

39

WINGS
OF A
CENTURY

THE ROMANCE OF TRANSPORTATION

Price 10¢

1833

1933

A CENTURY OF PROGRESS
INTERNATIONAL EXPOSITION * CHICAGO

A CENTURY OF PROGRESS PRESENTS

WINGS OF A CENTURY

The Romance of Transportation

By

EDWARD HUNGERFORD

Staged and Directed by HELEN TIEKEN

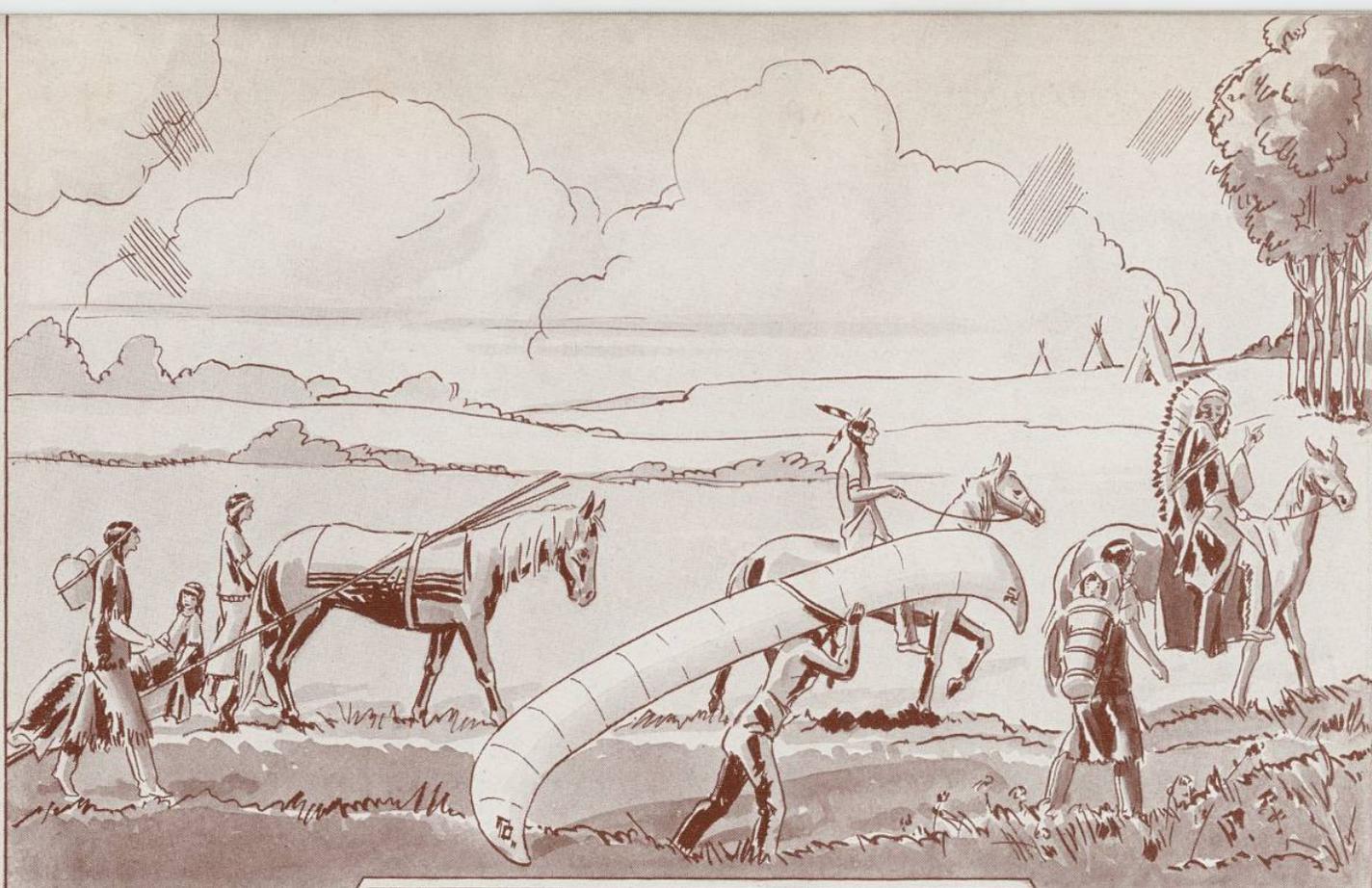
Musical Setting by HAMILTON FORREST

HARRINGTON ADAMS, *Business Manager*

Theatre Designed by HOWARD RAFTERY

SYNOPSIS OF SCENES

Prologue.....	INDIAN RETREAT	
.....	Episode I Wilderness Pathfinders.....	1700...1750
.....	Episode II Wilderness Road Blazers.....	1769...1800
Scene I.....	LITTLE OLD NEW YORK.....	1807
Interlude I.....	ON THE ERIE CANAL.....	1825
Scene II.....	BALTIMORE CLIPPER.....	1825...1850
Interlude II.....	PARADE OF THE IRON HORSE.....	1830...1867
Scene III.....	GOLD RUSH.....	1849...1860
.....	Episode I Overland Trail.....	1849
.....	Episode II Pony Express.....	1849
.....	Episode III Sacramento Night Boat.....	1858
Interlude III.....	PROMONTORY POINT...SPANNING OF A CONTINENT.....	1869
Scene IV.....	THE CHICAGO WORLD'S FAIR OF 1893	
Interlude IV.....	HORSELESS CARRIAGE.....	1905...1925
Scene V.....	KITTY HAWK—CONQUEST OF THE AIR.....	1903
Epilogue.....	MODERN TRANSPORTATION	



PROLOGUE—INDIAN RETREAT

FIRST EPISODE
1700-1750

"Wilderness Pathfinder"

Across the fore-stage begins a march of the earliest Americans, afoot and on horseback. There are Indians with their horses, their canoe and their travois, and a priest and a few hunters and trappers.

"Travelers these, and with a vengeance. Stout hearts and brave. Pioneers . . . breaking the first trails for progress."

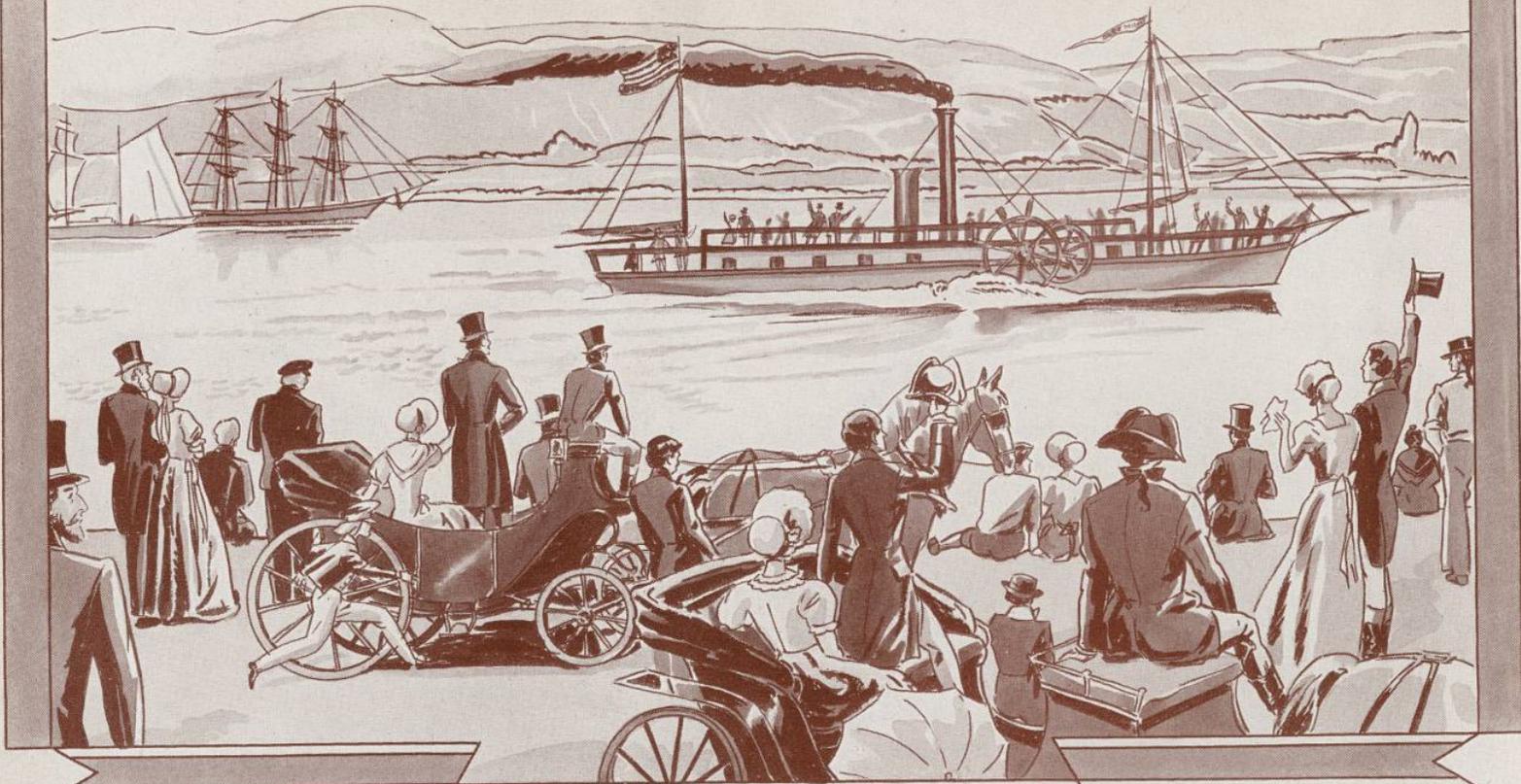
SECOND EPISODE
1769-1800

"Wilderness Road Blazers"

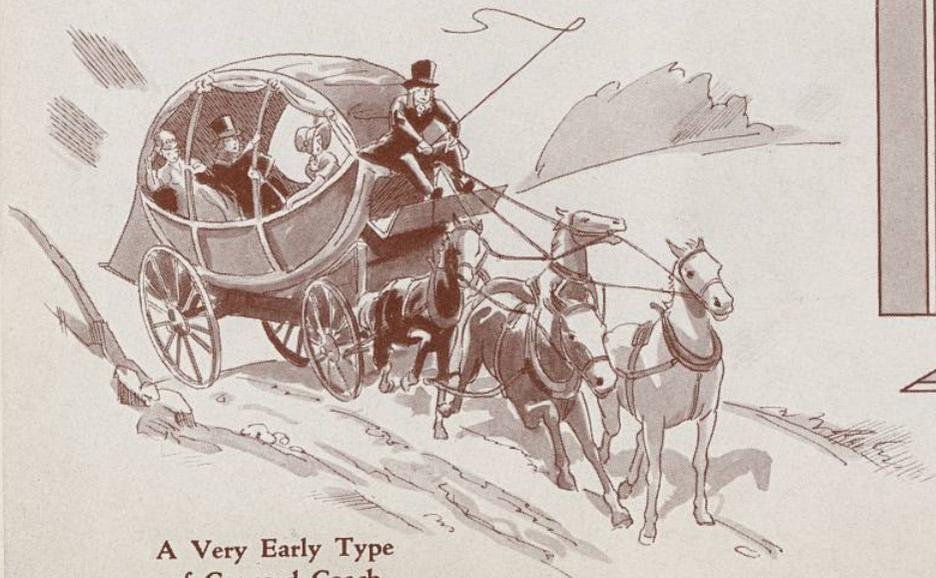
Daniel Boone's caravan comes on the stage. Trail blazers have begun to move through the forests, frightening the Indians and rousing their resentment. Boone's caravan battles for its very existence.

"The White Man is Master. The Indians have become a subject race."





Old Time New York Chaise



A Very Early Type
of Concord Coach



SCENE ONE

Little Old New York

1807

This scene is at the edge of New York harbor, at the time of the first triumph of Robert Fulton's remarkably successful steamboat, the *Clermont*. A few other experimental steamboats already have been builded, but the *Clermont* is the first to navigate waters, under this new power. The citizens of New York gather at their Battery to welcome the small steamboat, which already has succeeded in making a successful trip up the Hudson to Albany and back. And so the first step has been taken toward making travel in America a fairly swift and comfortable thing.

"As man makes the steam engine drive these vessels in these more sheltered waterways close at home, so will he put it to work to take great ships across the Atlantic."



Joys of Canal-Boating
a Century Ago

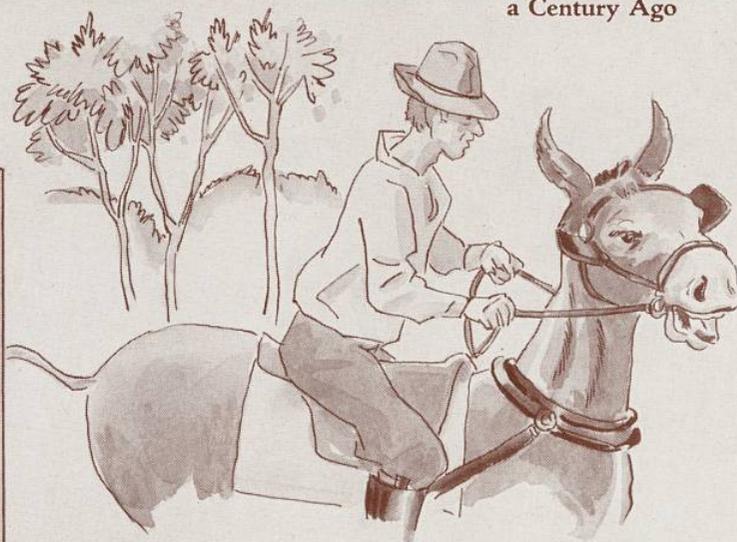
INTERLUDE ONE

On the Erie Canal

1825

DeWitt Clinton has just completed his masterpiece—the Grand Canal, soon to become known popularly as the Erie Canal, which is navigable from the waters of the Hudson at Albany to the foot of Lake Erie at Buffalo. It is an instant success—this new transport link between the Great Lakes and the Atlantic and it is thronged with swift packet boats and slower freighting craft. A freighter, portraying the amusing family life on board, and a passenger boat, are drawn by mules across the stage.

"This is traveling de luxe in 1825. . . Four miles an hour—sometimes five. The great speed of these boats upon the new Erie Canal has to be carefully regulated. . . The canal is the water railway of this era."





SCENE TWO

"The Baltimore Clipper"

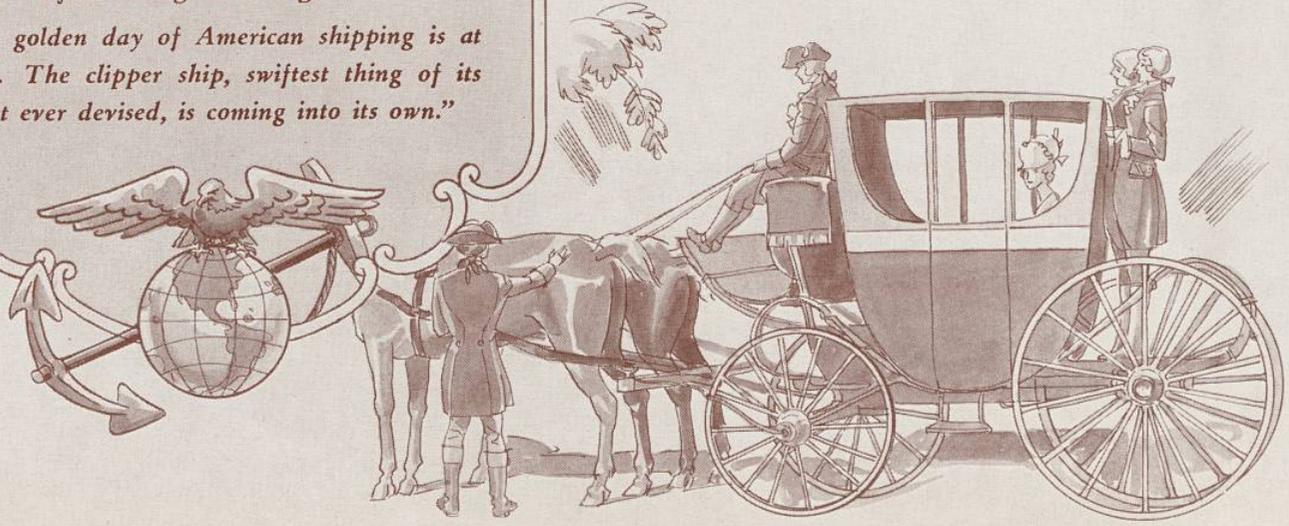
1825-1850

Two great phases of transport are shown within this episode—the triumph of the clipper ship and the coming of the railroad. The scene is Baltimore Harbor and the year, 1835. The Baltimore Clipper already has become known, throughout all the seas of the world as second to no other craft in creation and the railroad—at first operated by horse power and then by steam—is just coming into being.

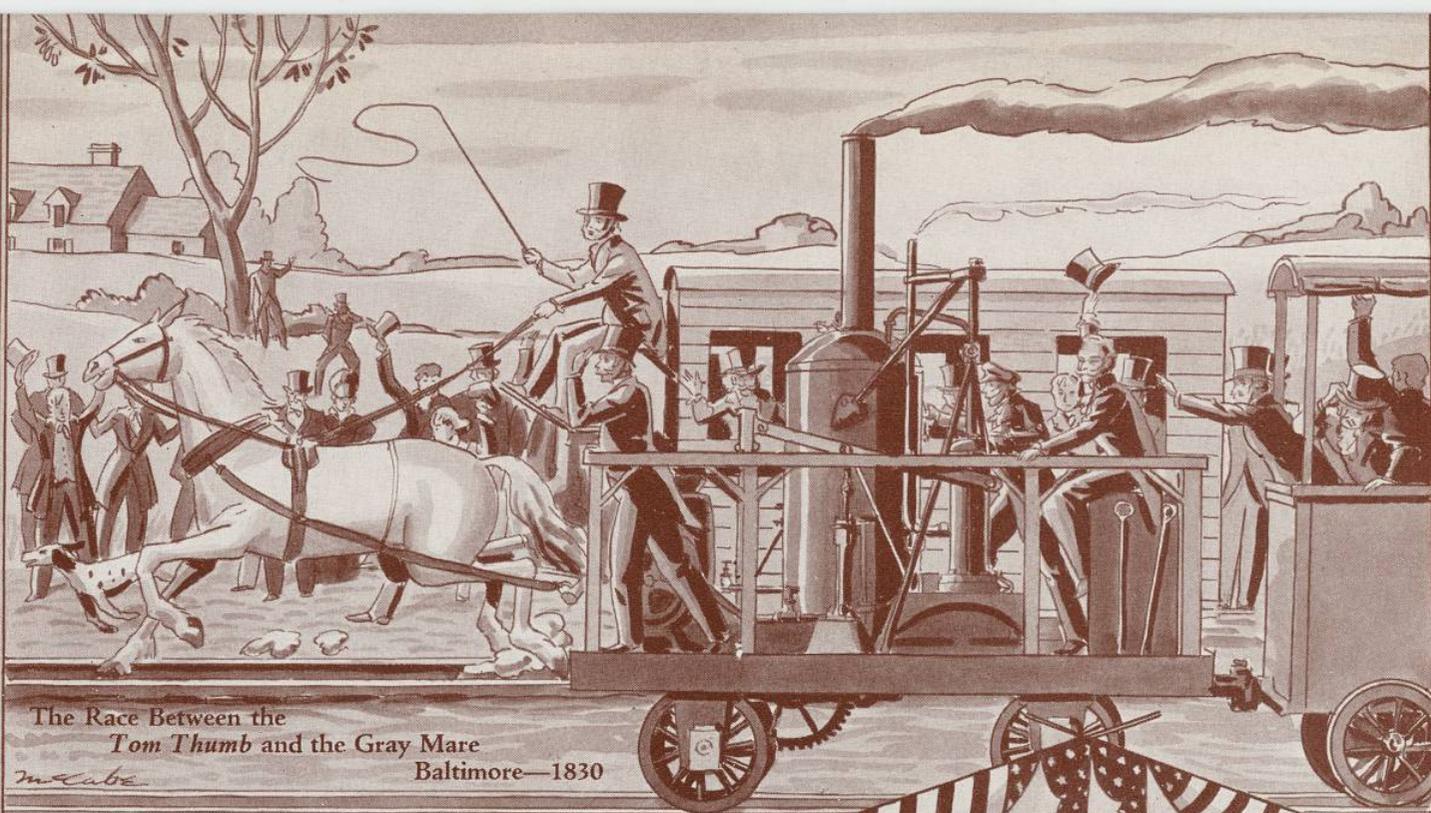
"The golden day of American shipping is at hand. The clipper ship, swiftest thing of its sort ever devised, is coming into its own."



An Early One Horse Chaise



In This Sort of Gentleman's Coach George Washington Once Rode



The Race Between the
Tom Thumb and the Gray Mare
Baltimore—1830
McCabe

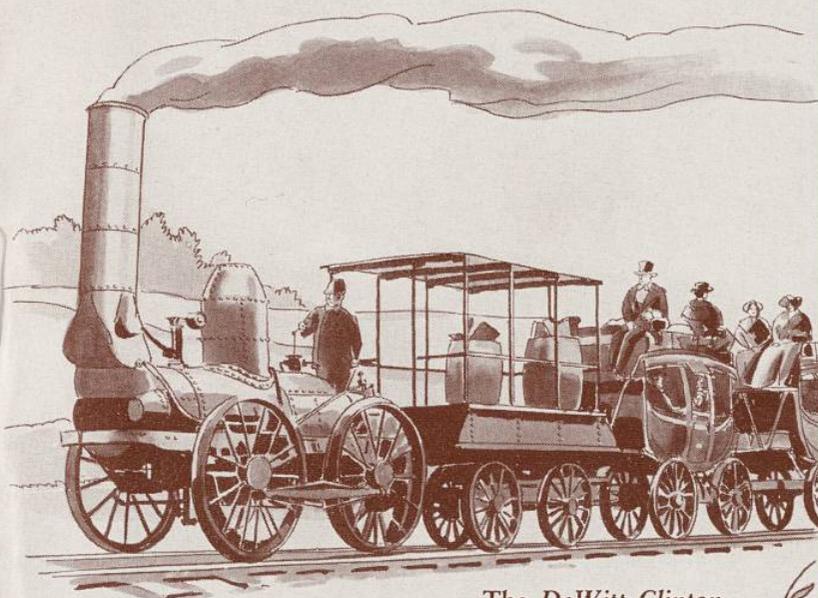
INTERLUDE TWO

Parade of the Iron Horse

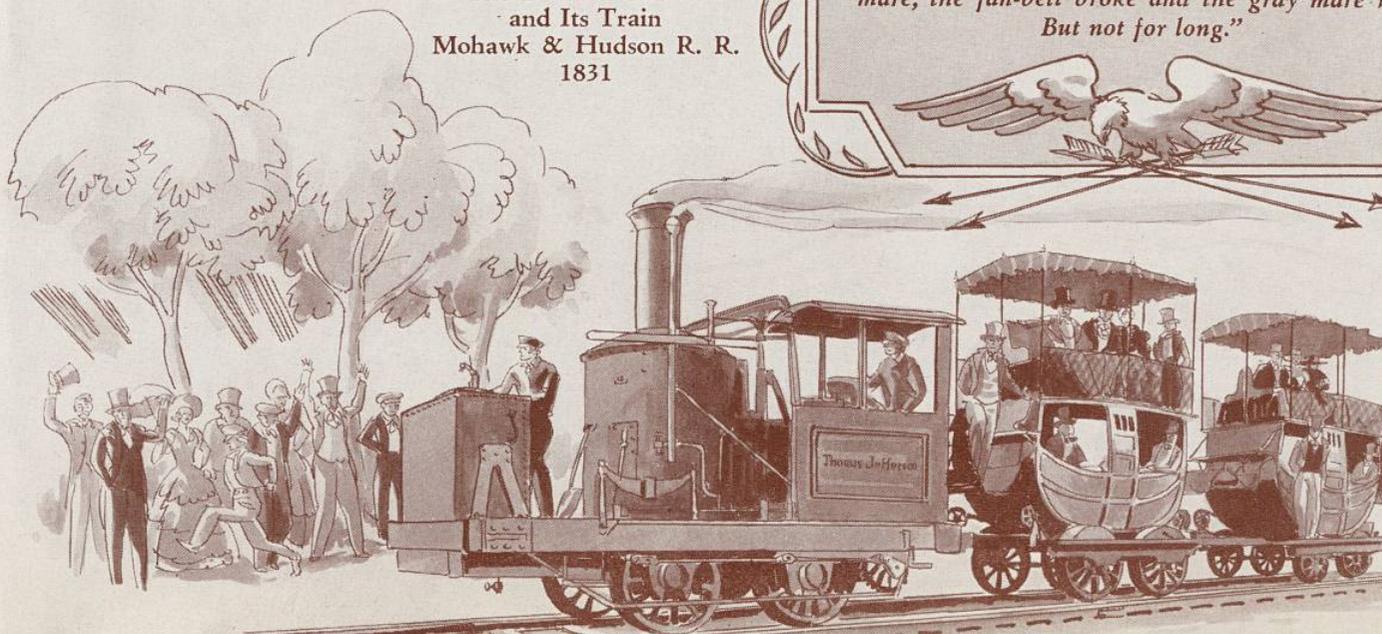
1830-1867

The *Tom Thumb* was the first locomotive of the Baltimore and Ohio Railroad. Its directors at first were loathe to accept the steam locomotive, but finally it was forced upon them—by this same *Tom Thumb*, devised and run by Peter Cooper, of New York. This early locomotive is followed by the early *DeWitt Clinton* and its train from the Mohawk & Hudson (now New York Central), and the *Thomas Jefferson* of the Winchester & Potomac (first railroad in Virginia) also with a very old stage-coach train.

"The Tom Thumb did the trick. It was a perky little engine and not infrequently it broke down. Once, when it was being raced against a fine gray mare, the fan-belt broke and the gray mare won. But not for long."

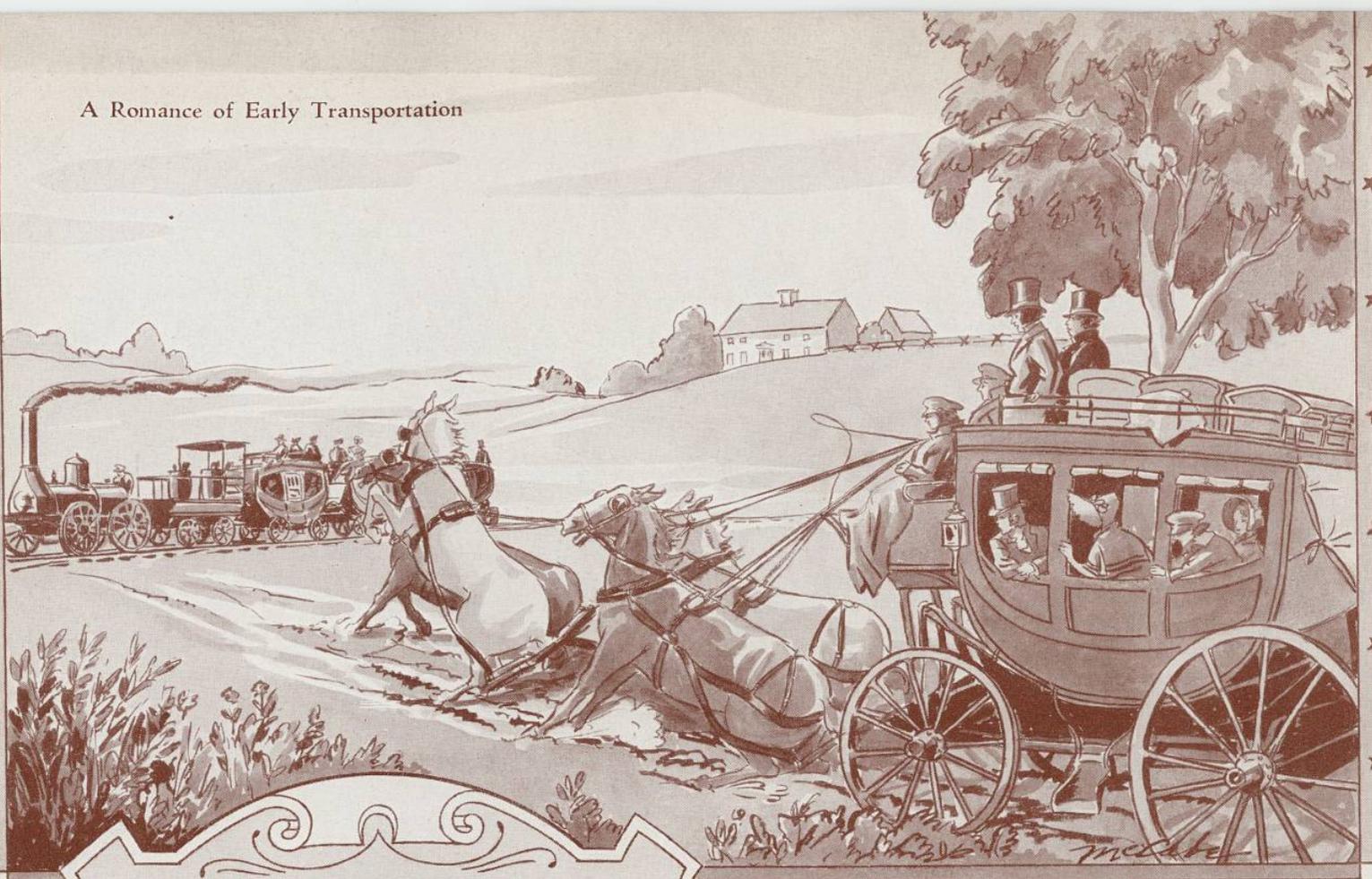


The *DeWitt Clinton*
and Its Train
Mohawk & Hudson R. R.
1831



Thomas Jefferson and Train—

Winchester & Potomac R. R. 1836



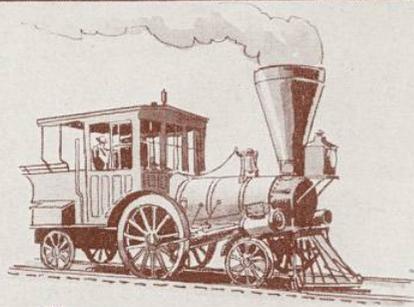
INTERLUDE TWO

(CONTINUED)

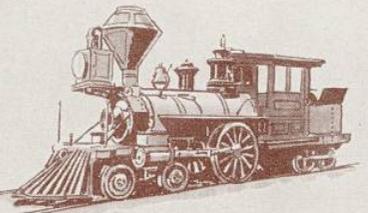
Parade of the Iron Horse

Another very early Southern railroad was the Cumberland Valley (now a part of the Pennsylvania) and one of its earliest locomotives was the *Pioneer*, built by Seth Wilmarth in 1851, which now comes across the stage. Earliest of the northern transcontinentals was the Northern Pacific and its first engine, the *Minnetonka* is next shown. The scene is closed by the fine *Thatcher Perkins* (with train) which Thatcher Perkins built for the Baltimore & Ohio in the days of the Civil War.

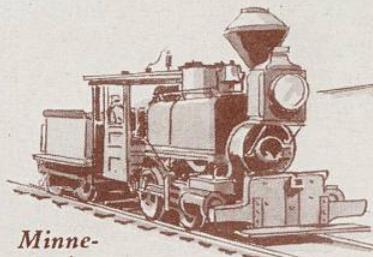
"The Iron Horse has found his way far into the interior of America. Only one more step remains for him and that is to link the Atlantic and the Pacific."



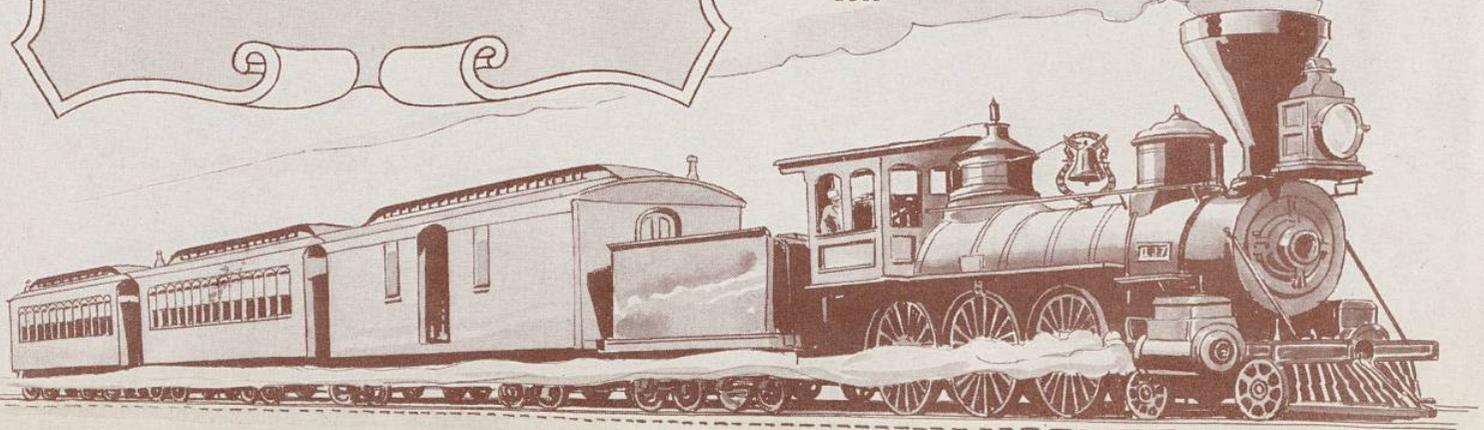
Pioneer
Cumberland Valley R. R.
1851



C. P. Huntington
Central Pacific R. R.
1863

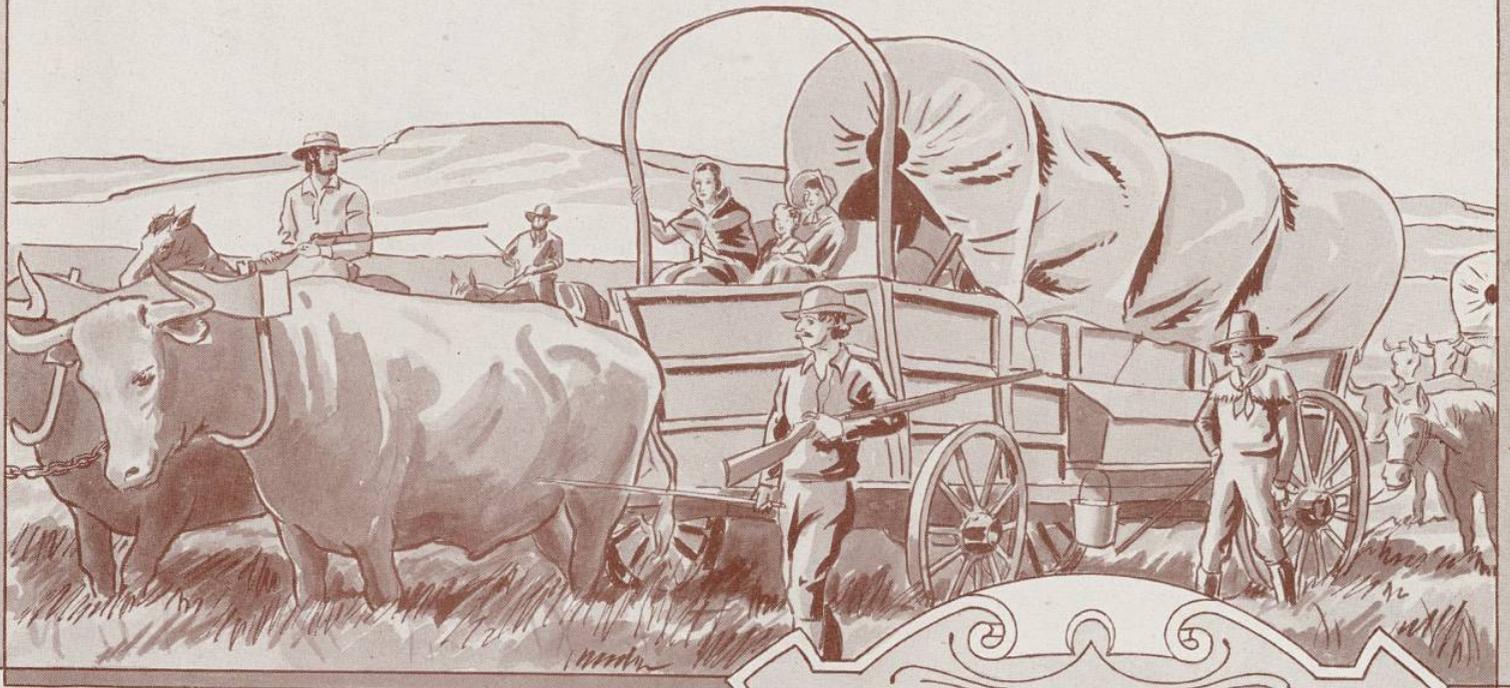


Minnetonka
Northern Pacific R. R.
1869



Thatcher Perkins and Train Baltimore and Ohio Railroad 1863

The Covered Wagon
Trail Across the Continent



The Pony Rider—1859-61

SCENE THREE

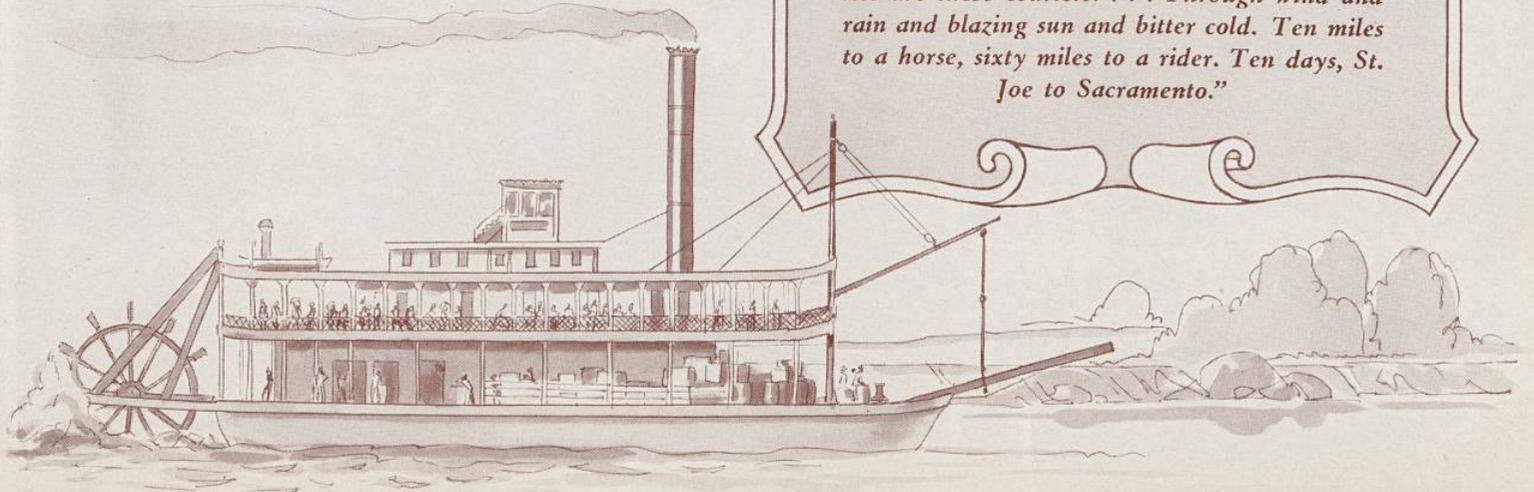
Gold Rush

1849-1860

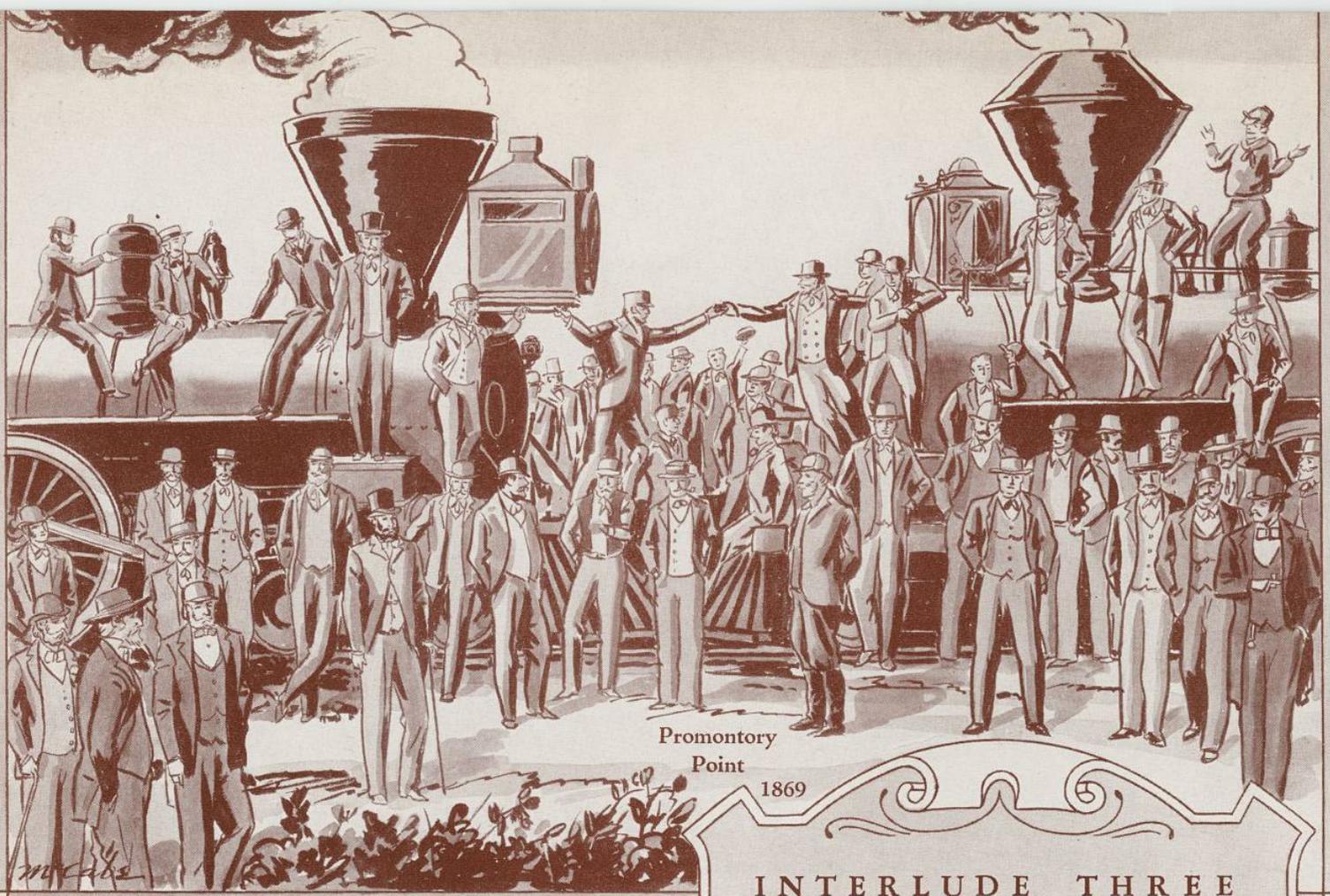
Scene and action now move from East to West. The year is 1849. Gold has been discovered in California and there is a mad rush across the continent. There are covered wagons and stage coaches, and at Sacramento wharf Wells Fargo transfers gold from the coaches to the night boat on to San Francisco.

The scene is enlivened by the advent of the pony express rider. The Pony Express was the most romantic form of transport America has ever known.

"Night and day, day and night, ceaseless, tireless are these couriers. . . . Through wind and rain and blazing sun and bitter cold. Ten miles to a horse, sixty miles to a rider. Ten days, St. Joe to Sacramento."



A Sacramento River Steamboat



Promontory
Point
1869

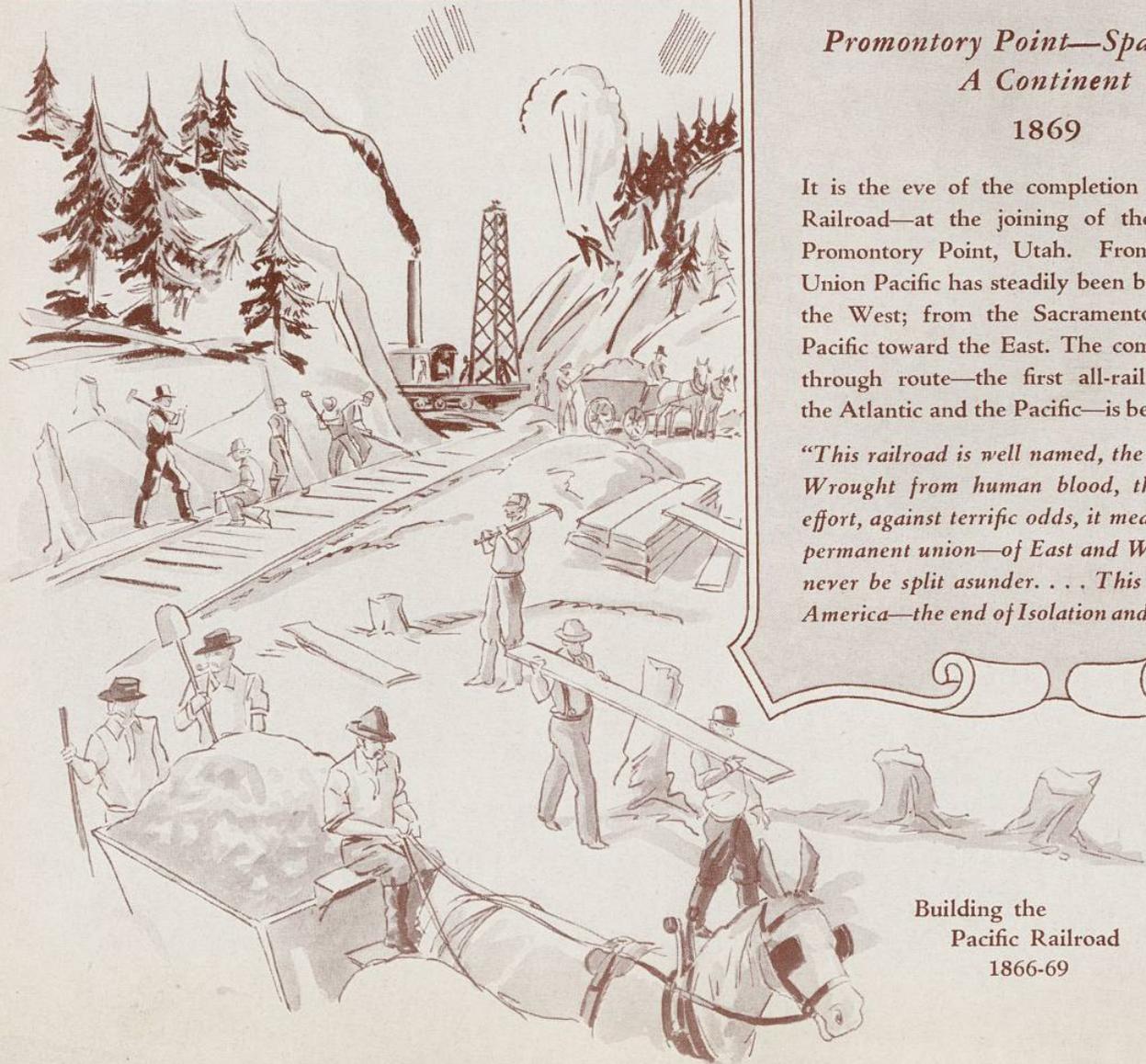
INTERLUDE THREE

Promontory Point—Spanning of A Continent

1869

It is the eve of the completion of the Pacific Railroad—at the joining of the tracks, near Promontory Point, Utah. From Omaha, the Union Pacific has steadily been building toward the West; from the Sacramento, the Central Pacific toward the East. The completion of the through route—the first all-rail link between the Atlantic and the Pacific—is being celebrated.

“This railroad is well named, the Union Pacific. Wrought from human blood, through human effort, against terrific odds, it means a great and permanent union—of East and West, which will never be split asunder. . . . This is the birth of America—the end of Isolation and Sectionalism.”



Building the
Pacific Railroad
1866-69



Chicago
in the
Gay Nineties

McCabe

SCENE FOUR

Chicago World's Fair

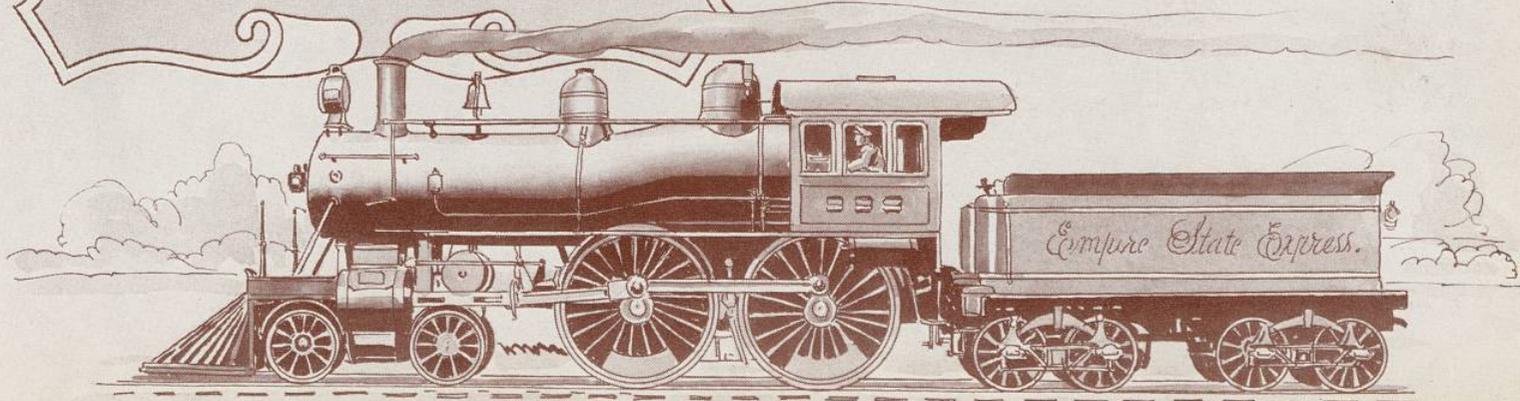
1893

Wings of a Century now swings to the very center of the land—to Chicago in the year of its unforgettable first World's Fair. Folk from all quarters of the world have gathered there. Among many interesting new things, the first automobiles are upon display. And close beside these, the fastest locomotive in the world, the famous 999 of the New York Central, which in May 1893 made a record of running at the rate of 112 1/2 miles an hour.

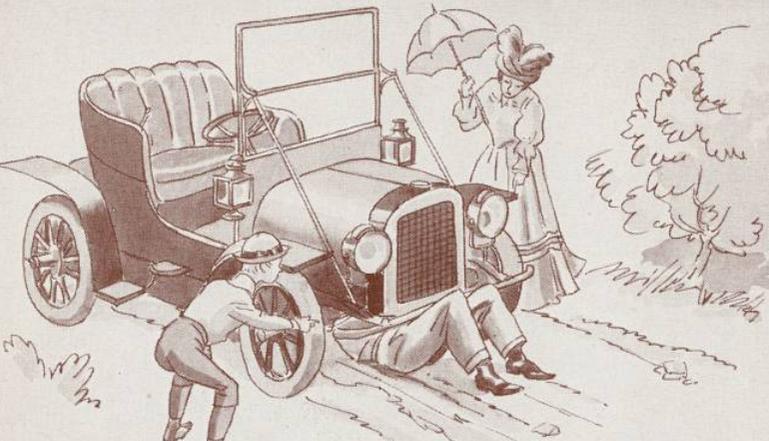
"How joyous all of this! Such gayety America has rarely ever seen. History is now being made, here by the shores of Lake Michigan."



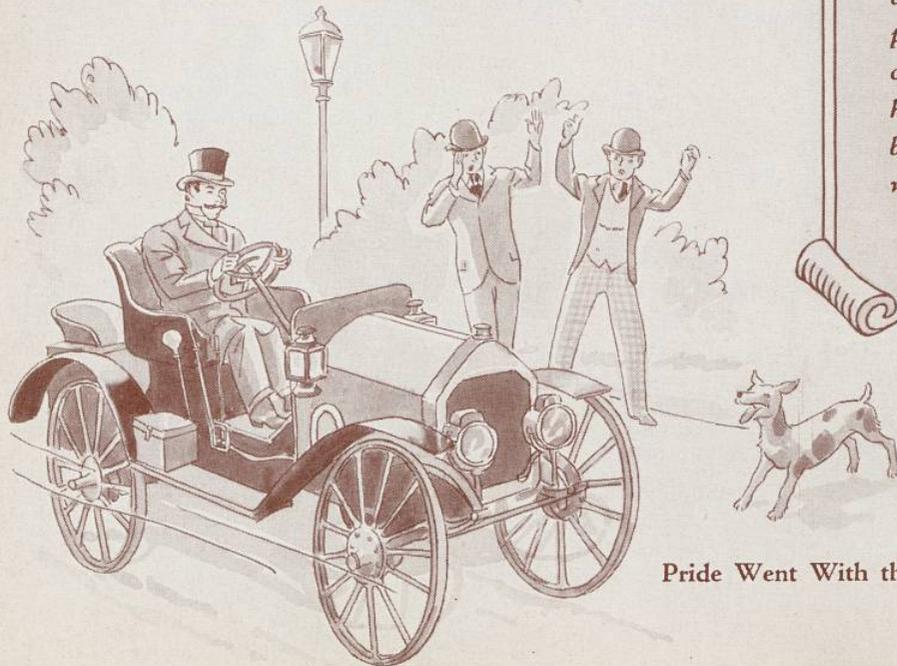
Illinois Central Engines
Such as This Little 1401
Hauled the Suburban Trains
to Jackson Park and the
Great Chicago Fair of 1893



The 999 of the New York Central & Hudson River Made a World's Record
—at the Rate of 112½ Miles an Hour—in May, 1893



Joys of Early Motoring



Pride Went With the Early Automobile

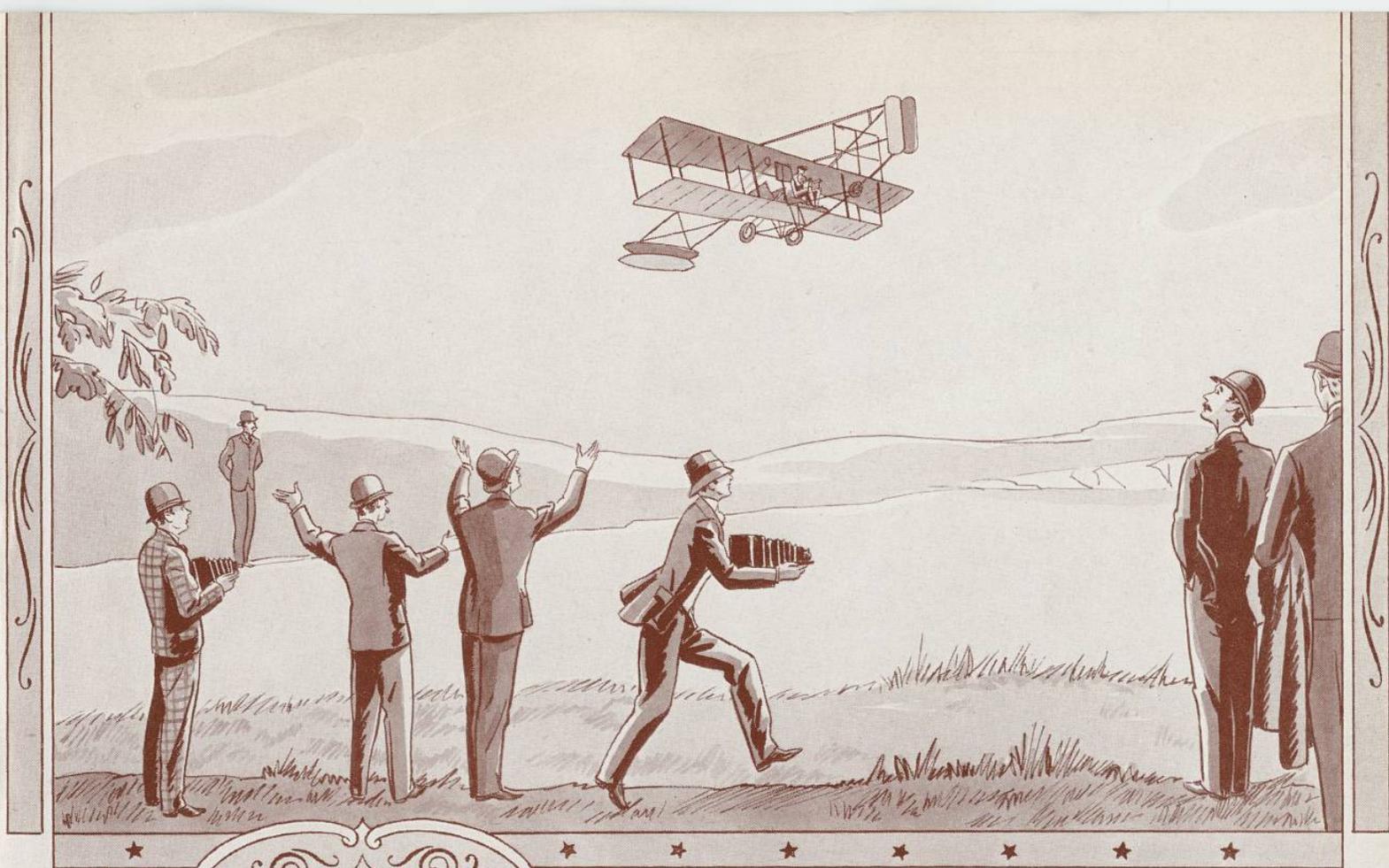
INTERLUDE FOUR

Horseless Carriage

1905-1925

There is an increasing stream of early motor cars upon both the fore-stage and the main-stage. As they come upon the stage, the Narrator mentions each by name.

"From these small beginnings is being born, not only a new and major agent of our transport, but a new and giant industry for our commercial progress. . . . For in the trail of this horseless carriage comes the rebirth of the American highway. . . . Smooth pavements. . . . Great new bridges, spanning hitherto impassable waterways. . . . Swift and easy roads—here and there and everywhere."



The Wright Brothers and Their First Airplane
Kitty Hawk, North Carolina
1903

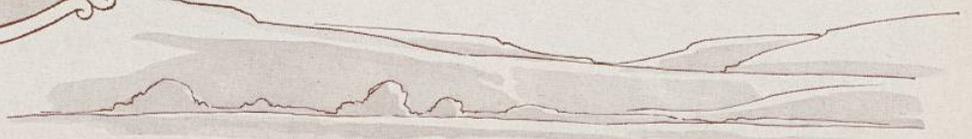
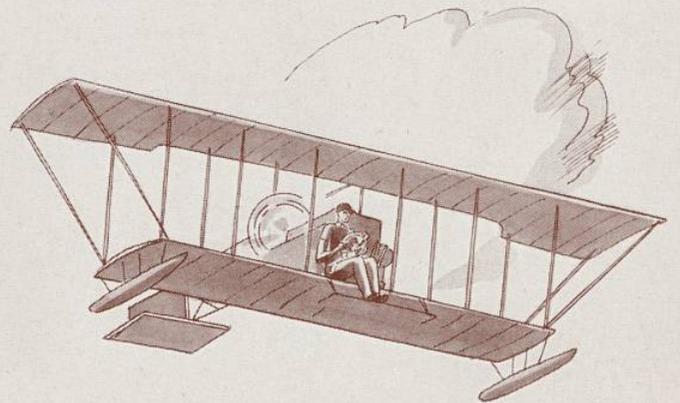
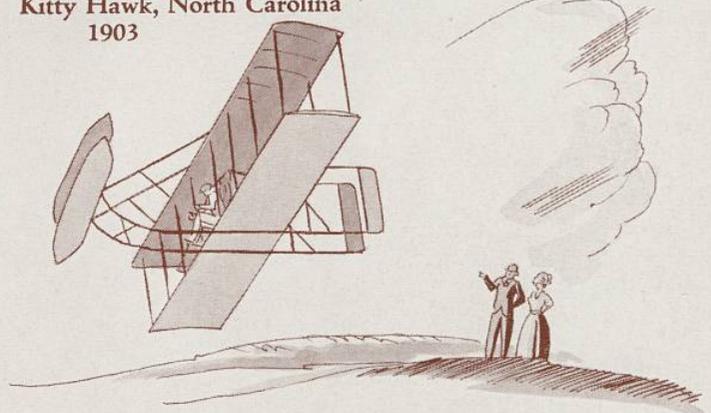
SCENE FIVE

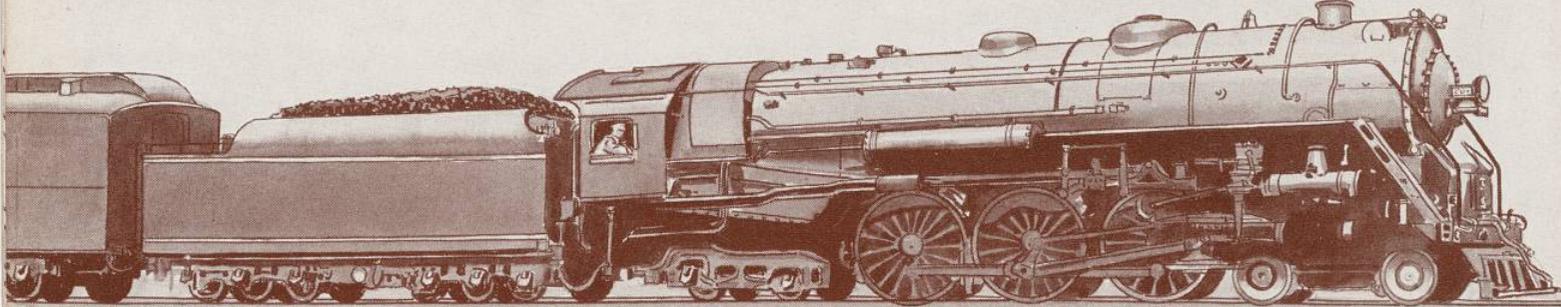
Kitty Hawk—Conquest of the Air

1903

The stage is an empty and a deserted place. One sees sand dunes by the rim of the Atlantic, along the North Carolina shore line. Wilbur and Orville Wright are making the very first successful tests of their airplane.

“One pathway remains for man to discover and to traverse. This is the unknown pathway, through the dominion of the heavens. The airway has become the newest field of his endeavors. In simple fashion, such as this, the airplane is born.”





EPILOGUE

Modern Transportation

1933

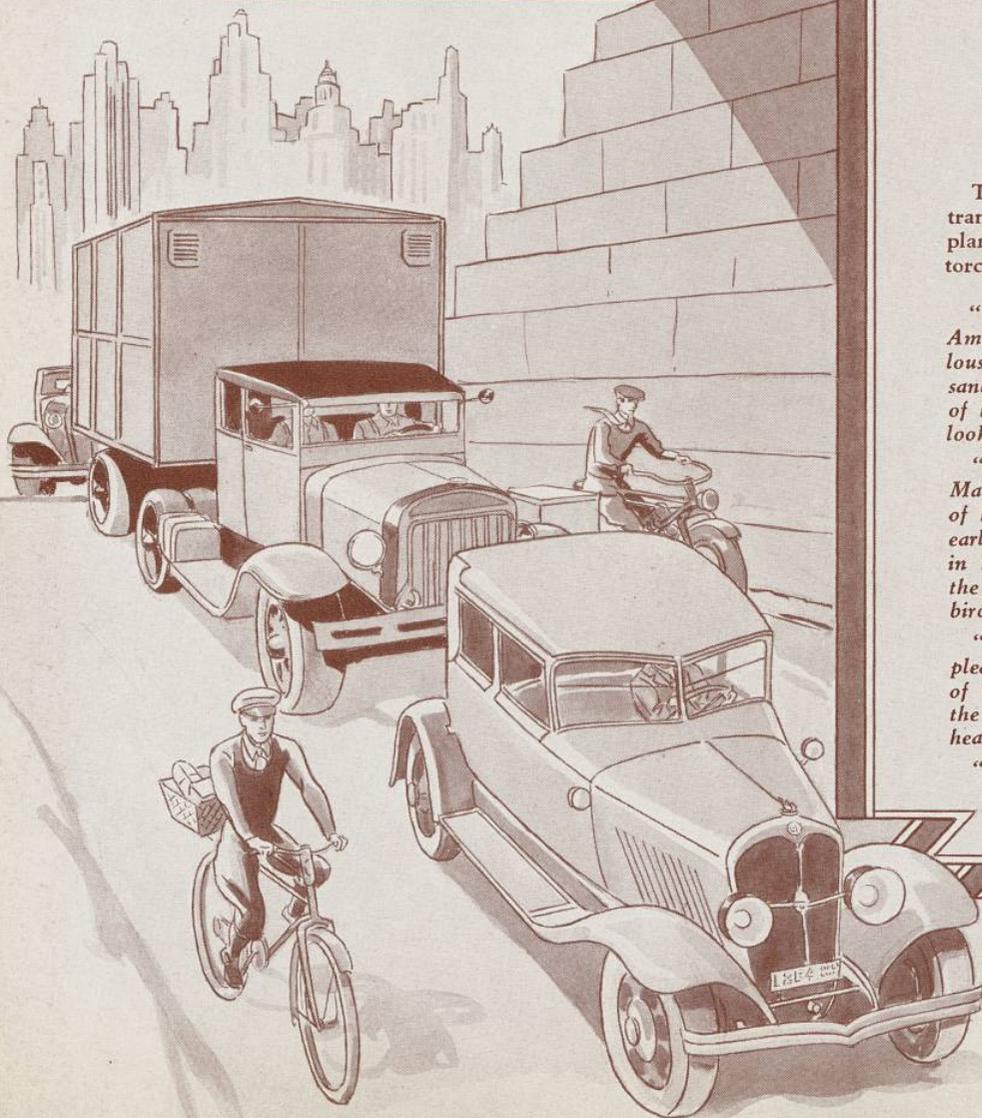
The final scene is a tableau of modern transportation vehicles including: the airplane, railroad locomotive, automobile, motorcycle, and bicycle.

"One hundred years have passed and America . . . has swept into a place of populous states, a thousand cities, and ten thousand towns . . . Within this nation no form of transport has been neglected, none overlooked.

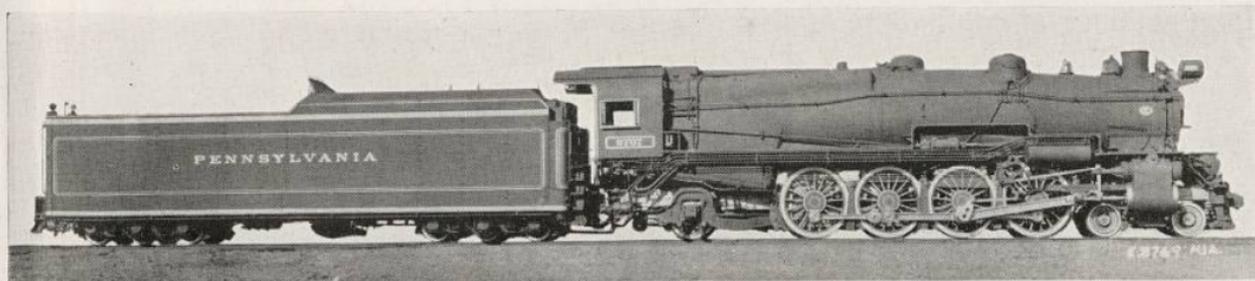
"Wings of a Century! It is no idle phrase. Man used these wings when first the paddles of his steamboats beat upon the waters, his earliest locomotives were, in his fancy and in his imagination, winged steeds. And so the motor car. And so, these great and birdlike creatures overhead.

"All move at his command—upon his pleasure. Together, they are the lifeblood of the nation . . . Transport is more than the right hand of the land. It is its very heart and soul.

"Wings of a Century! It is no idle phrase."



W.C. CAFE



MOUNTAIN TYPE FREIGHT AND PASSENGER LOCOMOTIVE—PENNSYLVANIA RAILROAD

The Pennsylvania Railroad's Class M-1a locomotive is one of the most useful engines in American railway service, hauling the fastest all-steel limiteds of the passenger service and the swiftest of the long through freight trains. The M-1a locomotive—a Mountain type engine—is the product of Pennsylvania Railroad engineering and mechanical development, having been designed by this railroad's own engineers and motive power experts.

This locomotive has four 33-inch engine truck wheels, eight 72-inch driving wheels and two 50-inch trailer truck wheels. Its boiler is $82\frac{1}{4}$ inches in diameter, with a total heating surface of 6,332 square feet. The grate area covers 69.86 square feet. The cylinder dimensions are 27 by 30 inches and the steam pressure developed is 250 pounds to the square inch.

The tender of the M-1a locomotive has a capacity for 22,090 gallons of water and 63,000 pounds of coal. It is 52 feet, $11\frac{1}{4}$ inches long and weighs 378,360 pounds.

The wheelbase of the combined engine and tender is 96 feet, $6\frac{3}{8}$ inches. The total length of the locomotive is 108 feet, $2\frac{3}{8}$ inches, and the total weight, 768,360 pounds.

CAST

Man Narrator . . . Lester Luther
Woman Narrator . . . Olga Rosenova

Jessie Allen	Bruce Edwards	Lawrence J. Kelly	William Quentmeyer
Robert Andrews	Manford Ettinger	Bruce Kent	Clifford Raynor
Ruth Anton	Melvin Feigenbaum	Jane Kermit	Frank Ryan
Caesar Arrigoni	Stanley Field	Eugene Knorps	Otto Scheer
V. R. C. Avery	Dixie Fisher	Dorothy Koerner	Mary Seiler
William H. Bender	John J. Fleming	Jap LaCour	Elizabeth Shawhan
Walter Bohnsack	Elvira Formella	Violet LeClaire	Paul Shawhan
Orin A. Brandon	Thomas K. Fuson	Robert Leicester	Bill Smith
Roger Bromley	Louise Gehr	Mabel Leigh	Rita Smith
Helen Brongel	Mary Gehr	Dan Leiner	Bert Stork
Tom Brown	Chester Genter	Bernice Lohff	Chester Sullivan
Frances Burke	Tom Gleason	Earl Marvin	Earl Svendson
Patrick J. Butler	Frances Glickman	Janice Meredith	Harriet Taylor
Santo Cacciato	Barbara Gordon	Faye Michelson	Esther Teeters
Omar Campbell	Willis Hall	Madalyn Mick	George Teeters
Stuart Chamberlain	William Healy	Joe Mirabella	Frank Teurfs
George G. Clark	Steve Heierling	Isabelle Mohr	Anne Tourtellot
John L. Connor	Homer Hobson	Loretta McNair	Florence Zander Wagner
Leonard Craven	Stella Hobson	Paul Nelson	Horace E. Walker
Randolph Crews	Roy Hudson	Dolly Nichols	Omer Watkins
Benton Dales, Jr.	Blanche Jackson	Frances Oliver	Everett Westness
Edward J. Denney	Earl Jamison	Beatrice Orland	Ross C. Whitmire
Tony Donofrio	Corine Jessop	Lee Orland	Virginia Whittier
George Dopp	Gomer L. Jones	Maryann Pearl	Gene Yell
Arthur Edmonds	James S. Jones	Rosemary Perkins	Ben Yost

LOCOMOTIVE ENGINEERS AND HELPERS

Napoleon Briggs	W. B. Good	C. H. Martin	C. J. Rosenbaum
John Clifford	Melvin Haugan	Elmer Munson	J. P. Schoeber
Jesse Cole	John Kinney	H. Oberender	C. W. Stark
Thorvid Engquist	George Kingsley	R. Rintoul	Henry John Suchor
	Ambrose Tatar		

VEHICLE DRIVERS AND HORSEMEN

Paul Barton	Walter Goodenough	Joe Kuta	Rhoda Royal
C. H. Baudendistil	William Hall	Ardell Leaman	Lorne Russell
William Bryan	Robert Harris	Walter Mapes	William Shannon
Glenn David	Fred Haynes	Roy A. Monson	Jack Victor
Jack Donovan	John J. Higgins	John O'Brien	George Williamson
Joe Farnum	Edward Kiefer	Theodore Pines	William Wolfington
Robert Glennon	John Konkol	William Rooney	

PRODUCTION STAFF

Harrington Adams.....	<i>Business Manager</i>	David Oakes.....	<i>Master Electrician</i>
Raymond O'Brien.....	<i>Director-in-Charge</i>	Allan King.....	<i>Lot Superintendent</i>
Abe Goldberg.....	<i>Musical Conductor</i>	Frank Martin.....	<i>Master Mechanic</i>
William Russell.....	<i>Stage Manager</i>	Arthur Weinberg.....	<i>Master of Properties</i>
Gordon Ray.....	<i>Assistant Stage Manager</i>	Florence Youngblood.....	<i>Costume Director</i>
Robert Van Deventer.....	<i>Assistant Stage Manager</i>	Pauline Mills.....	<i>Secretary-Personnel Director</i>
Arvid Crandall.....	<i>Technical Director</i>	Russell K. Tucker.....	<i>Chief of Service</i>

Costumes and Wigs by Marshall Field & Co.

RECOGNITION

The management of *A Century of Progress* gratefully acknowledges
the loan of these various articles for *Wings of a Century*

LOCOMOTIVES AND TRAINS

Baltimore and Ohio Railroad Company	Northern Pacific Railway Company
Chesapeake and Ohio Railway Company	Pennsylvania System
Chicago and North Western Railway Company	Rock Island Lines
Illinois Central Railroad Company	Southern Pacific Lines
New York Central Lines	Union Pacific Railway Company

HORSE DRAWN VEHICLES

Museum of Science and Industry	International Harvester Company
Messmore and Damon	Railway Express Agency, Inc.
Baltimore and Ohio Railroad Company	William Irwin C. Zepp, Inc.

AUTOMOBILES (Old and New)

Museum of Science and Industry	Auburn Automobile Company
General Motors Corporation	International Harvester Company
Chrysler Corporation	Waukesha Motor Company
Roy Monsen	R. C. Harris
Reed Brothers Garage	

BICYCLES AND MOTORCYCLES

Museum of Science and Industry	Harley-Davidson Motor Cycle Company
Mead Cycle Company	Ben D. Russell

AIRPLANES

United Air Lines	Stinson Aircraft Corporation—affiliate of Cord Corporation
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MISCELLANEOUS

Museum of Science and Industry	Marshall Field and Company
Baldwin Piano Company	