EXHIBIT
OF THE
BALTIMORE & OHIO
RAILROAD
AT
A Century of Progress
CHICAGO, 1933

THE BALTIMORE & OHIO RAILROAD COMPANY
General Offices, Baltimore, Md.
A Century of Progress, the World’s Fair at Chicago, opened May 27 and closed November 12, 1933. It will be re-opened in May or June, 1934.

The Baltimore and Ohio Railroad Company has re-engaged the same space in the Travel and Transport Building as well as on the tracks just outside of that building for its exhibit in 1934.

THE BALTIMORE & OHIO RAILROAD

AT

A Century of Progress

Chicago, 1933

This booklet contains eight leaflets describing the principal features of the Baltimore and Ohio exhibit in the Travel and Transport Building at A Century of Progress, Chicago, 1933, and those on the exhibition tracks outside of the building. They are:

THE TRAVEL BUREAU AND THE “RELAXATION CARS”

THE BEGINNING OF PROGRESS

The Laying of the First Stone of the B. & O.—1828

FOUR DIORAMAS

Birth of the Baltimore and Ohio—1827
Race between the Locomotive “Tom Thumb” and the Horse—1830
Baltimore, Maryland—1933
Harpers’s Ferry, W. Va.—1933

PANORAMA OF WASHINGTON

The Stately and Beautiful Capital of the United States of America

THE “ATLANTIC” LOCOMOTIVE

Built in 1832

THE AIR-CONDITIONED TRAIN

COLONIAL DINING CAR

“MARY PICKERSGILL”

MOTIVE POWER AND CARS OF YEARS GONE BY

THE BALTIMORE & OHIO RAILROAD

General Offices, Baltimore, Md.
THE TRAVEL BUREAU

AND THE

RELAXATION CARS

OF THE

Baltimore and Ohio Railroad

IN THE

Travel and Transport Building

A Century of Progress

CHICAGO, ILL.

1933
FOREWORD

A Train of Progress

In all of its exhibits at “A Century of Progress” the Baltimore and Ohio Railroad has endeavored to create the same atmosphere which the traveler finds on B. & O. trains. And that the visitor may sense in these exhibits a bit of the spirit of progress in rail transportation, a Baltimore and Ohio “train” of four “cars” has been set up in the Travel and Transport Building.

Each of the four “cars” of this train is twenty feet long. They represent sections of Baltimore and Ohio cars of 1850, 1890 and two of 1933.

The “train” was created first of all to provide a resting place for visitors in a real railroad atmosphere. Hence the name, “Relaxation Cars.”

Thousands have enjoyed visiting the quaint coaches of yesterday and the comfortable and luxurious ones of today. They have enjoyed seeing the improvements developed during “A Century of Progress.”

A Baltimore and Ohio Travel Service and Information Bureau marks the entrance to the “train.” In the aisles of the four cars are interesting models of railroad bridges and of locomotives, old and new.

And in a room across the aisle and just west of the Washington diorama, is another interesting exhibit of models of B. & O. equipment, of old and modern times. This includes bridges, coaches, cars and an Alton Railroad locomotive.

THE B. & O. TRAVEL SERVICE AND INFORMATION BUREAU

The introductory exhibit of the Baltimore and Ohio Exhibits in the Travel and Transport Building is a diorama, or scene in which the figures talk and move, portraying the Laying of the First Stone of the railroad. Adjoining this, with an entrance from either aisle, is the “Diorama Room” in which are presented scenes showing the first meeting of the promoters of the Baltimore and Ohio; a race between the first locomotive and the horse; Baltimore, birthplace of the Star-Spangled Banner, and Harper’s Ferry, W. Va. Just beyond this Diorama Room is the office of the Baltimore and Ohio Travel Service and Information Bureau.

On the south wall of this office hangs a large painting of the old Carrollton Viaduct. This is the world’s oldest stone-arch railroad bridge still in service. Built in 1829, when locomotives weighed but 3½ tons, the Carrollton Viaduct today—without change in its construction—carries locomotives and tenders weighing upwards of 350 tons. This bridge is on the first stretch of B. & O. track that was built. At Relay, Maryland, a neighboring village, is a similar stone-arch bridge, the Thomas Viaduct. This, however, has seven stone arches instead of one and is particularly interesting because it is built on a curve. It was completed in 1835. Both these bridges
are marvels of strength, noted for their symmetry of design, and are real monuments to their builders.

The Carrollton Viaduct was named for Charles Carroll of Carrollton, last surviving Signer of the Declaration of Independence. It was he who lifted the first spadeful of earth for the Laying of the First Stone of the Baltimore and Ohio. The Thomas Viaduct is named in honor of Philip E. Thomas, the railroad’s first president.

There are two entrances to the Travel Bureau. Above one of these, in a large frame, is displayed a set of the Baltimore and Ohio Blue China. This attractive tableware was made for use on the Baltimore and Ohio’s Colonial Dining Cars, and at the time of the One Hundredth Anniversary of the railroad, in 1927. A descriptive booklet, “Concerning the Blue China,” may be had at the desk in this office. Those who wish to purchase any pieces of this Blue China may leave their orders here.

Above the opposite doorway, and in another frame, are the original Masonic implements—the spade, the trowel and the hammer—which were used in the ceremony of the Laying of the First Stone of the Baltimore and Ohio at Baltimore, on July 4, 1828. Here, also, are the tin cup—made on the tin plate workers’ float in the parade on that occasion—and the original badge worn by Charles Carroll of Carrollton on that day.

The wall opposite the Carrollton Viaduct picture forms the outer end of a “Coach” of 1850, a unit of the “Train” which we have mentioned. Note the colors—red and yellow—and the shutters on the windows. These were important fixtures in the manufacture of these “luxurious” coaches of the early Fifties.

The Travel Service and Information Bureau is the headquarters of the Baltimore and Ohio at “A Century of Progress.” Here the visitor finds a welcome, a place to meet friends and comfortable seats in which to rest. Desks are provided for those who wish to write letters. Stamps may be purchased here, letters and telegrams sent, railroad tickets, reservations and general travel information secured. B. & O. historical post cards are available here at ten cents per set of thirteen.

A lucky-penny souvenir was also distributed to visitors by the Travel Service and Information Bureau. The coin is a 1933 Lincoln penny, in the center of an aluminum disc. The Lincoln side of the memento carries the inscription “Baltimore & Ohio Railroad—Safe, Comfortable, Dependable—America’s First Railroad — First to Air-Condition Trains,” a horseshoe and a four-leaf clover. On the reverse side are the words, “Baltimore & Ohio Railroad—All Trains East and West via Washington—Chicago, 1933—A CENTURY OF PROGRESS.” The “Tom Thumb” locomotive of 1829 and, in comparison, a modern locomotive, are pictured on this side of the souvenir.
Above the desk on the right is an interesting poster depicting in photograph and story, the sending of the first telegram. By means of the instrument invented by Samuel F. B. Morse, the message—"WHAT HATH GOD WROUGHT"—was sent over the line strung along the Baltimore and Ohio right-of-way from Washington to the old depot of the B. & O. on Pratt Street, near Light, Baltimore, on May 24, 1844. The message was indited by Miss Annie Ellsworth, daughter of the Commissioner of Patents, at Washington.

In contrast is a framed set of pictures showing the First Railroad-Radio Broadcast ever made. This was done by the Columbia Broadcasting System on the night of March 27, 1932, when a regular program went out on the ether waves from the B. & O. dining car "Molly Pitcher." The pick-up stations were at Laurel and Beltsville, Md. It is an historical coincidence that the broadcast took place on the same section of the B. & O. used by Morse in 1844.

Above the desk at the left is an announcement of Maryland's Tercentenary Celebration in 1934—an invitation to World's Fair visitors to visit Maryland and join in the Celebration. The Black-Eyed Susans, state flower of Maryland, which are displayed here and elsewhere throughout the exhibit, are placed in honor of that occasion.

THE B. & O. COACH OF 1850

Passing through the large doorway from the Travel Service Bureau, we find ourselves in the section which represents a B. & O. Railroad coach of 1850. Travelers of that period sat in these self-same red plush seats and marveled at the wonders of transportation.

Just inside the doorway is the original bell which called the passengers to the Ellicott's Mills' station at train time to board the horse-drawn cars, the earliest trains of the B. & O., in 1830.

On one side is a water cooler used in coaches of this type. It has a double cylinder, for the water was kept cool by the application of the vacuum principle. Everyone drank from the same old tin cup hung on a chain. A contrast, indeed, is the present type of drinking fountain with sanitary ice compartments, separate water containers and individual paper cups, supplied without cost to travelers on B. & O. trains.

On the other side is a model of the cast-iron, wood-burning stove. The conductor for a long time had his troubles with this stove. Passengers sitting nearest it complained that they were too warm and insisted upon opening the stove door. Those who sat farthest away complained of the cold and insisted upon adding more fuel to the fire and closing the stove door. At length the conductor asked to have a lock placed upon the door.
This was done, and at regular intervals thereafter, he fed the fire, locked up the stove and put the key into his pocket. For the sake of safety the stove was bolted to the floor. There is a great difference between this heating plant and that of the modern day coach.

The red plush seats are reversible. These are the original seats taken from a B. & O. railway coach of 1850. The kerosene lights suspended from the ceiling are now antiques. Grandfather, who complained that trying to read on a moving train proved “a little hard on the eyes,” probably never would have believed that his grandchildren would enjoy reading under the pleasant electric illumination of the table lamps of a lounge car of today.

At the extreme left is a model in miniature of old Mt. Clare Station, Baltimore, said to be the oldest railroad passenger depot in the world. In 1830 Mt. Clare was the “home terminal” of the B. & O. in Baltimore. After 103 years of service this station is still in use. It stands at the northwest corner of Poppleton and McHenry Streets.

The baggage racks of this car are very ornate, but small when compared with those of a modern day coach. Oblong, with square corners and with an umbrella rack below, we wonder how Grandfather managed to place even his carpet-bag into one of these. The lack of ventilation in such cars of old would probably horrify the fresh-air enthusiasts of today. But we shall see, as we proceed through this “train,” how ventilators, as well as other appliances, have improved during “A Century of Progress.”

In the center aisle of this coach there is a model of the Wooden Truss Bridge of 1839. A bridge of this type spanned the Patapsco River at Elysville, Maryland, not far from the Thomas Viaduct. It was made of American white pine. Its wooden roof had a covering of sheet-iron to protect the timbers from fires that might be caused by sparks from the early locomotives. In 1852 this bridge was replaced by one of metal. Above the frame which supports this bridge model are models of early B. & O. locomotives, as follows:

“Tom Thumb”—1829. First American-built locomotive, and so named by Peter Cooper, its builder, because he felt that it was “so insignificant.”

“Thomas Jefferson”—1835. Named for the third President of the United States. The first locomotive with a cab. (The original engine takes part in “Wings of a Century,” the Transportation Pageant staged by A Century of Progress.)

“Ross Winans’ Camelback”—1848. So named because of the unusual location of its cab—on top of the locomotive boiler.

On a pedestal that stands between the coach section of 1890 and that of 1933 is a working model of the “Tom Thumb,” first American-built locomotive, made in 1829 by Peter Cooper. Its experimental runs were made on the Baltimore and Ohio. It once lost in a race with a horse, but its tests proved the feasibility of steam as motive power. A full-size working model of the “Tom Thumb” also takes part in the transportation pageant, “Wings of a Century.”

THE B. & O. COACH OF 1890

“Hurling its sparks through the startled air,
Shaking the earth as it flew,
Tugging and chafing to feel the steam,
With a snort came the Royal Blue.”

—From “The Flight of the Royal Blue”
By E. Lacy Spear

The period known as the “Gay Nineties” was marked by luxury and ornate designs. Trains, as well as people, follow the fashions, and the Trains of the Royal Blue were no exception. Painted a gorgeous royal blue, with stripes and ornamentations of gold, they not only “shook the earth,” as the poet tells us, but also made a great impression on the people of that day. They were the high-speed trains of the times.

The first of the Royal Blue trains originally was placed in service between Washington and New York. Later, however, they were put into service on all of the railroad’s main lines. Visitors to the World’s Columbian Exposition, in 1893, rode in coaches similar to this. The seats, in green plush, were considered the last word in comfort. Their backs had grown higher since 1850. Their interiors had become very ornate. The baggage racks had adopted “lines.” They had become curved, rather than severe, although there was little improvement in size or capacity.

The lamps had undergone a radical change, not only in form but in character. Kerosene was no longer used. Gas was the latest discovery for lighting trains. This kind of illumination had not long been used in homes. All of the early Presidents of the United States used kerosene lights. Gas lamps were quite a luxury, even during President Cleveland’s first administration.

The train’s ventilating system had improved. The year 1890 found the ventilators both longer and wider, and more numerous.

In the center aisle of this coach stands a model of the Fink Truss, invented in 1852 by Albert Fink, bridge engineer of the Baltimore and Ohio. This type of bridge was used for both highway and railroad traffic until 1880. A modified form is still used extensively in the steel roof trusses of today.

Above this we find models of the “President Washington” and “The Mikado 4400,” B. & O. locomotives. The “President Washington” was built for the railroad in
1927. It is the first of the modern series of "President" locomotives. The "Mikado" was named for the ruler of Japan, because the first locomotives of this type were sent to that country. This locomotive was built in 1926 for high-speed freight service.

Between the section representing the Coach of 1850 and that representing the Coach of 1890 stands a working model of the old Atlantic Engine, perhaps the most famous of B. & O. locomotives. It is a significant figure in the history of transportation. Built in 1832, it is older than "A Century of Progress." Older than the telegraph or telephone, the reaper or the sewing machine. A Civil War veteran and a link between the 19th and 20th centuries, it has lived through years of war and peace, of want and plenty; through all save six of the Presidential campaigns and through the history of the B. & O. from its horse-car days to the era of air-conditioning. It served the railroad for 61 continuous years and is still able to operate under its own steam. It has been exhibited at scores of celebrations and is now attending its third World's Fair. The original Atlantic is on display at the north end of this exhibit.

THE B. & O. RECLINING SEAT COACH

The Reclining Seat Coach is the latest development in railway cars for overnight service for those who prefer not to use a Pullman sleeping car. It was designed and built by the Baltimore and Ohio and is used between certain points on the system on overnight runs. The backs of the seats may be inclined for comfortable sleeping. Individual bracket lamps make it possible to read at night without disturbing your neighbor's slumbers, for the ceiling lights are dimmed at 10:00 p.m. The dividing arm-rests may be lowered for the convenience of the passenger, or to provide a sleeping place for young children. A completely equipped Reclining Seat Coach, with its lunch counter and spacious dressing rooms, may be seen on the Air-Conditioned train on the B. & O. track, just south of the Travel and Transport Building. Note the soft ceiling lights of this car and the roomy luggage racks.

In the aisle of this car is a model of the Warren Truss, another type of railroad bridge used on the Baltimore and Ohio. This bridge was developed in 1920. The largest span of this type on the B. & O. is the bridge which crosses the Allegheny River at Pittsburgh.

Above this stands a model of Mallet No. 7147, a powerful B. & O. locomotive, built in 1926 for hauling coal, coke, ore, etc., in hopper and gondola cars.

Under a glass-covered cylinder between the reclining seat coach and the lounge car we see B. & O. Trainside Motor Coach Service, in miniature. There is a model of the Jersey City Station with trains arriving
and departing, and B. & O. motor coaches meeting the trains and starting on their delightful journeys across the Hudson. In New York Harbor a tiny Statue of Liberty "lights the world." On the opposite shore stands New York and the famous sky-line that never ceases to attract the ferry traveler. B. & O. entrances to the city are marked—Twenty-third Street and Liberty Street. Miniature ferry boats seem hustling up and down the Hudson. The Aquarium and other interesting spots in the city are seen in this model.

On the arrival of B. & O. trains at Jersey City, passengers step into comfortable motor coaches and are taken at once without change on the ferry boat across the river. On entering the city the motor coaches stop at a number of convenient stations and hotels in New York. There is also a coach to Brooklyn. Hand baggage is cared for by the attendant, in the coach with the passengers. There is no extra charge for this motor coach service.

THE MODERN B. & O. LOUNGE CAR

The modern Lounge Car, a section of which adjoins that of the Reclining Seat Coach, first developed by the B. & O., and provides the last word in comfort. Pullman passengers make this car their living room. Here they relax, write letters, play games, smoke, read or chat. The lights from table and bracket lamps lend a homelike atmos-

phere. The seats and chairs are especially designed for comfort; the color harmonies of all the furnishings are restful and pleasing to the eye.

A completely equipped lounge car is a part of the B. & O. Air-Conditioned Train on a track just outside the south end of the Travel and Transport Building. Visit this train and enjoy its clean, cool, refreshing atmosphere—the result of air-conditioning.

The model exhibited in the center aisle of this section is of the Scherzer Rolling Lift Bridge. The engine model above it is of the "Philip E. Thomas."

The Scherzer Rolling Lift Bridge is a modern movable bridge of a type developed by William Scherzer in 1893. It is so named from the curved base on which it is raised and lowered. This type was planned for the purpose of minimizing interruptions to the movement of heavy traffic. It is characterized by the rapidity and certainty of its operation, and marks a definite step in the progress of railroad bridge building.

The "PHILIP E. THOMAS," No. 5501, was built at the B. & O. Shops, Baltimore, in 1926. It is a mountain type passenger locomotive with a tractive power of 68,200 pounds. Its own weight is 400,000 pounds. It is named for the first president of the Baltimore and Ohio.

The Baltimore and Ohio will be glad to have you make its exhibit your headquarters.
Employees here are anxious to do everything they can to make your visit to “A Century of Progress” a pleasant and memorable event.

When you have rested here be sure to see the remainder of this exhibit—the Washington Diorama Room, adjoining this lounge car section; the original Atlantic just beyond, the B. & O. Air-Conditioned Train and the historic equipment on the tracks just south of this building. We believe that you would enjoy also the transportation pageant, “Wings of A Century,” just across the street.

IN THE MODEL ROOM

Just across the aisle, and west of the Washington Diorama Room, there is a room in which are housed a goodly number of other interesting B. & O. models.

Around the walls of this room, inside and out, are posters depicting scenes from railroads all over the world. On the north wall are the beautiful posters used in the Baltimore and Ohio’s Centenary Celebration, the Fair of the Iron Horse.

In the foreground of the model section is Alton Railroad. Locomotive 5297, of the type used to pull the Alton Limited, air-conditioned train running between Chicago and St. Louis daily. The Alton is owned by the B. & O.

This model, now being operated by means of compressed air, ordinarily runs under its own steam, on a 4½” wide track. It was built by G. M. Overmyer, of Bloomington, a former employee in the Alton Railroad shops. The type is a 4-6-2 Pacific. Width of tank and body, 10”; valves, piston type; total length of engine 40”; exhaust clearance, 1-64”; total length, engine and tender, 81”; height, 15¾”; boiler, extended wagon type; steam pressure, 100 lbs.; Class, P-16, 40 steel tubes, dia., ½”; grate area, 73 sq. in.; main rods, floating type; scale 1” to 1’.

On the right is a Plate Girder—Through Type 1927 model bridge. On top of this bridge is a B. & O. freight car and a “little red caboose.”

Continuing to the left we find, in order:

A bridge model of the Plate Girder—Deck Type of 1903. Plate girders for short spans have been used for many years. This model supports a modern coal hopper and a gondola.

The Pratt Truss, of 1884, was introduced by Thomas Pratt and Caleb Pratt, father and son. This type is still used extensively for railroad and highway bridges. On this bridge also are modern gondola and hopper cars, used chiefly for hauling coal; other freight cars and a modern railway postoffice car.

The Bollman Truss, of 1850, was developed by Wendell Bollman, a master of road on the B. & O. Another Bollman truss model is shown in the Harper’s Ferry scene in the B. & O. Four-Diorama Room.
A passenger car is shown passing over the Bollman Truss.

The Whipple Truss is another type, introduced by Squire Whipple in 1847. It is a development of the Pratt Truss, a type developed three years earlier. It involves the use of a double system of web members, each diagonal usually extending over two panels. Baggage and passenger cars of fifty years ago are shown with this model.

The Howe Truss, 1840, is a distinct type. It marks a definite step in the development of the modern railroad bridge. Patented by William Howe, it combines the use of both timber and metal. An example of this type was the old B. & O. bridge crossing the Allegheny River at Foxburg, Pa., until 1921.

Above the Howe Truss is a car built for the use of the directors of the railroad in 1829; two models of the little Imlay coaches, built by Richard Imlay, and which were considered very grand between 1832 and 1837. Here also are models of the "flour-barrel cars" used between Baltimore and Ellicott's Mills in the early days of railroading, and the early type of coal car known as the "Three-Pot Hopper." Full-size cars of this type may be seen on the exhibition tracks just south of the Travel and Transport Building. Each has a capacity of ten tons. They are of the self-clearing type, with link-and-pin couplers and hand brakes.
THE BEGINNING OF PROGRESS

The Laying of the First Stone

of the

Baltimore and Ohio Railroad

America's First Railroad

at

Baltimore, Maryland

July 4, 1828

Re-enacted

in the

Travel and Transport Building

at

A Century of Progress

Chicago, 1933
FOREWORD

A SCENE called "The Beginning of Progress" is one of the principal features of the Baltimore and Ohio exhibit in the Travel and Transport Building at A Century of Progress, Chicago. It re-enacts, in part, the original ceremonies attending the Laying of the First Stone of the Baltimore and Ohio Railroad. Full-size, animated and talking figures represent some of the persons who took part in the original ceremony.

The "First Stone" marked the beginning of construction of the railroad at Baltimore, Md. It was laid with formal ceremonies on July 4, 1828, under the auspices of the Grand Lodge of the Masonic Order of Maryland, assisted by the illustrious Charles Carroll of Carrollton, the last surviving Signer of the Declaration of Independence.
THE LAYING OF THE FIRST STONE

So important has the Baltimore and Ohio Railroad always considered the ceremony that signalized the beginning of its construction from Baltimore to the Ohio River, that the original Stone has been preserved for the 105 years since the day the ceremony took place, July 4, 1828. The First Stone itself has been brought from its original site in Baltimore to the Travel and Transport Building at A Century of Progress, Chicago, where it may be seen under plate glass during the exposition.

On the top of the Stone is still legible the following inscription:

"This stone, presented by the Stone-Cutters of Baltimore, in commemoration of the commencement of the Baltimore and Ohio Rail Road, was here placed on the Fourth of July, 1828, by the Grand Lodge of MARYLAND, assisted by Charles Carroll of Carrollton, the last surviving Signer of the Declaration of American Independence, and under the direction of the President and Directors of the Rail Road Company."

On each side of the Stone is the inscription:

"First Stone of the Baltimore and Ohio Rail Road."

Just as the words were spoken in 1828 by the Grand Master of the Masonic Order of the State of Maryland, the figure representing him and wearing the insignia of his office, now says:

"I pronounce this Stone well formed, true and trusty. Sealed within it have been put
Governors of States and others, came to witness the placing of the First Stone. They were guests of the President and Directors of the Railroad Company, as were the Mayor and City Council of the City of Baltimore, and other celebrities. A pavilion for the convenience of officials and guests had been erected close to the site chosen for the Stone.

The Declaration of Independence was read and a band played the “Carrollton March,” composed especially for the event.

**Significant Papers Sealed Within**

Most interesting is the cylinder placed within the Stone at the time, containing the Company’s Charter, newspapers of the day and a scroll with the following inscription:

“This Stone is deposited in commemoration of the commencement of the Baltimore and Ohio Rail Road, a work of deep and vital interest to the American people. Its accomplishment will confer the most important benefits upon this nation, by facilitating its commerce, diffusing and extending its social intercourse, and perpetuating the happy union of these Confederated States. The first general meeting of the citizens of Baltimore to confer upon the adoption of proper measures for undertaking this magnificent work, was on the 2nd day of February, 1827. An Act of Incorporation by the State of Maryland was granted February 28th, 1827, and was confirmed by the State of Virginia March 8th, 1827. Stock was subscribed to provide funds for its execution, April 1st, 1827. The first board of directors was elected April 23rd, 1827. The Company was organized April 24th, 1827. An examination of the country was commenced under the direction of Lieut.-Col. Stephen H. Long, Capt. William G. McNeill, U. S. topographical engineers, and William Howard, U. S. civil engineer, assisted by Lieuts. Barney, Trimble and Dillehunt, of the U. S. Artillery, and Mr. Harrison, July 2nd, 1827. The actual surveys to determine the route were begun by the same officers, with the additional assistance of Lieuts. Cook, Gwynn, Hazzard, Fessenden and Thompson, and Mr. Guion, Nov. 20th, 1827. The charter of the Company was confirmed by the State of Pennsylvania, February 22nd, 1828. The State of Maryland became a stockholder in the Company by subscribing for half a million of its stock, March 6th, 1828. And the construction of the road was commenced July 4th, 1828, under the management of the following named Board of Directors: Philip Evan Thomas, president; Charles Carroll of Carrollton, William Patterson, Robert Oliver, Alexander Brown, Isaac McKim, William Lorman, George Hoffman, John B. Morris, Talbot Jones, William Stewart, Solomon Etting, Patrick Macauley; George Brown, treasurer.”

The man who cut the Stone and its inscription was Nicholas Hitzelberger, of Baltimore, a veteran of the War of 1812 and the carver of
the Washington Monument in Baltimore, the first to be erected in honor of President George Washington.

In 1898, interest in the First Stone, which for a time apparently had been forgotten, was revived. A visit to its supposed location revealed no sign of it. Nobody remembered having seen it for forty years.

Then an old record, giving its exact location in distance and direction from Mt. Clare, was discovered. A new survey was made, and after hours of strenuous digging, the Stone, intact, was discovered.

It was unearthed, photographed and surrounded by a fence and protective wire covering. Here it remained until it was brought to A Century of Progress, Chicago.

The spade which is seen in the hands of the figure representing Charles Carroll of Carrollton in this scene was loaned through the courtesy of the Ames Baldwin Wyoming Shovel Company, of North Easton, Mass. It is hand-fashioned and was made in 1812, and is of the type used during the period of the Laying of the railroad's First Stone.

Benjamin Howard, Grand Master of the Masonic Order of Maryland; is shown measuring the Stone; the Grand Chaplain who stands at his left is Rev. Wyatt.

Charles Carroll of Carrollton, to the end of his life, remained a firm friend and supporter of the Baltimore and Ohio Railroad.
THE FOUR DIORAMAS

EXHIBITED BY

The Baltimore and Ohio Railroad

IN THE

Travel and Transport Building

AT

A Century of Progress

CHICAGO, 1933

1. The Birth of the Baltimore and Ohio—1827
2. The Race Between the "Tom Thumb" and the Horse—1830
3. Baltimore, Maryland—1933
4. Harper's Ferry, W. Va.—Today
THE BIRTH OF THE BALTIMORE AND OHIO RAILROAD

Meeting in George Brown's House, Baltimore, Md.

The meeting shown in the model called "The Birth of the B. & O. R. R.," took place in Baltimore on February 12, 1827, in the house of George Brown, one of the principal founders of the railroad and its first treasurer. It was the culmination of previous gatherings of George Brown, Philip E. Thomas and other prominent business men of Baltimore, during the winter months of 1826 and 1827. The mails from overseas were slow in those days, and reports of experiments made abroad with a steam engine on tracks did not reach America with their full import until about this time.

From a brother residing in England, George Brown received word of what was transpiring there. Filled with enthusiasm over the possibilities of a rail road in America, he broached the subject to his friends and colleagues. Not only did the news stimulate their interest, but all were ready for some project that might preserve the commerce of their city, which had been threatened by canals built to the North.

The first general meeting of the citizens of Baltimore to consider how best to undertake
the building of a railroad, took place on February 2, 1827, followed by this one of February 12, and another on February 19. On February 28, the Charter enacted by the State of Maryland establishing THE BALTIMORE AND OHIO RAIL ROAD, gave it the authority to construct a railroad from Baltimore on Chesapeake Bay to some point on the Ohio River. The Baltimore and Ohio operates today under its original charter, which was the first granted to an American railroad for the general transportation of passengers and freight.

In this scene two figures stand at the foot of the table. The one with gray hair is William Patterson. The younger man is John VanLear McMahon, promising young lawyer of Baltimore, who had drawn up the Charter which was to become not only a permanent one for the Baltimore and Ohio, but also the model for the railroad charters which followed. McMahon was reading the Charter, when Robert Oliver banged his fist upon the table, and said: "Stop, John, you've asked for too much. You've asked for more than the Lord's Prayer!"

And McMahon, with a smile, replied that it was all quite necessary, adding, "and the more we ask, the more we're apt to get."

"Right, man, go on," agreed Oliver. And a few days thereafter the Charter, with all of its provisions, was granted to the B. & O. by the General Assembly of Maryland.

Hoping that the railroad some day might reach the Ohio River, the founders named it BALTIMORE AND OHIO. Twenty-five years elapsed before the railroad actually reached the Ohio.

Among those who sat at this table in George Brown's home were: Philip E. Thomas, who became the first president of the B. & O.; George Brown, treasurer; William Patterson, Isaac McKim, Alexander Brown, Robert Oliver, William Lorman and others. They were all men of action, men of vision.

The setting is a typical Baltimore home of 1827.

[Diorama No. 2]

THE RACE BETWEEN THE "TOM THUMB" AND A HORSE

The event depicted in this scene is the historic race between the "Tom Thumb" and the horse. It took place on August 25, 1830, and tested the respective merits of steam and horse power. The "Tom Thumb" was the first American-built locomotive. It was constructed by Peter Cooper, alderman of New York, in September, 1829, on a spot now occupied by the Mount Clare shops of the Baltimore and Ohio in Baltimore.

The first tests were unsuccessful. The engine was returned to the shop, where its inventor worked on it for several months before being satisfied that it could be run. On
the occasion shown in the diorama, the "Tom Thumb" locomotive was returning from a trip to Ellicott’s Mills, Md. (now Ellicott City), thirteen miles from Baltimore. Leaving Relay, which received its name from the fact that horses were changed at this point, the driver of the horse car, on the adjoining parallel track, challenged Peter Cooper to a race.

In an instant they were off! The "Tom Thumb" for a while lagged behind, but when Peter Cooper put on full steam, it drew up on even terms, then forged ahead. The engine was winning! Just then the belt on the drum of the little engine slipped and the "Tom Thumb" had to stop to have this adjusted. The horse tore by it on the adjoining track and obtained such a lead, because of this accident, that it actually finished first. The finishing line was the Baltimore terminal of the railroad, Mount Clare Station, built in 1830 and still in use. (A model of the station is shown elsewhere in the B. & O. exhibit.)

Despite Dobbin's apparent victory, historians point out that the "Tom Thumb" really was the victor because it proved to the American people the feasibility of steam locomotion. Within a very few months inventors and machinists were busy building locomotives in various parts of the country, and the directors of the B. & O. were offering a prize of $4000.00 for the best engine submitted to meet their specifications. A full-size working model of the "Tom Thumb" takes part in the Transportation Pageant, "Wings of A Century."

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[Diorama No. 3]

HARPER’S FERRY

THE scene of Harper’s Ferry displays in detail this picturesque and historic spot, even to the moving passenger train rounding the mountain and crossing the railroad bridge in the foreground. At this point three states, Maryland, Virginia and West Virginia meet. Here also is the confluence of two great rivers, the Shenandoah and the Potomac. Of this place, Thomas Jefferson declared: "The scene is worth a voyage across the Atlantic."

We see Maryland Heights, standing in stark grandeur on the right, Loudon Heights towering on the left in Virginia, Bolivar Heights rising in the center, in the State of West Virginia. Nestling against the sides of Bolivar Heights are the quaint houses and churches of the towns of Harper's Ferry and Bolivar.

A toll bridge for vehicles leads over the Shenandoah River, connecting Virginia and West Virginia. A highway bridge across the Potomac, of the famous Bollman truss type (the one to the left in the model), was originally the B. & O. R. R. bridge. It was built in 1870 and was used by the railroad until 1893, when the middle bridge across the Potomac was built. This bridge is still used for trains going up the Shenandoah Valley. The latest B. & O. bridge, which is the one the railroad now uses for its through trains, and over which the
BALTIMORE, MD.

Birthplace of the Baltimore and Ohio

BALTIMORE, as it looks today, is here reproduced in a ten-foot animated panorama. In the foreground is historic Fort McHenry, whose flag, floating high above it in 1814, inspired Francis Scott Key, while detained on a British battleship in the harbor, to pen the immortal “Star-Spangled Banner,” our National Anthem.

Fort McHenry has been reconstructed in its original state, and with its immediate surroundings, is now a National Park. The Fort was built in the form of a star. Mary Pickersgill, a Baltimore woman, at the request of Commodore Barney, had fashioned the flag which flew above the Fort. Her home in Baltimore is kept as a shrine, known as the “Flag House.” A Baltimore and Ohio colonial dining car has been named in her honor. There are twenty Baltimore and Ohio dining cars of the same design named for famous women of American history. The car “Mary Pickersgill” now is included in the six-car air-conditioned train of the Baltimore and Ohio on the track outside the Travel and Transport Building at “A Century of Progress.”

Next in this panoramic perspective view may be easily identified the principal marine terminals of the B. & O., at Locust Point, Baltimore, with large railroad yards leading to the piers and the grain elevator. This elevator has a capacity of 3,800,000 bushels and has galleries leading to the export piers, by means of which, with the system of belt conveyors installed, grain is poured into the holds of vessels in golden streams. The grain is not touched by human hand. Ample berthing for vessels is provided. At the larger piers four vessels may load or unload simultaneously, and a vessel berthed at the pier provided with grain gallery connection, may take on grain and merchandise at the same time.

Baltimore City is shown in perspective in the background. We see the Shot Tower, built in 1828, the same year the “First Stone” of the Baltimore and Ohio was laid; the Washington Monument, which was the first built in this country to the memory of our First President, and the Baltimore and Ohio general office building. The Baltimore and Ohio Railroad had its inception in Baltimore in 1827, and its headquarters have always remained in this metropolis on Chesapeake Bay.
WASHINGTON
The Stately and Beautiful Capital
OF THE
UNITED STATES OF AMERICA

All Baltimore and Ohio Trains
EAST and WEST
RUN VIA
THE NATIONAL CAPITAL

MODEL EXHIBITED BY
The Baltimore and Ohio
IN THE
Travel and Transport Building
AT
A Century of Progress
CHICAGO, 1933
WASHINGTON
The Stately Capital of the United States of America

The model of the City of Washington, which the Baltimore and Ohio Railroad has in its exhibit in the Travel and Transport Building at A Century of Progress, Chicago, is built in panoramic perspective on a scale perhaps never before attempted. It has been constructed carefully from Government drawings. It measures 17 feet wide by 25 feet deep.

As the seat of our Federal Government, Washington contains the largest number of beautiful buildings of any city in the country. Besides the Capitol, the White House and other superb structures devoted to government activities—and the great memorials typified in those erected to Washington and Lincoln—the National Capitol has great edifices containing priceless exhibits of art, literature, science and history. All these buildings are reproduced in careful detail along the tree-lined avenues and parks, and give a lasting impression of the city's stately magnificence.

In Washington are enacted events that leave their impress on the future, and one cannot look upon the scenes where the destiny of the nation is being decided without feeling the pulse of a living Government. To those who have never seen Washington, it is hoped that this model will be an
inspiration to visit the city itself. To those who have had the privilege and pleasure of seeing Washington, most of the famous buildings shown here will be easily recognizable. A convenient index hung at each side of this exhibit enables the visitor to locate the principal points of interest.

Unlike other great capitals of the world, such as Rome, London and Paris, which became capitals through circumstance, Washington was planned for the express purpose of becoming the center of national life.

**Selection of the Site**

Soon after the Revolutionary War had ended, Congress recognized the necessity of a permanent seat of government. From 1788 to 1790 repeated attempts were made to enact legislation fixing the site of the National Capital. These attempts for the most part failed because of rivalry among the several states. Finally, as a result of a compromise effected through the efforts of Thomas Jefferson, the states agreed to the location of the capital on the banks of the Potomac River.

In January, 1791, a commission was appointed to run the lines of the proposed Federal District. The site chosen was a tract ten miles square on both sides of the Potomac River, the land on the north shore having been ceded by Maryland, and that on the south shore by Virginia. (The Virginia portion was subsequently turned back to that State.)

The commissioners named this tract the Territory of Columbia, but it is now called the District of Columbia. The city which they laid out was named Washington in honor of the Father of Our Country, in spite of the protests of that great patriot, who always referred to it as the Federal City.

To Pierre Charles L’Enfant, at the recommendation of President Washington, was assigned the task of designing the future capital of the nation. L’Enfant, a Frenchman, had been a military engineer in the Army of the Revolution, and had demonstrated his ability for this type of public work.

**The Original Plan**

As the focal point of his plan L’Enfant chose Capitol Hill and from it laid out wide avenues radiating in every direction. In addition, he mapped parks, circles and squares to be formed where these avenues cut at angles across the lettered and numbered thoroughfares. The latter were to cross the city at right angles to one another.

In the last few years rapid and important steps in the beautification of the city have been carried out. The great $200,000,000 federal building program in the Federal triangle, extending from the White House to the United States Capitol grounds, is in reality a modification of the L’Enfant plan. Washington now takes its place among the most
beautiful of all world capitals. The greater part of the city is the property of the people of the entire nation.

The plan of the city is symmetrical. The Capitol and the White House form two centers from each of which radiate broad avenues, many completely arched by trees for almost their whole length. Three streets running from the Capitol, known as North Capitol, East Capitol and South Capitol Streets, and a broad stretch of public gardens on the west, known as the Mall, divide Washington into four sections—Northeast, Southeast, Southwest and Northwest. Commencing at the Capitol, the streets extending north and south are numbered, while the streets running east and west are lettered according to the alphabet. The broad avenues, named for the States of the Union, run diagonally, intersecting the streets. The city proper now covers an area fourteen miles in circumference, and the District of Columbia embraces a tract of sixty-nine square miles.

**Models of the Buildings**

Union Station, in the foreground of the Baltimore and Ohio model, is an imposing granite structure which makes a most fitting and dignified entrance to the Nation's Capital. It is the railroad gateway for all passenger trains, North, East, South and West. The station faces on a broad plaza from which radiate nine avenues and streets. Immediately in front is the Columbus Memorial Fountain and nearby is the City Post Office, not far from which is the Government Printing Office.

The Capitol can be recognized immediately. It is situated on the brow of a hill in a park of 120 acres and is visible from every direction. It is said to have cost $14,000,000. It was one of the first Government buildings to be started in Washington. Its cornerstone was laid in September, 1798, by President Washington. It was burned during the War of 1812 but by 1817 had been restored for use by Congress. Its magnificent cast iron dome, surmounted by a large bronze figure typifying Freedom, was erected in 1863, during the Civil War.

Northeast and southeast of the Capitol are the Senate and House Office Buildings, and just east of the Capitol is the Library of Congress, where 3,000,000 volumes occupy over fifty miles of shelves and furnish a treasury of learning for the nation.

The White House, which is next to the Capitol in point of interest, is surrounded by lovely grounds not far from the Potomac River. It is a fascinating experience to visit the place where every President of the Nation except the first has lived, where for more than a century each has had his office, and where have gathered some of the most distinguished statesmen, soldiers and journalists of the world. The Presidential home was destroyed by fire in the War of 1812. It was rebuilt under the direction of James
Hoban, an Irish architect. President Monroe moved into it in 1817. Minor changes have been made from time to time, and during President Theodore Roosevelt's administration (1901-1909), a west wing was built to house the Executive Offices. Originally grey in color, the building was painted white after its burning and restoration and thereafter became known popularly as the White House.

Not far from the White House is the new Department of Commerce Building.

There is no mistaking the Washington Monument, the shaft built as a memorial to the Father of his Country. It is the tallest work of masonry in the world, reaching a height of 555 feet 5 5/8 inches. Its cornerstone was laid July 4, 1848, exactly twenty years to the day after the laying of the First Stone of the Baltimore and Ohio Railroad in Baltimore, Md.

Flanking the White House on the east is the Treasury. West of this stands the State War and Navy Building. Another inspiring sight is the Lincoln Memorial in a lovely setting from which the Lincoln Highway bridge leads across the Potomac to Arlington.

**Washington Inspirational Paintings**

The eight original inspirational crayon posters, which hang on the walls adjoining the Washington model, were drawn for the Balti-

more and Ohio Railroad by the well-known artist, M. Leone Bracker. They represent the following:

**The Pledge of A Patriot**

"On my honor I will do my duty to my God and my country."

(From the Boy Scout oath)

**The White House**

Home of the Presidents of the United States

**The Lincoln Memorial**

Eternal Inspiration to the Youth of America

**The Inspiration of Ambition**

A goal within reach of any American boy

**The Congressional Library**

Where now is preserved the original of the Declaration of Independence

**The Smithsonian Institution**

Where are housed many interesting relics, including the original Morse telegraph instrument, first used to send messages along B. & O. right-of-way, May 24, 1844

**The Washington Monument**

Erected by the Nation to the immortal memory of the Father of His Country

**Mount Vernon**

The home of George Washington, preserved by a grateful posterity
Other Paintings in this Section

The oil paintings were made originally by Herbert D. Stitt during the Baltimore and Ohio Centenary Celebration in 1927. They were cover illustrations of the Baltimore and Ohio Magazine.

Before the Coming of the Railroad—
The old stage coach starts out on its arduous journey

Changing Horses at Relay—
On the thirteen-mile run between Baltimore and Ellicott’s Mills, horses were changed at Relay, Maryland

The Pathfinders—
The Pioneer Surveyors of the Baltimore and Ohio met many problems in the Cheat River Valley

Along the Canal—
The Canal Horse becomes frightened at the appearance of his rival, the Locomotive

The Railroad Reaches Frederick, Md.—
The Baltimore and Ohio was completed to Frederick in 1831. Here it made connections with western stage coaches

The Lafayette—
A Young Lady of 1837 has journeyed behind the Lafayette locomotive. This engine had a tall green smokestack and was the first B. & O. engine with horizontal boiler

Roseby’s Rock—
Christmas Eve, 1852, the Baltimore and Ohio reached the Ohio River, thus fulfilling the implication in its name

Lincoln at Washington—
President Lincoln arrives in Washington for his first inauguration in 1861

Twenty Minutes to Eat—
Passengers got their meals at “Eating Houses” along the way

Locust Point Marine Terminal in the Early Eighties—
The romantic years of the combination sail and steam ships

Milestones—
The “York,” first practical locomotive, and a vision of a modern flyer

The “Fair of the Iron Horse”—
(Two pictures)
Celebration of the one hundredth anniversary of the Baltimore and Ohio, Baltimore, 1927

A set of thirteen colored post cards, depicting in these scenes the historical development of the B. & O. and reproduced from these paintings, may be had at 10 cents per set, at the B. & O. Travel Bureau in the Travel and Transport Building, Chicago, or by writing the General Offices, Baltimore, Md.
The Original

“ATLANTIC” Locomotive
BUILT IN 1832

WHICH THE

Baltimore and Ohio Railroad

IS EXHIBITING IN THE

Travel and Transport Building

AT

A Century of Progress

CHICAGO, 1933
THE ORIGINAL "ATLANTIC" LOCOMOTIVE

Built 1832

The "Atlantic" locomotive was built in 1832 by Phineas Davis, a watchmaker of York, Pa. It might be called the grandfather of the big Mikados, Mallets and Pacifics of today, the powerful locomotives which haul trains like the air-conditioned pioneers, the Capitol Limited, National Limited and Columbian, of the Baltimore and Ohio.

The remarkable thing about the "Atlantic" is that, although it was constructed at a time when the locomotive was a new power in the world of travel, tried out by few and scoffed at by many, it outlived and outlasted larger, finer-looking and much more powerful locomotives built in later years. For sixty-one years, all told, carrying passengers and freight, it ran regularly in the service of the Baltimore and Ohio.

In 1835 the "Atlantic" pulled the first railroad train ever to enter Washington. A generation later its queer-looking frame, with rods likened to the legs of a grasshopper, headed the first troop train into Washington, hurried Union forces to the defense of the Capital. In 1893 it was honorably retired, not because it was unable to perform its work in the railroad yards in Baltimore, but to be displayed at the Columbian Exposition, Chicago.
There it bore testimony to the ingenuity of the pioneer locomotive builders—Phineas Davis, Peter Cooper, Ross Winans, Baldwin, James, and others. Again, in 1904 at the St. Louis Exposition, the “Atlantic” occupied a prominent place in the Baltimore and Ohio exhibit. From time to time since then it has been brought forth, steamed up and run in a score or more of historic celebrations.

On one occasion President Theodore Roosevelt himself ran this engine near Martinsburg, W. Va., and declared he had had a “bully” trip. Tradition says that President Abraham Lincoln once visited the old engine at Mount Clare Shops, Baltimore, Md.

At the “Fair of the Iron Horse”

At the “Fair of the Iron Horse,” the Baltimore and Ohio’s Centenary Exhibition and Pageant, held at Baltimore, Md., in 1927, more than a million and a quarter people saw the old “Atlantic” under its own steam. Daily it took its place in the Pageant of Transportation, which showed the modes of pre-railroad transportation and then in sequence the outstanding types of locomotives and railroad equipment up to 1927. In March, 1933, the “Atlantic” was filmed in action, drawing replicas of the double-decked “Imlay” coaches. These scenes are included in the motion picture shown in the Standard Oil exhibit in the dome of the Travel and Transport Building at “A Century of Progress.”

The “Imlay” coaches were quite a novelty from 1832 to 1837. People flocked to the railroad to ride them between Baltimore and Ellicott’s Mills, the Baltimore and Ohio’s first terminals. Passengers could sit either inside or on the upper deck, which was covered by a canopy.

Peter Cooper’s “Tom Thumb”

The Baltimore and Ohio line was completed to Ellicott’s Mills in 1829. The first cars were drawn by horses. In September, 1829, Peter Cooper demonstrated that steam could be successfully applied as motive power by the trial run of his Iron Horse, the “Tom Thumb,” the first American-built locomotive. In 1831 the Baltimore and Ohio offered a prize of $4,000.00 for the best locomotive that would perform under specified conditions. The award was won by the “York,” built by Phineas Davis. A year later Davis built the “Atlantic.” The “Atlantic” thus became the third of the Baltimore and Ohio’s family of locomotives.

The “Grasshopper” Engine

Because of its appearance and the peculiar motion of its piston rods, the “Atlantic” became known as a “grasshopper” type locomotive. It has vertical cylinders in front of the boiler, piston rods which operate walking beams with rods connecting with a crank shaft, gearing into one pair of driving wheels. It burns anthracite, and a forced blast by exhaust steam operates the fan. The feed water is
preheated by exhaust steam forced by pumps through the closed heater.

The “Atlantic” has a tractive power of 4,245 pounds. Its cylinders are 12 x 22 inches; its drivers 36 inches, and its boiler pressure 75 pounds. The weight on its drivers is 13,100 pounds, and the total weight of the locomotive is 27,160 pounds. Its heating surface consists of fire-box, 29.10 square feet, tubes and flues, 175.25 square feet; total heating surface, 204.35 square feet. Its grate area is 11.0 square feet; the water capacity of its tender, 300 gallons, and the coal capacity of its tender, 800 pounds.

**National Development Follows the Locomotive**

This unique and historic locomotive is a “living link,” coupling the 19th and 20th centuries. It was running when Charles Carroll of Carrollton, the last surviving Signer of the Declaration of Independence, was still living. President Andrew Jackson himself greeted it when it pulled the first train into Washington in 1835, and now in 1933 visitors to “A Century Of Progress” do it honor. Through such locomotive pioneers as the “Atlantic,” the real progress of the United States as a nation began, for communication was made easier, bringing people closer and binding the confederated states more solidly into a Union.

The shrill whistle of the “Atlantic” heralded the dawn of a new day. Historians agree that since the coming of steam on the railroads of this country, more progress has been made in transportation and communication by the human race in this single century than in all the ages before.

**The Old and the New**

In displaying the original “Atlantic” in the Baltimore and Ohio exhibit, in the Travel and Transport Building at “A Century Of Progress,” Chicago, 1933, the old pioneer is silhouetted against a painting of a modern B. & O. locomotive, the 5510. This is a water-tube fire-box locomotive, one of the most powerful in existence today. A locomotive having a water-tube fire-box is on the B. & O. track outside of the Travel and Transport Building. It is at the head of the Baltimore and Ohio’s air-conditioned train.

The track upon which the “Atlantic” is mounted for exhibition purposes illustrates the second period of track development on the Baltimore and Ohio, known as the stone sill and strap iron rail. Often the stone sills were made of granite and many of the original blocks are still preserved in Baltimore. The preceding, or first, type of rail used on the Baltimore and Ohio was fastened to wooden stringers.

A short section of Edge Rail adopted in 1835, the third type used on the Baltimore and Ohio, is also shown in front of the Atlantic locomotive. This was first used when the B. & O. was built from Relay, Md., to Washington. In this exhibit the rails and wooden
stringers on which they are laid, are a section of the original construction. The joint fastenings and spikes are reproductions.

This rail is especially interesting because it was rolled with a "cant" (beveled top) of one in thirteen, which was the same as the coning, or bevel, of the first car wheels on the B. & O. This rail is also mitred, or cut obliquely, at the joint, instead of being cut square as in modern practice. This was done to make the impact of the car wheels over the joint more gradual and smoother, but it did not prove practical and was soon discontinued.

The successor of the light track of these early periods of B. & O. history—in the form needed for the heavy trains of today—is shown in the section of modern track, with American Railroad Engineering Association standard rail of 130 pounds to the yard, which is set up in front of the old Atlantic.
THE AIR-CONDITIONED TRAIN

The Pullman Car Names

The visitor to the Baltimore and Ohio’s air-conditioned train at “A Century of Progress” enters through the rear door of the beautiful Pullman observation car “Maryland,” so named in honor of the native state of the Baltimore and Ohio. It was due to the foresight of enterprising citizens of this state that the first “public carrier” railroad in America was born. The second Pullman car of the train has been named “Illinois,” in honor of the state in which it was built by the Pullman Company. Also Chicago, the metropolis of this state, is the western terminus of the Capitol Limited and the site of the World’s Fairs of 1893 and 1933.

The First Pullman

In connection with these two modern Pullman cars on the B. & O. train it is interesting to recall that the first Pullman sleeping car, old “Number Nine,” was built in the Alton Railroad Shop at Bloomington, Ill., and made its first run in 1858 over the Alton Railroad from Bloomington to Chicago. The Alton is now a part of the Baltimore and Ohio system. The original old “Number Nine” is also on exhibition at A Century of Progress near the Baltimore and Ohio’s exhibit space inside the Travel and Transport Building. While only
three quarters of the full century have elapsed between the building of this primitive first Pullman car and the beautiful, modern Pullman sleeping cars used on the B. & O.'s present trains, there can be no question about the progress in comfort for the night traveler.

The Modern Pullmans
The rear of the lounge of the observation car is partitioned off in a glass-enclosed sun room, from which the traveler may enjoy to the fullest extent the beautiful scenery along the route of the Capitol Limited. The spacious lounge in which Pullman passengers may sit to read or chat and smoke, is equipped with a Pullman buffet for the serving of light refreshments.

The two Pullman cars on exhibition contain sleeping quarters of many kinds, drawing-rooms, compartments and ordinary open sections. The latter may be occupied as "full sections" with upper berth raised, or in separate parts as upper and lower berth.

The Air-Conditioning
The visitor who enters the train on a warm day is immediately impressed with the deliciously cool, fresh air of the interior. This is the result of the B. & O.'s modern system of air-conditioning with mechanical refrigeration. Each car of an air-conditioned train is a separate unit with its own cooling and circulating system independent of the rest of the train, all operating electrically from current supplied by generators and heavy duty storage batteries under the car.

The Baltimore and Ohio was the first railroad in the world to apply air-conditioning in a practical and successful way to railway cars, as was demonstrated on April 23, 1930. It was the first railroad to operate a fully air-conditioned train, The Columbian, May 24, 1931. It was the first, and is still the only railroad operating an air-conditioned train between New York and Chicago.

The Lounge Car
In order to supply extra lounging space for Pullman passengers on certain trains, a full lounge car is provided in the center of the train. Next to the two Pullman sleeping-cars of the exhibition train is a lounge car especially designed for use on B. & O. trains, and built and furnished in the company's own shops in Baltimore. It is one of five cars of this type built by the B. & O., and has been in regular service on its trains for the past four years.

The Mt. Clare Shops, in which these cars were built, stand near the beautiful old estate of Mt. Clare, the home of Charles Carroll, Barrister, built in 1754. (This Charles Carroll is not of the family of Charles Carroll of Carrollton, who helped to lay the First Stone of the B. & O.) This home, which is shown on the table lamp shades, is still standing in Carroll Park. It is the oldest house in Baltimore.

Other Lamp Shade Decorations
The silhouettes on the shades of the side-wall bracket lamps show the old Atlantic
state of the B. & O., was a colony of Great Britain for as long a period as it has been a State of the Union.

The Colonial Features

In these colonial dining cars the windows, with their side panels and overhead ovals of leaded glass, are reproductions of a doorway in an old colonial home in Philadelphia. The delicate mouldings near the ceiling are in the festoons characteristic of the work of Robert Adam, British architect and interior decorator of the eighteenth century. The side-wall brackets are suggestive of colonial pewter. The ceiling globes and sideway shades were especially designed to emphasize the crystal prisms so characteristic of lighting fixtures of the Colonial period.

The Furniture

The chairs are of a Heppelwhite design and the sideboard is of the Sheraton type, although both have been built on sturdier lines to meet the requirements of railroad use. The neat tiling of the vestibules and passageways is reminiscent of the brick pavements leading to many colonial kitchens.

The Blue China

The blue china used on the tables was designed especially for use in these colonial dining cars of the Baltimore and Ohio Railroad. More than a century ago, when the first charter ever drawn up for a public carrier of passengers and freight by rail was granted to the Baltimore and Ohio, this momentous
event was commemorated by English potters. Enoch Wood, of Burslem, England, one of the leading manufacturers of Staffordshire china, brought out two beautiful blue plates stamped on the reverse—"The Baltimore and Ohio Rail Road." In 1927, as part of the celebration of its one-hundredth anniversary, the B. & O. placed orders for the blue china used in this dining car. It was made in the traditional British style, by the Scammell China Company of Trenton, N. J. The engravings for the decorations were all made by hand, and occupied the full time for a year of three artist- engravers, especially trained for this work.

* A full description of this blue china and of its manufacture is contained in the special booklet, "Concerning the Blue China", which may be obtained without charge at the office of the B. & O. Exhibit in the Travel and Transport Building.

**Named for Famous Women**

The Baltimore and Ohio now has twenty air-conditioned dining cars of this colonial type, each of which is named in honor of some woman prominent in American history of the Colonial, Revolutionary or early nineteenth century periods. This car on display at A Century of Progress, Chicago, is named in honor of Mary Pickersgill, the Baltimore woman who made the "Star-Spangled Banner," which, waving above Fort McHenry throughout its bombardment on the night of September 14, 1814, inspired Francis Scott Key
to write our National Anthem. Mary Pickersgill's home in Baltimore, in which the historic flag was planned, is still standing at Pratt and Albemarle Streets. It is preserved as a national shrine by local patriotic societies and is open to the public. It is known as the Flag House.

**The Reclining Seat Coach**

Not only does the Baltimore and Ohio Railroad endeavor to provide maximum comfort for Pullman passengers on its trains, but it has also developed unusual service for its coach passengers. The two coaches ahead of the dining car on the exhibition train show the latest developments in coach travel for both night and day. The reclining seat coach is designed for the comfort of those passengers who must travel by night and prefer not to use the sleeping accommodations of a Pullman. The seats have adjustable backs which can be inclined at any angle between eighteen and thirty-eight degrees. There are wide foot rests for each seat. The dividing arm rests may be lowered when desired. Linen head rests on the seat backs are cool and inviting. One sinks with ease into the soft padding of the cushions and back to spend a surprisingly comfortable and restful night. During the night the ceiling lights are dimmed, and the individual sidewall lights may be used by those passengers who desire to read.

The wash rooms for both men and women are spacious and comfortable, with an
abundance of large wall mirrors. Free liquid soap, free paper towels and free paper drinking cups are provided. There are seats in both the men's and women's rooms, so that they may also be used by smokers.

The Lunch Counter

At one end of the car is a new development in the form of a lunch counter at which sandwiches, coffee, fruit, etc., may be secured at any time during the night at prices not exceeding ten cents. Certain of the cars are also provided with electric grills in which eggs may be poached, bacon or ham grilled, and bread toasted for a thirty-five cent combination breakfast. This meal may be served at the passenger's seat on one of the serving trays shown in the first section of the car. It is evident that this reclining seat coach provides exceedingly comfortable quarters for those who wish to travel economically.

The Day Coach

In front of the reclining seat coach is one of the Baltimore and Ohio's standard day coaches. The comfortable chair seats in this car are typical of B. & O. coach service, and were developed first for this railroad and first put into service on its trains. The seats may be turned to face the windows, or so that they face each other in pairs. These seats are wide and low, with softly-padded upholstery, as comfortable as an easy chair in one's home.

The coaches are fully air-conditioned and have thermostatic heat control for both hot and cold weather. The lavatory facilities and toilets are in separate compartments, the two at one end of the car for women and those at the opposite end for men. Passengers are provided with free liquid soap and paper towels. There are also free paper drinking cups at the iced water coolers.

All Baltimore and Ohio coaches are built with the same type of six-wheel trucks used on Pullman cars. Rubber pads are inserted at many points to eliminate noise and minimize jars. This is a "comfort" development evolved by the B. & O. several years ago and since adopted by other railroads. We call these shock-absorbers our "rubber heels." Cars which are not equipped with automatic air-conditioning have individual sash ventilators at each window. These can be opened or closed by the passenger to suit his own taste without inconveniencing other occupants of the car. They operate without the necessity of raising even an inside window. Day coaches which are not air-conditioned also have ceiling electric fans.

Typical of B. & O. Service

The cars in this exhibition train of the Baltimore and Ohio are typical of the various features of its service, and all of them have been in actual use on its trains for several years. Before leaving this train the visitor to A Century of Progress may walk through
the powerful modern locomotive ahead, one of the passenger engines which haul the Capitol Limited. Truly a Century of Progress is exemplified in the development of this powerful locomotive from the little experimental Tom Thumb and the pioneer Atlantic, both of which are important Baltimore and Ohio exhibits at A Century of Progress.

**How the Air-Conditioning System Works**

After a long series of tests, before determining the type of equipment to be used, it was decided that any car equipped with air-conditioning must be capable of operating at all times, whether the car is in motion or standing in a station or car yard. It was also decided that no dangerous refrigerant would be introduced into any part of the passenger-carrying compartment of the car.

In order to meet these requirements, an entirely new design 7½ KW-third brush type generator, driven by a specially designed combination belt and gear drive from the axle of the car, was installed. This third brush generator is of such capacity that it furnishes at all times sufficient power for operating the air-conditioning equipment and at the same time furnishes additional current to the storage battery, so that the air-conditioning equipment can be operated for pre-cooling before the car leaves the station, and whether a car is in motion or standing in the station.

During the summer of 1931 a new refrigerant, known as dichlorodifluoromethane, otherwise called Freon or F-12, was developed by the Kinetic Chemical Company, a subsidiary of Du Pont. It is a colorless, odorless, non-corrosive, non-combustible, non-toxic refrigerant. Therefore, the refrigerant can be expanded directly into the cooling unit located generally in the upper deck of the cars, making it possible to reduce the time necessary for pre-cooling a car previous to dispatching a train.

When any refrigerant is compressed, as a gas, heat is generated, and this heat must be liberated in order to reduce the refrigerant from a gas to a liquid, so that it can be expanded again, and in doing so take up the heat from the body of the car.

The cooling tower is generally mounted in the end of the car. The outside air is drawn into the bottom opening and blown out by a fan through the upper opening. Also, in this cooling tower is a fine spray of water which is furnished by the small motor-driven pump located directly beneath the cooling tower, so that when the heated gas from the compressor passes through pipes inside the cooling tower, the gas is changed to a liquid by the action of the air blast and the water spray. The air is circulated inside the car by being drawn from the car into the air-conditioning unit under the ceiling at one end of the car. Here it passes over fin-surface cooling coils containing the refrigerant F-12.
Heat and moisture are removed by these coils, and since the coils are always saturated with moisture, any dust and dirt in the air are also removed. This air, after being cleaned and dehumidified, is then forced through an air duct on one side of the car through openings in the upper deck into the car. Located on the vestibule ceiling of the car is a fresh air intake, controlled by a damper, this fresh air being filtered for the removal of dust and dirt before it is mixed with the returning air from the car to be again cooled and forced back into the body of the car. The entire air-cooling apparatus is controlled automatically by a temperature operated thermostat, which can be set at a predetermined temperature.

**President Cleveland** Locomotive

The "President Cleveland" locomotive, which heads the air-conditioned train on the exhibition tracks outside the Travel and Transport Building, at A Century of Progress, Chicago, took the place of Locomotive No. 5510 on August 15, 1933. No. 5510 had been at the head of the train since the beginning of the Fair.

The "President Cleveland" is one of twenty-one similar type locomotives of the "President" series, which haul the "Capitol Limited," the "National Limited," the "Columbian" and other B. & O. passenger trains.
COLONIAL DINING CAR
MARY PICKERSGILL
OF THE
Baltimore and Ohio Railroad

DESIGNED ESPECIALLY
FOR
America's First Railroad

DISPLAYED ON ONE OF THE
TRACKS
SOUTH OF THE
Travel and Transport Building
OF
A Century of Progress

CHICAGO, 1933
THE COLONIAL DINING CAR

The Colonial Features

In these colonial dining cars, the windows with their cut-panes and wire-mesh grilles of beaded glass, are reproductions of a design from an old colonial home in Philadelphia. The antique washstands and the dining car in the

FOREWORD

THE Baltimore and Ohio Railroad for more than a century has been associated with the important events of our national history. It was the first, and for many years, the only railroad into Washington. It traverses the section of the United States in which are located most of our famous old Colonial estates. Maryland, its home State, was a colony of Great Britain for as long a period of its history as it has been a state of the Union. Because of these associations, the Baltimore and Ohio Railroad has adopted a Colonial design for the dining cars used on many of its trains.

The Blue China

The Blue China used on the tables was designed especially for use in these colonial dining cars of the Baltimore and Ohio Railroad.
THE COLONIAL DINING CAR

The Colonial Features

In these colonial dining cars the windows, with their side panels and overhead ovals of leaded glass, are reproductions of a doorway in an old colonial home in Philadelphia. The delicate mouldings near the ceiling are in the festoons characteristic of the work of Robert Adam, British architect and interior decorator of the eighteenth century. The side-wall brackets are suggestive of colonial pewter. The ceiling globes and sidewall shades were especially designed to emphasize the crystal prisms so characteristic of lighting fixtures of the Colonial period.

The Furniture

The chairs are of a Hepplewhite design and the sideboard of the Sheraton type, although both have been built on sturdier lines to meet the requirements of railroad use. The neat tiling of the vestibules and passageways is reminiscent of the brick pavements leading to many colonial kitchens.

The Blue China

The blue china used on the tables was designed especially for use in these colonial dining cars of the Baltimore and Ohio Railroad.
More than a century ago, when the first charter ever drawn up for a public carrier of passengers and freight by rail was granted to the Baltimore and Ohio, this momentous event was commemorated by English potters. Enoch Wood, of Burslem, England, one of the leading manufacturers of Staffordshire china, brought out two beautiful blue plates stamped on the reverse—“The Baltimore and Ohio Rail Road.” In 1927, as part of the celebration of its one hundredth anniversary, the B. & O. placed orders for the blue china used in this dining car. It was made in the traditional British style by the Scammell China Company of Trenton, N. J. The engravings for the decorations were all made by hand and occupied the full time for a year of three artist-engravers, especially trained for this work.

A full description of this blue china and of its manufacture is contained in the special booklet, “CONCERNING THE BLUE CHINA,” which may be obtained without charge at the office of the B. & O. Exhibit in the Travel and Transport Building.

The Air-Conditioning

The visitor who enters this car on a warm day is immediately impressed with the deliciously cool, fresh air in the interior. This is the result of the Baltimore and Ohio’s modern system of air-conditioning with mechanical refrigeration. Each car operates as a separate unit with its own cooling and circulating systems run by electric power furnished from generators and storage batteries under the car. The Baltimore and Ohio was the first railroad in the world to apply air-conditioning in a practical and successful way to railway cars, as was demonstrated on a test run of the Martha Washington dining car on April 23, 1930. It was the first railroad to operate a fully air-conditioned train, The Columbian, May 24, 1931, which runs daily in both directions between New York and Washington.

Named for Famous Women

The Baltimore and Ohio now has twenty air-conditioned dining cars of this Colonial type, each of which is named in honor of some woman prominent in American history of the Colonial, Revolutionary or early nineteenth century periods. The car on display at A Century of Progress, Chicago, is named in honor of Mary Pickersgill, the Baltimore woman who made the “Star-Spangled Banner,” which, waving above Fort McHenry throughout its bombardment on the night of September 14, 1814, inspired Francis Scott Key to write our National Anthem.

Mary Pickersgill

Mary Pickersgill came of a patriotic family. Her mother, Rebecca Young, made the Grand Union Flag, which was the first flag of the Revolution and the one under which Washington took command of the American
Army, January 1, 1776, at Cambridge, Mass. Six weeks later Mary was born, to become in her turn a maker of flags for her country.

Three Flags

The Grand Union Flag had thirteen red and white stripes, but with a field composed of the British crosses of St. George and St. Andrew. After the Colonies had declared their independence, they substituted the union of stars for the British flag, and Congress, on June 14, 1777, established the Stars and Stripes as the flag of our country. This was the flag made by Betsy Ross, and was later christened “Old Glory.”

Then came the War of 1812 and the garrison flag of Fort McHenry, made by Mary Pickersgill and hailed by Francis Scott Key as the “Star Spangled Banner.” This flag had fifteen stripes and fifteen stars, since Vermont and Kentucky had been added to the original thirteen states. Mary Pickersgill’s “Star Spangled Banner” is now a prized exhibit in the National Museum in Washington.

Mary Pickersgill, born in 1776, was thirty-eight years old when she made the famous flag. She lived until 1857 and was distinguished for her philanthropy as well as for her patriotism. A century ago she founded the Humane Impartial Society for Widows and Orphans, which has become the Home for Aged Men and Women, still carrying on its good work in Baltimore, Maryland.

In the Mary Pickersgill dining car visitors may see an interesting old-fashioned doll, dressed to represent Mary Pickersgill; also a replica of the flag made by Mistress Pickersgill, and which inspired Francis Scott Key to write his immortal ode. This doll was loaned by those who fashioned it and who made the Flag exhibited with it—the Auxiliary of the German H. H. Emory Post, American Legion of Maryland.

A young woman guide, dressed to represent this illustrious lady, is hostess on the dining car. She is a B. & O. employee. As the “reincarnation” of Mary Pickersgill she is happy to answer questions and to tell about the B. & O. exhibits at the Fair.

The Other Nineteen

The other nineteen women in whose honor the Baltimore and Ohio has named its dining cars, are:

Martha Washington—the first “First Lady of the Land”

Betsy Ross—maker of our country’s first official flag, the “Stars and Stripes”

Dolly Madison—popular and tactful wife of our country’s fourth President

Betty Zane—heroine of the siege of Fort Henry, the pioneer fort on the site of Wheeling, W. Va.

Catharine Greene—spirited and patriotic wife of General Nathaniel Greene

Hannah Dustin—heroine of Haverhill, Mass., who made her escape by slaying her Indian captors
ABIGAIL Adams—courageous wife of John Adams, second President of the United States
Molly Stark—the inspiration of her husband's troops at the Battle of Bennington
Priscilla Alden—the Puritan maiden, whose simple story has been immortalized by the poet Longfellow
Molly Pitcher—the brave water carrier who took her husband's place at his gun in the Battle of Monmouth
Betsy Patterson—famous belle of old Baltimore, and wife of Jerome Bonaparte, brother of the Emperor
Polly Provoost—pioneer Dutch business woman, who laid the first sidewalk in New York
Rebecca Rolfe—the Indian princess, Pocahontas, who saved the life of Captain John Smith
Virginia Dare—the first white child born in America
Margaret Brent—first advocate of woman's rights, a pioneer settler of Maryland
Ann Bailey—fearless Indian scout and heroine of the Battle of Point Pleasant
Margaret Corbin—who manned a gun in the siege of Fort Washington, New York
Nellie Custis—adopted daughter of George and Martha Washington, whose childhood was spent at Mt. Vernon
Evelyn Byrd—beautiful belle of old Virginia, of the famous Byrd family of Westover

The Dining Car Service

The foodstuffs used in the preparation of Baltimore and Ohio dining car meals are selected with special care. In order to obtain the freshest of vegetables, fruits, meats, etc., these articles frequently are bought in the various localities through which the railroad runs and are served in these sections respectively. For example, the traveler leaving Chicago is apt to find delicious lake fish on the menu of his first meal on the dining car. On leaving Baltimore the seafood listed on the menu comes from the waters of the Chesapeake Bay.

The ripening seasons of various fruits, vegetables, etc., also form a determining factor in the purchase of these foods, which are obtained locally when in season. During "off-seasons" they are brought from those sections of the country which are famous for these products. The drinking water comes from mountain springs at Deer Park, Maryland.

Baltimore and Ohio dining car prices are reasonable, particularly when we consider the costs of maintenance of equipment and personnel of these cars. For example, in addition to the a la carte service at all meals, the breakfast menu includes a choice of nine table d'hote meals, priced at 35 cents and up. Lunches and dinners are priced at 60 cents, 85 cents and $1.25. The last named is a full seven-course meal.
The Dining Car Kitchen

Every woman visitor to the dining car is interested in the kitchen.

"How do you feed so many people from so small a place?" they invariably ask.

And the answer is simple. Not an inch of this space is wasted. Each man has his own particular job, and everything needed for that job at his fingertips.

According to the best traditions of cookery, the hard coal range is used for all cooking except broiling. For the latter the charcoal broiler is employed. And the cook whose duties require his presence at the range or broiler does not need to go to the other end of the room for his condiments; they are within reach from where he stands.

Immediately above the doorway is the flour bin. At the right as you enter the kitchen is the large refrigerator. Next come a utility shelf and the pie locker. The B. & O. makes its own pies, biscuits, muffins, rolls, tarts and other pastries; these are baked in the ovens of the coal range just opposite.

The Engineer Wipes the Dishes

Beyond the pie locker are the condiment and cereal containers. Below is the general utility table, which also serves as a storage place for ice, for fish and other sea-foods and has a capacity for thirty dozen eggs. The locomotive at the head of the train makes a connection with the steam table of the dining car and the steam from the locomotive keeps hot the roasts, the soups and the bouillon, the bouillon cups, the coffee and the plates used for hot plate service; it also connects with the sink and provides a sterilized hot bath for the dishes, after these have been washed, so that they need no wiping. Thus it is the engineer who is our dish-wiper.

Below the sink are the bins for apples, potatoes and other dry vegetables; above is a utility shelf. At the end of the kitchen section is a table or counter over which the orders are filled.

The Food is Relayed

A complete dining car crew consists of a steward, four cooks and seven waiters. The waiters do not enter the kitchen; they come into the pantry and give the orders which are filled by the cooks and passed over the counter which separates the kitchen and pantry.

Below this counter is the hot plate closet; above it is the shelf for baking dishes. The Centenary Blue China is kept in shelves in the pantry.

Above the broiler and the range are warming closets, and on top of these are the copper kettles with tin plate linings, used in the cooking of soups and vegetables.

Hot and cold water tanks are overhead, with a filter for all water used in actual cooking. On the right as we leave the kitchen
is the linen closet, and below this is the coal bin.

Additional storage place is provided in the "cellar" below the kitchen floor.

A refrigerator in the vestibule takes care of the salad vegetables.

Dining car employees must undergo strict medical examinations regularly.

The rough floors of the kitchen provide a safety measure. Each cook has his own place to stand while on duty. All silverware is thoroughly cleaned each day whether it is used or not. Every possible measure is taken to provide clean, healthful, appetizing and attractive foods for our patrons at reasonable prices. B. & O. dining car meals provide one of the Railroad's best advertisements.
MOTIVE POWER AND CARS
OF YEARS GONE BY

EXHIBITED BY THE

Baltimore and Ohio Railroad

ON THE

EXHIBITION TRACK

SOUTH OF THE

Travel and Transport Building

AT

A Century of Progress

CHICAGO, 1933
MOTIVE POWER OF YESTERDAY

 Visitors who have gone through the Baltimore and Ohio's modern air-conditioned train at "A Century of Progress" find themselves—at the end of this little "journey"—face to face with some odd-looking examples of early transportation. Odd-looking now, but during the first few years of "A Century of Progress" on the B. & O., they were important milestones in the history of motive power.

 The old "York" engine, with its Nova Scotia coach, the William Galloway and its flour-barrel cars, and the Winans' Camelback, with its three-pot hoppers—these are but a few of the Baltimore and Ohio's contributions to the progress of transportation in America. Today we smile at these quaint relics, but not so many yesterdays ago they commanded as much attention as now is accorded modern air-conditioning, massive passenger flyers, luxurious Pullmans and freight cars of unusual capacity.

 The "York" Locomotive

 1831—York. Vertical boiler. No tubes. Center flue extending down from crown to cylinder drum firebox, carried on frame supported by two pairs of drivers with outside cranks connected by trussed sidebars with connecting rods to vertical cylinders, bolted to top of boiler sides. Weight 3½ tons.
1831—York (Remodeled). Cylinders re-located on back of boiler and driving through spur gears on one pair of drivers.

After the experiments with Peter Cooper’s “Tom Thumb” locomotive, in 1829 and 1830, which proved the practicability of steam as motive power, the Baltimore and Ohio announced a prize contest. The prize of $4,000 was offered for the most practical locomotive built to meet certain definite requirements. This prize was won in 1831 by Phineas Davis, formerly a watchmaker of York, Pa. His locomotive was named the “York.” Four other locomotives entered the contest, but the York most closely complied with the rules of the contest, which had been signed by Philip E. Thomas, first president of the Baltimore and Ohio. These rules had been published once each week for four weeks in the leading newspapers of the day.

The “York” at first did not completely fulfill the requirements, but after undergoing certain modifications, it was able to meet the needs of the railroad, and soon it was making two round trips a day between Baltimore and Ellicott’s Mills, a total distance of twenty-six miles, in one hour. Its train, then considered a miracle of speed, was known far and wide as the “York Express.”

The “York” had four wheels, each thirty inches in diameter, and they were flanged. Their velocity was attained by means of gearing with a spur wheel and pinion on one of the axles of the road wheels. The “York” burned anthracite coal. This was one of the requirements. It ran on stone stringers and strap rails.

Phineas Davis, the builder of the “York,” was an interesting character. A born mechanic, while yet a boy he had made a gold watch. He also was a student of natural philosophy and chemistry. His was the first locomotive to burn anthracite successfully. The Baltimore and Ohio not only awarded him the prize and purchased his locomotive, but also gave Davis an official position in the Mt. Clare (B. & O.) Shops, Baltimore. Here he was associated with Ross Winans, another famous locomotive builder.

**The Nova Scotia Coach**

Attached to the York locomotive is the quaint old Nova Scotia Coach, the first rail-road coach used in Canada and now said to be the oldest railway passenger coach on the North American Continent. It has been in the possession of the B. & O. for many years and is one of the prized relics of early transportation.

This Nova Scotia coach was built in London, England, and shipped to America in 1838, to be used by the directors of the Albion Coal and Iron Company of Nova Scotia. It so happened that the new Governor General of Canada was a passenger on the ship which brought the coach to America. On the day that the ship was docked the
Governor General was married and the coach was used to convey him and his bride to their home, 25 miles distant.

Since that day it has been known as the Bridal Coach. Tradition assures us that the maiden who is able to sit for ten minutes in absolute silence in this coach will be wed within a year. Tradition might have added that perhaps a little greater assurance might be given the prediction if the young lady brings along the young man to witness this remarkable feat.

The William Galloway


This ancient locomotive with its horizontal wood-covered boiler was built in 1837 and was first christened the “Lafayette.” Ninety years later, in 1927, when the Baltimore and Ohio held its Centenary Celebration, the “Fair of the Iron Horse,” at Baltimore, this locomotive was re-named “William Galloway,” in honor of one of the first drivers of a B. & O. horse car. The grandson of William Galloway, Charles W. Galloway, is now vice-president of the Baltimore and Ohio, in charge of operation and maintenance.

The “William Galloway” was the first six-wheel locomotive on the railroad, and represents the first transition from the old vertical boiler. It was built by William Norris, of Philadelphia, for the B. & O., and was used to haul both freight and passengers.

It is interesting to know that among railroaders this locomotive and all built by William Norris were known as “One-Arm-Billys,” the one arm referring to the single connecting rod which characterized his locomotives, the “Billy” derived from the name of the builder.

The Flour Barrel Cars

Attached to the “William Galloway” locomotive are two little freight cars, typical of the day of the Lafayette and known as “flour barrel” cars. These were so named because they were largely utilized for carrying barrels of flour and boxed goods under protective canvas coverings. Flour was one of the earliest commodities hauled by the Baltimore and Ohio. Ellicott’s Mills, the first terminal other than Baltimore, for many years was a noted flour center. These little cars were early developments in B. & O. transportation, but not the earliest. A four-wheel drop-side gondola was the first freight car used on the railroad.

Ross Winans’ Camelback, No. 217

1848—Winans’ Camelback. Eight-wheel connected locomotive. Horizontal cylinders. Drivers 43 inches in diameter,
Horizontal boiler with inclined top overhanging firebox. Large cylindrical dome on forward part. Cab built on top of boiler. Plate frame, solid bushed side rods, equipped with hook-motion valve gear. Converted into Stephenson link motion about 1870.

A neighbor of the “William Galloway” at “A Century of Progress,” is the “Winans’ Camelback,” built by one of America’s foremost locomotive makers. These “camelbacks” characterized the two decades preceding the Civil War, and were used extensively for years thereafter.

Ross Winans, the builder, was a pioneer in this work. First a farmer, then a horse-trader, history marks him as a man of “peculiar traits, which would have made him a conspicuous character, no matter what calling he had chosen.” At an early age he showed remarkable genius as an inventor. His first of a long line of patents was made in 1821, when he had invented a method of “fulling,” or bleaching cloth by means of steam. He experimented in many types of appliances for steam locomotives, both for railroads and for steamships. At one time, sent to England by the B. & O., he designed some improvements for railroad carriages, not only for his own railroad, but some for the English railways, as well.

It was in 1844 that Winans made his first locomotive. It was of a class distinctly original with him. This locomotive was known as the “Mud Digger.” It had a horizontal boiler connected with overhead crank shafts, gearing into the rear axle of eight connected drivers. His first “camelback” was produced in 1848. He made many locomotives thereafter, but from this time on he never failed to adhere to the “camelback” type.

It was Ross Winans who had helped, materially, to improve and remodel the early “York” locomotive until it fitted the needs of the Baltimore and Ohio. His first appearance in B. & O. service was as engineer in 1829-30, when he assisted Peter Cooper. In 1835, as a member of the firm of Gillingham and Winans, he took charge of the B. & O. Mt. Clare Shops, Baltimore. There he continued the manufacture of locomotives until the early Sixties. He died in 1877.

Winans’ purpose in the unusual placing of the locomotive cab above the boiler in his “camelbacks” (so-called from the resemblance to the back of a camel), was to shorten the length of the locomotive; he considered the firebox of the locomotives developed after the form of the “William Galloway” entirely too long.

The “camelback” locomotive, shown here, was built in 1873, and was somewhat of an improvement over the original models built by Winans himself. This type was used in freight service, and was constructed in the B. & O. Mt. Clare Shops.

The first “camelbacks” had eight wheels, but Hayes & Davis, in 1853, had found that
a four-wheel truck under the forepart of the locomotive would facilitate its operation and afford better service, and adopted the ten-wheel type.

**The Three-Pot Hoppers**

The old hopper car attached to the Winans' Camelback No. 217, is one of a type which this locomotive was accustomed to haul in the early Sixties and Seventies. It has a ten-ton capacity, and is a self-clearing type, with link-and-pin continuous couplers and handbrakes. It is operated on two pairs of wheels.

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**OLD EQUIPMENT PARTICIPATING IN THE TRANSPORTATION PAGEANT**

In "Wings of a Century," the Transportation Pageant of "A Century of Progress," the following pieces of historical Baltimore and Ohio equipment are seen in action.

"**TOM THUMB**" locomotive—1829-1830  
"**THOMAS JEFFERSON**" locomotive—1835  
"**THATCHER PERKINS**" locomotive—1863  
Two Passenger Coaches and a Baggage Car of the period 1850-1860  
Conestoga Wagon—1813  
Victoria Coach—1800  
Two "Imlay" Coaches—1832  
Horse Car "Pioneer"—1829  
Directors' Car—1830