another incorporator, had been one of the financial geniuses in raising huge funds for the Civil War and he also was a potential force in the earliest days of Northern Pacific financing.

The Northern Pacific, the steelway of which follows much of the course Lewis and Clark, the intrepid explorers, pursued in 1804-1806, was the first of the northern transcontinental lines. Its construction was done under the direction of men of great vision. The actual builders of the line were courageous pioneers who found it necessary to cope with nature's obstacles and fight the Indians who inhabited the territory.

On February 15, 1870, at a point now named Carlton, Minn., ground was broken during ceremonies which were to launch the building of the railroad. . . . At this place, which is 20 miles west of Duluth, actual construction was begun in June, 1870.

Six months later construction of the line from Kalama, Wash., to Tacoma, Wash., was started. This was the first standard gauge steam railroad in the state of Washington. The "Minnetonka," the first locomotive of the Northern Pacific Railway, which is appearing in the transportation pageant at the Chicago Railroad Fair, was purchased on July 18, 1870, and was used in construction of the line west from Carlton, for some months. . . . It was then shipped to San Francisco and from there by boat to Kalama. It arrived there in September of 1871 and was used in the construction of the line from Kalama north to Tacoma.

Construction work, which was undertaken near Duluth with a view to fulfilling the charter obligations of building a railroad line from Lake Superior west to Puget Sound, carried the rails as far as Brainerd, Minn., in March of 1871. In December of the same year, the rails reached Moorhead, Minn., and trains moving over the line operated out of Duluth, using the rails of the Lake Superior & Mississippi Railroad between Duluth and Carlton.

In June, 1872, a bridge was completed across the Red River and the head rails moved into Fargo, N. D. In June of 1873, the builders of the new line had pushed as far west as the Missouri River and into Bismarck, N. D. At that time, the crews engaged in construction of the Kalama-Tacoma line were approaching Tacoma. A financial crash, which carried under Jay Cooke and his firm and many other financial institutions, reacted in halting railroad construction. However, work continued in the West until on December 16, 1873, when Kalama and Tacoma were joined by rails. At this time Portland and points east and west were reached by boat from Kalama.

With the Northern Pacific line operating from Kalama to Tacoma on the west and Duluth to Bismarck on the east, construction was held in abeyance for five years.

On October 2, 1879, construction in the West was started on a line eastward from Wallula, Wash., while at the Missouri River on the east, in the winter of 1878-1879 construction was taken up heading westward.

On August 22, 1883, at Gold Creek, Mont., the line built east from Wallula met the line built west from Lake Superior. On September 8, 1883, at Gold Creek, elaborate ceremonies signalized the completion of the first northern transcontinental railroad. The Northern Pacific Railroad was linked at Wallula with the eastern terminus of the Oregon Railroad and Navigation Company. This line from Wallula to Portland had been constructed in 1881 and 1882 and was opened to traffic on November 22, 1882.

Thus, a traveler in 1883 could have boarded a passenger train at Duluth and traveled west over the lines of the Northern Pacific through Spokane to Wallula, over the lines of the Oregon Railroad & Navigation Company to Portland, thence by boat on the Columbia River to Kalama and again on Northern Pacific lines to Tacoma.

Since the agreement for use of the Oregon Railroad and Navigation Company's lines from Wallula to Portland was temporary, the Northern Pacific began construction of a link of its transcontinental system from Pasco to Tacoma over the Cascade Mountains in July, 1883.

Also in 1883, construction began at Cascade Junction, near Tacoma, pressing eastward to meet the line being constructed from Pasco.

At a point two miles west of the summit on a "switchback" line over the Cascade Mountains, the westward and eastward construction crews met at 6 pm on June 1, 1887. Through operation over this line began July 2, 1887. Meanwhile, at the summit of the Cascade Mountains, the Stampede Tunnel construction was started, and operation through the tunnel began on May 27, 1888.

Until 1882, the Northern Pacific trackage in the Pacific Northwest consisted of a line from Kalama to Tacoma and the coal-carrying line from Tacoma to Wilkeson. Surveys, however, had been made to construct north from Tacoma to Seattle and south from Goble to Portland on the Oregon side of the Columbia River. Goble is located across the river from Kalama. Construction started on the Tacoma-Seattle line in November, 1882, and on the Goble-Portland line in April of 1883. Operation in the Tacoma-Seattle service began July 6, 1884, and in the Goble-Portland service October 9, 1884. In 1901, Northern Pacific service was extended northward when it bought the Seattle International Railroad with a line from Seattle to Sumas, Wash., where connection is made with the Canadian Pacific Railway.

Northern Pacific operations between Seattle and Portland continued until 1908 over its rails from Seattle to Kalama, crossing the Columbia River from Kalama to Goble by ferry, thence by rail into Portland. Meanwhile, in 1902-1903 the railroad built a branch line extending south from Kalama to Vancouver, Wash., and this line was opened for through service March 1, 1903. It was rebuilt as a main line in 1908, and in that year a bridge across the Columbia was constructed at Vancouver and this then became a part of the Northern Pacific route from Seattle to Portland.

While the Northern Pacific was expanding its operations in the Pacific Northwest, the company, although it was chartered to build a railroad from Lake Superior to Puget Sound, recognized the importance of the St. Paul-Minneapolis area and took successive steps to serve those cities.

On May 1, 1872, the company leased the Lake Superior and Mississippi Railroad, which owned and operated a line from Duluth into St. Paul. Northern Pacific trains were operated over this line. The Lake Superior & Mississippi was reorganized in June of 1877 as the St. Paul and Duluth, and it was from this company that the Northern Pacific bought the St. Paul to Duluth line on June 15, 1900.

The Northern Pacific introduced luxury passenger service to the Northwest in 1900 when the first North Coast Limited was inaugurated. The 1948 edition of this famous transcontinental train is a streamlined beauty powered by giant, smooth rolling Diesel locomotives. New light weight "Day-Nite" coaches, diner-lunch cars, all-room Pullmans and Pullman lounge cars provide passengers with superb accommodations. For the economy-minded, comfortable Tourist sleepers also are available. N. P.'s "famously good" dining car service has been acclaimed by travelers for more than half a century.

The North Coast Limited operates between Chicago, Twin Cities and Spokane, Seattle, Tacoma and Portland. Between Chicago and St. Paul it operates over the Burlington Route.

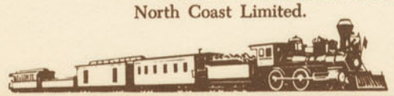
The Villard special train carried dignitaries from the U.S. and Europe to the Last Spike ceremony, September 8, 1883.

These Palace cars on the Northern Pacific in 1884 were the first through Pullmans between the Middle West and the North Pacific Coast.

The 1948 version of the famed North Coast Limited is streamlined, with modern light weight coaches, diners and all-room Pullmans.

Sparkling new diner-lunch cars offer a choice of a full course meal at tables or a snack at the counter on the new North Coast Limited.

Northern Pacific's new "Day-Nite" coaches with "Sleepy Hollow" seats and leg rests permit the passenger to recline full length.



PENNSYLVANIA RAILROAD

With plenty of reserve pulling power under 50 miles an hour and plenty of steam at 70 and above, this locomotive with a 4-4-4-4 arrangement handles freights in accordance with modern demands.

Keeping pace with the new era for railroading in America ushered in by modern Diesel-electric powered locomotives, Pennsylvania's fast passenger trains maintain their schedules behind the latest modern types.

The story of the Pennsylvania Railroad begins a score or more of years before 1848.

Of all the pioneers of railroading, the first and most important was undoubtedly Colonel John Stevens. To him on February 6, 1815, was granted the first charter for a railroad in America. The route lay between New Brunswick and Trenton, approximately where the Pennsylvania's New York Division is today.

The project, considered as "wild and impractical," did not gain public acclaim nor win acceptance among the canal supporters. In fact when the Erie Canal across New York was opened in 1825, Philadelphians demanded an improved canal route westward to the Ohio River and the legislature consequently was more concerned with canals than with railroads. Although a second charter was granted to Stevens in 1823, actual construction on neither was accomplished.

After 1825, the legislature granted charters to a few railroads but, being impatient with their progress, decided upon state enterprises to build up their transportation arteries. Despite some services performed by the State Works, they were far from satisfactory and on April 13, 1846, an act incorporating the Pennsylvania was passed.

The Pennsylvania was originally organized to construct a rail line from Harrisburg to Pittsburgh. Travel between these points was by canal from Columbia to join the river to the west at Middletown. From Middletown the route followed the valley of the Juniata for 172 miles. From Hollidaysburg, the Allegheny Portage Railroad ran to Johnstown, and from there, again by canal and river, 104 miles to Pittsburgh.

On December 10, 1852, lines by rail had been completed from both ends of the Allegheny Portage connecting Philadelphia and Pittsburgh. The first through train was operated that day. By July 18, 1858, the Pennsylvania had purchased the state railroads and was able to travel over its own tracks for the entire distance from Philadelphia to Pittsburgh.

The development of the Pennsylvania in the years following included construction and the purchase, acquisition or leasing of a number of other lines. The Camden and Amboy Railroad had begun with a line between Bordentown and Hitestown, N. J., in 1832, and in 1834 had a line from Amboy to Camden. The New Jersey Railroad meanwhile, in 1834, operated a line from the Hudson River to Elizabeth. These two roads were later merged as the United Railroads, and by 1871 the Pennsylvania had leased them in order to have a connection with New York. In 1869 the Pennsylvania leased the Pittsburgh, Fort Wayne and Chicago Railroad, and in 1864 had leased the Philadelphia and Erie Railroad. Other roads in which the Pennsylvania obtained a controlling interest included the Northern Central Railroad, the Long Island Railroad, and the Philadelphia, Wilmington and Baltimore Railroad. It would be impossible to describe all of the small roads which have become a part of the Pennsylvania, but among these are the Madison and Indianapolis, the Steubenville and Indiana, the Indianapolis and St. Louis, the Vandalia, the West Jersey and Seashore, and others. Through all of them, the Pennsylvania was able to serve a greater and greater area of the East and Middle West until today it ranks as one of the greatest railroads in the country.

Progress by the Pennsylvania, in keeping with its rapid development, has kept it foremost in engineering accomplishments, with enviable records in construction of facilities such as tunnels, bridges, stations, and in the use and promotion of safety devices, testing equipment, and in the constant modernization of every phase of its services to business and to the public. The Pennsylvania was the first railroad to use steel tracks, having imported a quantity from Bessemer in England in 1863. Through the use of steel rails, it was possible to carry much greater loads per axle, and, of course, there was an even more important advantage in the superior wearing quality and safety of these rails. The use of track tanks for picking up water for the locomotives while the train is in motion was another of the Pennsylvania's innovations, being first employed as early as 1870.

The main line construction of the Pennsylvania was and still is a remarkable feat of engineering, requiring the bridging of the Susquehanna, passage over the Horseshoe Curve, through the tunnel at Gallitzin, along the Conemaugh River, and the tunnels under the Hudson and East Rivers. The Susquehanna bridge is the largest stone arch bridge in the world, four tracks crossing on 49 arches for a length of 3850 feet over the river.

In 1910 the famous tunnels under the North and East Rivers were officially opened, being employed for entrance into the new Pennsylvania station in New York City, construction of which had been started in 1904. The Pennsylvania constructed two tubes under the Hudson River and four tubes under the East River, thereby accomplishing a much-needed connection for a through route between New England and the South and West. The erection of the Pennsylvania station, the building of the tunnels and the associated yards on Long Island were projects of tremendous scope and importance and are unrivaled in their magnitude.

In recent years the construction of the Hell Gate bridge between Long Island and New York City was a task of outstanding engineering importance.

In 1869 a Pennsylvania train was outfitted with equipment which had a great influence in the progress of railroad—air brakes for fast, safe stopping. Previous to the use and development of air brakes by George Westinghouse, train cars had to be halted with hand brakes and it was, of course, with the invention of the air brake that railroad safety and efficiency improved tremendously. The Altoona shops of the Pennsylvania where numerous advances in brake design were accomplished are in themselves an interesting story, for they are the largest group of railroad shops in the world, comprising 125 buildings and trackage over 218 acres. A locomotive testing plant which had been on exhibit at the St. Louis exposition in 1904 was moved to Altoona at the end of the exposition and was the first equipment of its type by which the performance of locomotives could be carefully analyzed.

The Pennsylvania has been foremost in its use of electrification, and is now first in the number of miles of road and track operated electrically.

Modernization of passenger services has been a constant program of this progressive railroad, resulting in such deluxe trains as the "Broadway Limited," noted as well for its "on time" fast schedule between New York and Chicago; among other "crack" trains are the "Congressional Limited," "Spirit of St. Louis," the "Red Arrow," "Jeffersonian," "Trail Blazer," "Silver Meteor," the "Champion" and the "Southerner."

The Pennsylvania today is our fourth largest railroad system in point of mileage operated, there being 10,683 miles of main and branch lines. About half of the country's population lives in this territory reached by the Pennsylvania in 14 states and the District of Columbia. It served essentially the same area in the early seventies and has progressed since that time with the growing nation it has served and will continue to serve in the future.

The Pennsylvania boasts more miles of electrified track than any other railroad and their GG-1 electric engines can achieve 90 miles an hour with a 12-car train in six miles and in six minutes.

Another of the many different types and kinds of motive power used by the Pennsylvania is its steam locomotives developed for fast freight service employing a 4-4-6-4 wheel arrangement.

Pennsylvania's newest locomotive is a direct geared turbine, a coal-burning steam-engine weighing nearly 300 tons. It is really a beautiful, high-capacity, heart-stirring, high-speed mechanism.

UNION PACIFIC RAILROAD COMPANY

Wood-burning locomotives such as this shiny patriarch helped build the Union Pacific Railroad and pulled its first trains.

The Los Angeles Limited is a conventional steam train in daily service between Chicago and Los Angeles offering sleeping car and reserved seat coach accommodations.

The "City of Salina" was the first completely streamlined train in the United States. It was placed in service by Union Pacific Railroad in 1934.

The largest steam locomotive in the world, "Big Boy," pulls heavy freight trains over the mountainous territory of western United States for the Union Pacific Railroad.

"City of Los Angeles," one of the fleet of famous Union Pacific Streamliners in daily, fast passenger service between Chicago and Pacific Coast.

Two small rails of steel stretched across the endless miles of prairie, laid unballasted on a fresh grade through the vast territory of western United States. The Indian territory and great, unknown mountain ranges of the forbidding land west of the Missouri River had finally been conquered.

It was the morning of May 10, 1869, and the driving of the golden spike at Promontory, Utah, had just united the Union Pacific and Central Pacific railroads into the first transcontinental railroad. This was the day for great rejoicing in the young republic for it was this slender thread that would grow into a mighty tie to bind the country together into a powerful nation. Having just passed the crucial days of the Civil War, it was this opening of a new frontier that the infant nation needed to turn its mind and energies toward progressive pursuits.

Averaging twenty miles per hour, woodburning locomotives pulled wooden cars over the railroad, bringing settlers to enlarge those towns already established during its construction. Other settlers turned the virgin sod of the prairie to cultivate farms and transform the region into the granary of the world.

From the single line of a little more than 1,000 miles at the time of the driving of the golden spike in 1869, the Union Pacific grew rapidly until it consisted of over 7,500 miles of main lines and branches thirty years later. Now the Union Pacific had a line extending into the states of the Pacific Northwest with its rich timberland and a short line extended southward through Utah pointed at Los Angeles, which connection was accomplished for use in 1903 and later purchased by the Union Pacific.

The railroad had assumed the general character it maintains today with a main line from Omaha to Ogden and Salt Lake City, Utah, with connections over the Chicago and North Western to Chicago and over the Southern Pacific (the old Central Pacific) to San Francisco. From Kansas City another main line continues to Denver with a connection to Cheyenne and the original line. The main line to the Pacific Northwest extends from Wyoming with branching tentacles throughout the states and the line south from Salt Lake City runs to Los Angeles and Southern California.

Complete rebuilding took place following receivership in 1897, calling for double track, enlarged yards and track sidings, bringing the Union Pacific to the 10,000 miles of track it operates today.

The mineral, agricultural and livestock wealth of the eleven western states it serves poured forth to the industrial and shipping centers of the East and it was necessary for the Union Pacific to constantly improve its service to keep pace with its responsibility as the backbone of the nation's transportation.

Today roller bearing equipped Livestock Express trains pulled by fast, powerful Diesel locomotives speed the shipment of livestock from range to market. Centralized traffic control watches over the movements of trains on 960 miles of the railroad, with dispatchers at centralized switchboards directing traffic safely.

Sleek streamliners, in which the Union Pacific was the pioneer, operate on daily, 39¾-hour schedules between Chicago and Los Angeles or San Francisco. Trains like the City of Los Angeles transport passengers quickly and safely and in luxury travelers know nowhere but in America.

Confident in the future of the territory it serves, the Union Pacific has committed itself to invest over 200 million dollars in new equipment and facilities since the end of the war. On the list are Diesel locomotives, dining cars, sleepers, box cars, refrigerator cars and like equipment. Other expenditures include new switching yards, line changes, and a tunnel in Wyoming costing eight million dollars to eliminate the only stretch of single track remaining between Omaha and Salt Lake City.

WABASH RAILROAD COMPANY

On November 8, 1838, the first railroad locomotive ever operated in the State of Illinois or, for that matter, in the entire Mississippi Valley was placed on a track at Meredosia and hauled a select party to the end of the eight miles of track which had been completed at that time, and back to Meredosia. That road, which was known as the "Northern Cross," and that locomotive, which was called the "Rogers," formed the nucleus of what was later to become the great Wabash Railroad system.

In the early 1830's, few of the westward-bound settlers ended their journeys east of the Mississippi. They were lured to the west bank of the river by the frontier glitter of the city of St. Louis, just below the junction of the Mississippi and the Missouri. And here, from traders, scouts and trappers, they heard of the fertile plains a few hundred miles farther on.

To many of them the name of a new State just east of the river was a synonym for wilderness, for they had heard rumors of a new Indian uprising and many remembered the stories of the hardships of the militiamen—among them a lanky Kentuckian named Abe Lincoln—who had marched against Black Hawk and his braves only a few years before in the Black Hawk War.

Geographical location and lack of transportation facilities handicapped the growth of Illinois, too. Fewer and fewer traders moving westward by water were making the long, arduous trip via the Great Lakes, through Michilimackinack and down the length of Lake Michigan to the tiny settlement that in 1833 was named "Chicago."

The new westward movement was over the Alleghenies to Pittsburgh—a city on the site of old Fort Duquesne—and thence down the Ohio to the Mississippi, where riverboats carried their traffic down the river to New Orleans or upstream to St. Louis and on up the Missouri to wild-and-woolly St. Joseph, at the edge of the great plains.

It was the problem of transportation that faced the Illinois legislature as it convened in the tiny capitol of Springfield in the early 1830's. And the legislators divided themselves into two rabidly partisan groups.

Proponents of a new canal shouted down the suggestions that even a small percentage of the funds of the new State of Illinois be spent for the construction of a railroad. It was only a few years before that a test strip of railroad had been placed in operation in New York State and at the time there was no permanent road anywhere on the continent. The railroad contingent, headed by Joseph Duncan, a member of Congress, sought financing for the project in New York, but here, too, they met with ridicule. Financiers could see no gain in investing money in a railroad that would span only an unpopulated forest.

By 1834, the fight for better transportation had reached its peak. Duncan was now governor of Illinois and one of his first official acts was the recommendation of a network of roads, railroads and canals for his state. He conceded that canals offered the cheapest, most practicable means of transportation, yet he had sufficient vision to see that the railroad offered the only hope of good transportation to those communities springing up at points away from the navigable rivers of the State. Duncan's flowery oratory finally won the passage of the Illinois Internal Improvement Act, a bill which contained authorization for the study of the State's transportation systems.

The committees appointed to study the situation found in favor of the canals. "Wherever the means of promoting the welfare of the people is most profoundly understood," the report read, "there canals abound."

The "canalers"—the men who pointed to the success of the Erie Canal in New York State—hailed this as a victory, but Duncan, in 1834, succeeded in forcing approval of a steam engine railroad to be built between the capital at Springfield and the Illinois-Indiana State Line.

At first the road was treated as a joke. Workers could not be lured to Illinois to build the railroad. There was a shortage of materials, for the iron of the rails had to be brought up river by boat from New Orleans to St. Louis and re-shipped again by boat from St. Louis up the Mississippi and Illinois rivers to the tiny settlement of Meredosia, the city that was later designated as the starting point for the new road.

Nearly three years after authorization for the construction of the new line, actual work was finally begun. The starting date was set for November, 1837, and when the first shovelful of earth was turned for the railroad, the few supporters of the railroad on hand were outnumbered by the "canalers" who came from up and down the river to jeer.

This new railroad was known as the "Northern Cross," a name chosen, according to some historians, because the line surveyed for the railroad closely paralleled a well-worn trail known as the "Northern Crossing" of Illinois and often called "Northern Cross" although it was actually in the south central portion of the State.

The drama of the building of the "Northern Cross" railroad is the first chapter in the romantic story that is the growth of the Wabash Railway System, for the lineage of the Wabash can be traced, without a break, to the first 8-mile strip over which was operated a clumsy little locomotive in the fall of 1838.

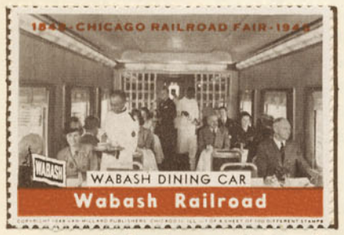
Today, 110 years later, the Wabash truly serves the "Heart of America." Its 2,393 miles of track radiate from Chicago to Detroit and Buffalo; to Toledo, Ohio; and to St. Louis, Missouri. The lines extend westward from St. Louis to Des Moines, Iowa; Omaha, Nebraska; and Kansas City, Missouri. In this vast area are produced products of the mines, fields and forests, which are manufactured into commodities now taken for granted in your every-day lives. Fast freight transportation places on the shelves of your stores merchandise which 110 years ago was either unobtainable or out of reach of the average pocketbook because it had to be made by hand or in small local factories. Mass transportation made mass production possible and economical, with consequent lower costs and higher living standards.

Between Chicago and Detroit the "Red Bird," the "Detroit Arrow" and the "Mid-City Express" provide high-grade transportation for people and for products moving via mail and express. Between Chicago and St. Louis the "Blue Bird" and the "Banner Blue" whisk you through the fertile Illinois prairies to the bustling metropolis of St. Louis, crossing en route the grand old Mississippi River, the "Father of Waters." From St. Louis to Kansas City and to the great western territories beyond, two luxurious streamliners, the "City of Kansas City" and the "City of St. Louis" provide the finest accommodations to people on the move for business or for pleasure.

110 years young and still growing lustily, the Wabash looks to the future with confidence in continued national well-being and with pride in the growth and development of the great area with which the Wabash has been so closely identified for more than a century.

The "Rogers" was the first railroad locomotive ever operated anywhere in the State of Illinois.

Engine 671 rolls along at 75 with the Banner Blue Limited, the blue-painted fast schedule pride of the Wabash.



American Railroads are justly proud of their excellent equipment. Wabash advertises, "You'll eat in a 'finer diner' when you 'Go Wabash'."

The deluxe Wabash Streamliner "City of St. Louis" is shown passing through Forest Park in St. Louis, Missouri, enroute to Kansas City, Denver, Los Angeles, San Francisco and Portland.

The modern "City of Kansas City" is the latest addition to the Wabash fleet. Placed in service November 26, 1947, this sleek Streamliner operates between Kansas City and St. Louis.

Above, all copy and photographs for 10 Locomotive Stamps, courtesy of American Locomotive Company.

With smoke pouring from its stack, steam popping from its valves, AMERICAN LOCOMOTIVE's first version of the Iron Horse, *Lightning*, is pictured thundering over the countryside of 100 years ago.

Many a railroader and railroading fan felt a twinge of nostalgia in June of this year when they read in their newspapers and magazines that the last steam locomotive on the order books of the century-old American Locomotive Company had chugged away from the shops at Schenectady, N. Y., where production now is 100 per cent diesel-electric locomotives.

This breaking away from the era of the steam locomotive occurred in the hundredth year of locomotive production at the Schenectady plant, just a century after the first locomotive, the "Lightning," was produced there. The span of railroad motive power progress is indicated by the locomotive which is pulling the Freedom Train to each of the 48 states, a 2,000 hp diesel-electric.

Although it largely was a wood-burning boiler mounted on wheels, the "Lightning" was a fine piece of machinery and even on the metal topped wooden rails of the time managed to top 80 miles an hour with a train. Its large driving wheels, and exposure of the engineer to the elements was typical of the time.

Until about 1890 development of the steam locomotive was largely concerned with enlarging the boiler, the weight and the number of drivers. From 1850 to 1870, the locomotives were of the 4-4-0 type, illustrated by the "Commodore Vanderbilt" and Hudson River Railroad locomotive stamps. This type continued in popular use, but was joined in the next decade by the 2-6-0 type and in the 1880s by the 4-6-2 and 4-8-0.

THE LOCOMOTIVE—1948

The locomotive stamps in this album indicate the course of locomotive progress through the century.

From 1850 to 1870, locomotives rolled on a four-wheeled leading truck; were powered with two pairs of coupled driving wheels.

In the early days, locomotives were named—such as this early Alco, "Commodore Vanderbilt."

Increasing weight and power, designers changed wheel arrangements to 2-6-0, 4-6-2 and 2-8-0 during the 1880s.

The powerful Mallet locomotives were built for hauling enormously heavy trains at a steady speed.

In the 1890s, besides increasing weight and power, engineering design incorporated the features of the piston valve and the cross compound. After the turn of the century, innovations which multiplied the nation's transportation facilities poured in. Some of these important new locomotive features were obvious to the open-mouthed farm youngsters who watched the trains roar by. These included the Mallet compound type of locomotive, such as the 0-6-6-0 type built for the Baltimore & Ohio Railroad in 1904, and the new type of motive power, the electric locomotive. Other features of this period, such as the superheater, the Walschaert gear, power reverse gear, automatic stoker and feedwater heater, were the pride of the railroads but were not too well known to the public. They were followed within a few years by the booster, which gave additional steam power for starting trains.

In the fabulous '20s the simple Mallet quietly entered the picture, but in 1924 a new type of locomotive was built which was destined to revolutionize railroading motive power over the succeeding decades. This was the first commercially successful diesel-electric switcher locomotive, built by American Locomotive in 1924 and entered into the service of the Central of New Jersey Railroad in 1925. Incidentally, it still is in yard service, in company with the huge sleek diesels it sired. The first diesel-electric passenger locomotive was delivered to New York Central in early 1929.

Steam still remained king, however, and the nation's imagination was captured in 1935 by the first streamlined locomotive, a 4-4-2 type steam passenger locomo-

1848—DEVELOPMENT OF THE LOCOMOTIVE—1948

When Alco designed the first streamlined steam locomotive for 100 m.p.h. passenger service, the 4-4-2 wheel arrangement of the Atlantic type was used.

Representing the peak of weight and power and doubtless, the largest steam locomotive that will ever be be built, "Big Boy" was built by Alco for the Union Pacific in 1941.

The 4-8-4 Niagara Class locomotives were dual purpose powerful freight or high speed passenger engines.

tive built by American Locomotive for the Milwaukee Road to power its hundred-mile-an-hour streamlined trains. This was the "Hiawatha."

Just before World War II, in 1941, American Locomotive built for Union Pacific the world's largest locomotive, appropriately named "Big Boy." This giant 4-8-8-4 with its 14-wheeled tender carrying 28 tons of fuel and 24,000 gallons of water was an apex of steam freight locomotive accomplishment. As late as 1945 one of the finest steam locomotives ever built, the "Niagara" class, 4-8-4, went into service on the New York Central and promptly established sensational freight and passenger motive power records.

But meanwhile an inevitable trend was developing toward the diesel-electric locomotives, culminating in June, 1948, when American Locomotive bid the old steam locomotive farewell and turned 100 per cent to diesel-electric locomotive building.

In 1946, Alco had produced its 75,000th locomotive, a 6000 hp diesel-electric passenger locomotive for the Santa Fe.

This type of powerful diesel, which can be used in units of 2000 to 6000 hp, was part of a new line of locomotives which included a 4500 hp freight locomotive and a 1500 hp combination road and switching locomotive.

This was a new type of railroad history, because now these diesel-electrics in versatile combinations, answer all the motive power problems of all railroads, where in the steam days the locomotives were specified for particular duties on particular railroads, resulting in a great variety of types.

Some of the locomotive types, names which are familiar to railroad men and fans, are descriptive of the requirements for that type, the Mountain type, for example, or the Mikado, an export locomotive. The development of locomotives can be traced by the requirements of the railroads. From the start, there was a demand for power, to pull trains, freight and passengers. Heavy duty locomotives were required for the freights and lighter ones for passenger trains. Primarily at first, this caused the building of bigger boilers and engines, and more wheels to carry the added weight.

Later refinements increased the power, and better rails and roadbeds permitted both heavier freight locomotives and speedier passenger locomotives.

In the present days of changeover to diesel-electric power, the emphasis is on greater economy and availability for service, such refinements as smooth stops and starts, and the important considerations of power braking, less wear and tear on the tracks and fewer delays for required stops for fuel, water and cleaning.

The "last" steam built by Alco, a 2-8-4 type, was delivered in June, 1948, to the Pittsburgh and Lake Erie Railroad.

A new type engine was destined to end the steam era of American Railroading.
The first commercially successful Diesel-electric locomotive was built by Alco in 1924.

Carrying America's most loved treasures, THE FREEDOM TRAIN has been powered with the latest of Diesel locomotives.

1948—PICTURES AND STAMPS—2048

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