TRAINS, TRACKS and TRAVEL

TENTH EDITION

by T. W. and R. G. VAN METRE

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BY

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PREFACE TO TENTH EDITION

When the first edition of this book was published thirty-four years ago the steam railroad was the unrivalled agency of overland transportation within the United States. Virtually all of our intercity freight and the great majority of our passenger traffic not strictly local in character moved in railroad trains. With few exceptions, these trains were hauled by steam locomotives.

But the passage of these thirty-four years has seen a revolution take place, not only in the railroads themselves but in transportation in general. The source of this revolution has been the development of internal combustion power in the form of both engines and turbines.

This new source of power had its first great effect upon transportation by making possible the family automobile. Although invented very late in the last century, the period of the 20's brought the automobile into truly mass production and saw it become the possession of millions of American families.

The automobile brought the previous steady rise of railroad passenger travel to a halt. From there this travel slid into a steady decline, relieved only by the years of World War II when the private car became all but immobilized. Particularly did the private automobile deal a body blow to such formerly popular pastimes as railroad and lake and river steamboat excursion travel.

The automobile was followed closely by the highway bus and the highway truck. The private automobile and highway bus together have all but wiped out the electric interurban. The highway truck has come to take about a quarter of all our intercity freight business while the railroads now retain less than one-half.

These last thirty-four years have also seen the rise of commercial air transportation in the United States. Today over half of all our common carrier intercity passenger travel is by plane and an ever increasing share of express and freight now make their way by air.

The internal combustion engine made possible the planes that created this massive airline transportation network; the internal combustion turbine in the form of the jet has given it its present lightning speed.

At sea and upon the rivers, the lakes, the canals and the harbors of this country the internal combustion engine has also made deep inroads into steam. In all but the larger steamship power plants, the diesel engine has come to be preferred. In the form of the outboard motor, the internal combustion engine has made America a nation of yachtsmen. From its origin as an auxiliary to oars or paddles the outboard motor has made possible a whole new kind of power boat and opened up a whole new area of recreation.

On the railroads themselves, internal combustion power has also worked a revolution. Starting in the mid-nineteen thirties and reaching a climax in the years following World War II, the diesel locomotive has all but driven the last steam locomotives from the rails. Hardly anywhere has such a technological revolution been worked in so short a time—nor hardly anywhere has the coming of such a revolution brought on more nostalgia for the machines that were superseded. No other creation of man has ever more endeared itself to its contemporaries nor has any ever been more mourned at its passing than has the steam locomotive.

But not only has the diesel locomotive been a source of great improvement to the efficiency of our railroads. New types of signals, centralized traffic control, radio communication, and new machines to mechanize the labor of equipment repair and track maintenance have had a major share. So rapidly have changes been accomplished on our railroads that it has been impossible, in books, however frequently revised to keep abreast of all the changes.

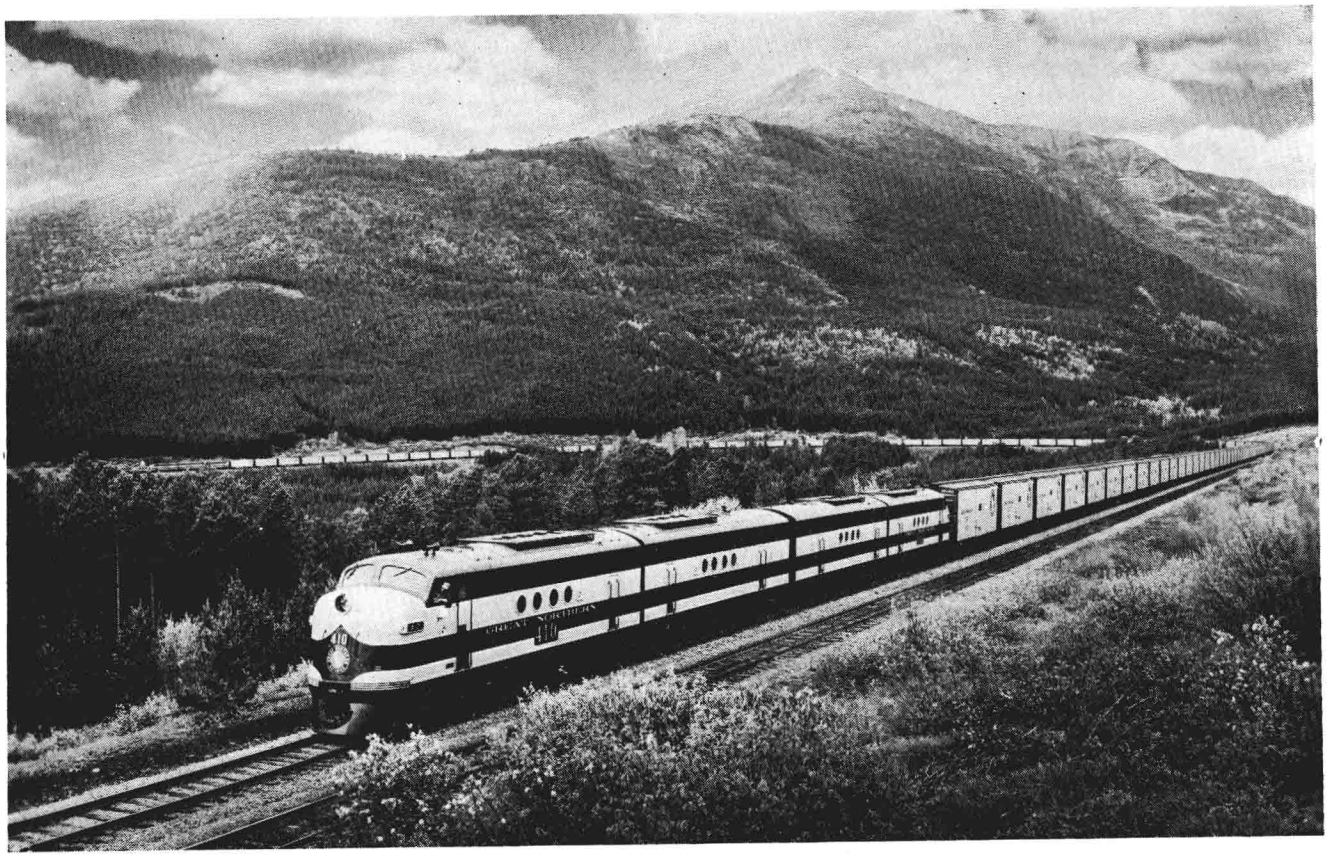
Like the revolution worked upon our railroads and elsewhere in the field of transportation, so has this revolution been reflected in this book. In this tenth edition, not much still remains of the original first edition. The years between each new edition have always seen new charges that have had to be described and much of what was up to date in the first and earlier editions has now become history—and has had to be rewritten in that light. It is difficult to write of

once familiar things in terms of history and as you read through these pages I am sure you will catch an impression here and there that some things from a bygone day are described as though they were with us still. Such is the resistance of a man's thinking to the passage of time.

This book has survived one generation and it has entered into a second. It was written originally by my father and revised by him many times but starting with the last edition he turned over to me the responsibility for keeping it abreast of current progress. I have continued this work on into this edition. Not many books, certainly of this type, enjoy such longevity and it is a tribute to his original work that TRAINS, TRACKS AND TRAVEL has continued to receive its cordial reception over the intervening years. It is my hope that I too may have the satisfaction of writing for a full generation of English speaking readers and that TRAINS, TRACKS and TRAVEL will continue to provide the enjoyment for railroad fans of this generation that it has shown itself to have had for the past.

RUSSEL G. VAN METRE

Cincinnati, Ohio
February 28, 1960



Horseshoe Curve on the Great Northern. The train is more than a mile long.

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CHAPTER I

CLEARING THE WAY

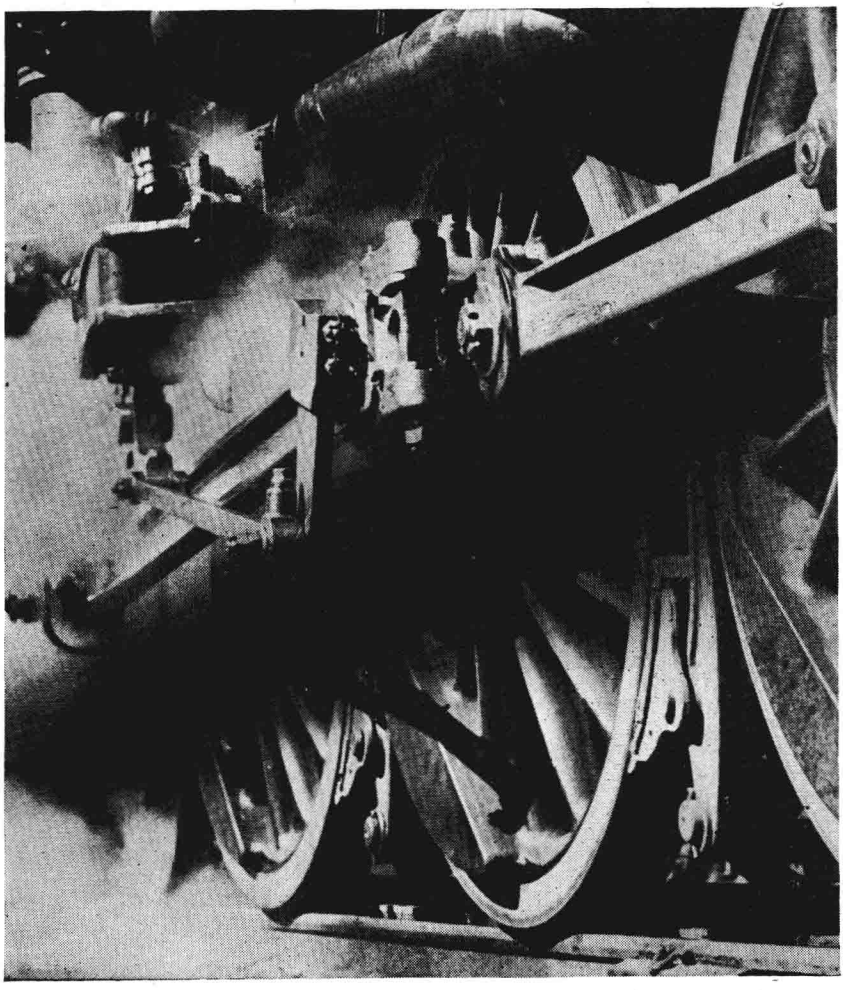
Of all the many mechanical devices which the invention of the steam engine brought into use none has been more useful, attracted more interested attention, and been more admired and cherished than the steam railroad. From its very beginning it has been an object of fascination to everybody to whom it became a familiar sight. It may be that the universal popularity of the steam railroad and especially of the steam locomotive was because it was this steam-driven machine which was most readily and most widely open to public view. Not everybody in those countries where steam power came into common use could get into mills and factories to watch the operation of the steam engines and the machinery to which their power was applied. The steam locomotive, however, was out in the open where everybody could see it. Or it may be that the steam locomotive, because of its appealing sound, its rugged appearance, its swiftly moving rods and wheels, its exemplification of great power as it pulled heavy trains of cars along the track, had a fascination in itself which was not to be found in other steam engines or in the machines they served to operate.

The diesel-electric locomotive, which is the chief agency of railroad power today, somehow does not seem to have the same facination that its disappearing elder brother long possessed. Its sound is different, it sends up no billowing cloud of smoke or long trailer of white vapor, not many of its moving parts are visible. Nobody seems to think of it as an "iron horse." It reminds one more of what the automobile was once commonly called, a "horseless carriage." Many people who once

enjoyed listening to the somewhat mournful, long-drawn-out whistle of the steam locomotive do not like the raucous blasts which come from the horn of the diesel-electric locomotive. In deference to the recollections of numerous sentimental railroad enthusiasts some railroad companies have developed horns for their diesels which simulate the sound of the steam locomotive whistle. It has been said that on some western roads this change has been made because the sound of the early diesel horns resembled so closely the angry bellow of a bull moose that upon hearing it, real bull moose, invariably to their discomfiture, would charge onto the railroad track to meet head-on the challenge of what they thought to be an insolent interloper.

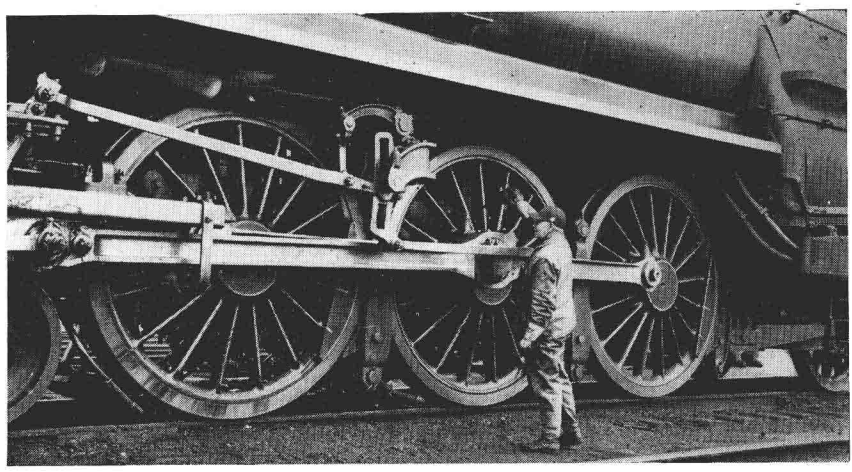
There were very few persons for whom the old steam locomotive was not a fascinating attraction. In country villages it used to be a common practice for boys and girls, and grown-ups too, to gather at the railroad station to see the "evening train" arrive. It might be that some of them were there to meet relatives and friends who were coming for a visit, or some might be there to "see off" departing travelers, or perhaps even to board the train themselves to go to a nearby city, but many of them came just to see the train arrive and leave. The far-off sound of the whistle announced the train's approach and soon the roaring noise of the onrushing train was audible. The train would soon reduce speed, and the engine, puffing, snorting, and clanking, its brass bell ringing, smoke pouring from the smoke-stack, steam hissing and brakes screeching, would draw alongside the station platform and come to an uneasy stop. Many boys liked to stand near the engine when the train halted. They could watch the fireman shovel great lumps of coal into the hungry fire-box, see the leaping red and yellow flames beyond the open fire-box door, and even feel their heat. The engineer, in blue overalls and jumper, might get down from the cab and squirt oil into some mysterious nooks and crannies about the rods and wheels of the engine, using an oil can with a very long spout, the outer end of which was gracefully curved.

The train would not tarry long, as there were few passengers



"Steam hissing and brakes screeching."

to get on and off the cars, and soon the engineer was back in his seat in the cab, his hand on the throttle, the long lever with which he controlled the movement of the steam from the engine's big black boiler. The fireman would tug at the bell-cord, the engineer would pull slowly on the lever. The engine would begin to puff loudly, sending up a shower of small cinders which rattled faintly on the platform, the great wheels

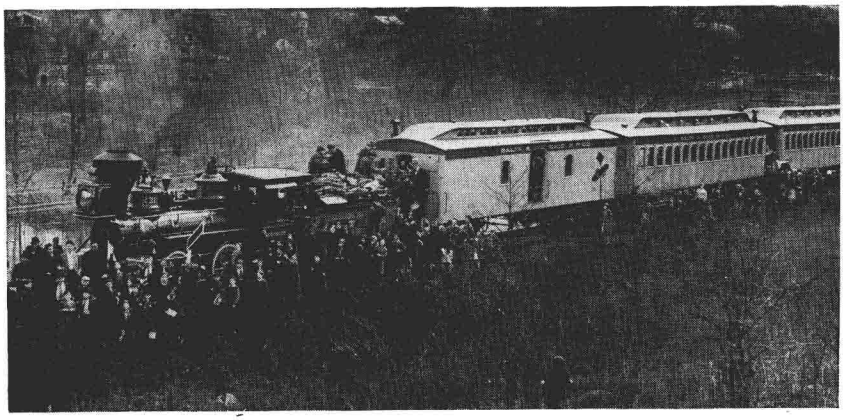


The engineer uses his oil can.

would begin to move, and very slowly at first, but faster with each succeeding puff, the train would leave the station. As it moved down the track the sound of the rapid puffing became fainter and fainter, and the sound of the whistle became more and more mournful. Soon all sound had died away; the evening train had come and gone.

To many a boy the steam train was so fascinating that his fondest ambition was to become a locomotive engineer when he grew up. Long ago when the sea seemed to be the best place to find adventure, mystery and romance, nearly all boys longed to be sailors, and many of them, like Robinson Crusoe, "ran away to sea" at an early age. Today the imagination of ever so many boys carries them in space ships and other aerial vehicles far out into interplanetary space and to those far distant worlds which we know only as shining stars in the yet unpenetrated depths of the sky.

If the diesel locomotive has deprived the railroad of some of the fascination it once held for young and old, the fascination has not departed entirely. Trains are still objects of absorbing interest. On the passenger trains the coaches, the sleeping cars, the diners, and the cars which carry baggage, mail and express are ever so much more comfortable and con-



School children visit a train of Grandfather's day. The three coaches were hauled by the "J. W. Bowker" locomotive, built in 1871.

venient than they were a few years ago. They are better designed and more attractively decorated, and they have lighting and heating systems which are a vast improvement over former methods. Interesting "gadgets" for opening and closing doors and windows, air conditioning, radio telephones, and devices for the entertainment of passengers, command the attention of today's traveler. Many passenger cars now in use have glass domes instead of wooden or metal roofs, and the passenger can see the landscape on all sides as he flies along on his journey. The diesel locomotive, though it may not have some of the features which made the steam locomotive an object of deep interest, nevertheless is just as much the embodiment of power, speed, and endurance as the puffing steam locomotive always seemed to be.

Moreover the diesel locomotive has made it possible for our railroads to provide us with transportation service that is much less costly than the service we had when steam was the chief agency of motive power. The diesel locomotive is much more efficient than the steam locomotive for many reasons. It is more economical in the use of fuel, and it does not have to spend so much time out of service for repairs and maintenance. These as well as other reasons for the superior

"The thoughts of youth are long long thoughts."

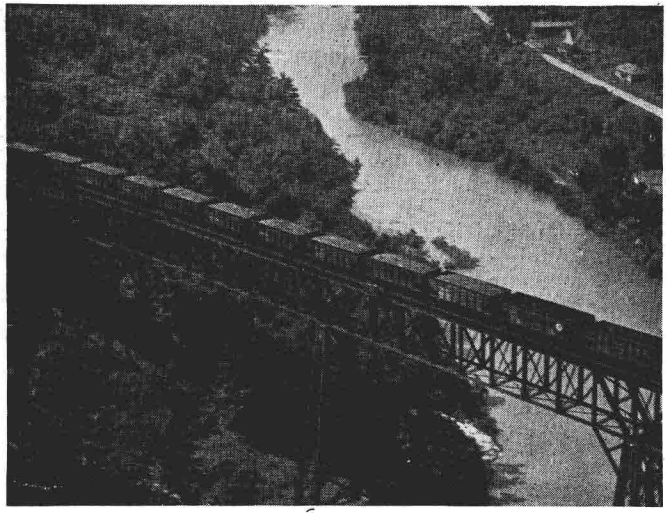
efficiency of the diesel locomotive we will discuss in detail in a later chapter.

So the railroad continues to maintain its interest for everybody even if it is rapidly ceasing to be a steam railroad. We still like to watch the flying passenger trains and the long, heavy freight trains with their many kinds of cars loaded with minerals, lumber, live stock, machinery, food, merchandise, and hundreds of other things which enter into the vast commerce of our country. People still go to railroad stations to see trains arrive and depart, though there are not nearly so many small stations as there used to be. They like to read of the new inventions and the improvements which make railroad transportation safer, faster, and more comfortable. Riding on a locomotive is still a thrilling experience, though a ride on a diesel does not seem to be quite as thrilling as a journey on a steam locomotive.

Railroad shops and engine houses draw many curious and inquiring visitors, and railroad yards and terminals, with their

maze of tracks, their interlocking towers, control stations, signal systems and other structures still have an allurement for thousands of persons for whom the railroad and all of the railroad's equipment have never lost their charm and fascination.

Yes, the railroad still holds our interest, even if it can no longer be said to be a steam railroad. One begins to wonder



High above Rondout Creek, New York, a frail looking viaduct carries the tracks of the West Shore (New York Central) Railroad across a narrow valley.

what the railroad will be called when the last steam locomotives have been discarded. It is still commonly referred to as a "steam railroad," though it is obvious that this name is no longer literally applicable to any of our huge railroad systems. Maybe somebody will think of a new name which will be more accurately descriptive, or maybe we shall just speak of the "railroad" without using a descriptive term. It is hard to imagine calling our railroads "diesel railroads" or "diesel-electric railroads." Perhaps some day in the not too distant future all our railroad locomotives will be driven by atomic power. What shall we call our railroads if this change

should take place? It is probable that for some time we shall go on calling them "steam railroads," just in affectionate memory of what they once really were.

There are thousands of railroad "fans" in the United States, who eagerly learn everything there is to know about our railroads, their complicated equipment, and their methods of operation. Some of these enthusiasts are organized into clubs or societies, a few of which have a nation-wide membership. They have regular meetings at which they hear lecturers give interesting talks about railroads in this country and in foreign lands. Some of these societies publish magazines containing all kinds of odd and interesting information about railroads; many of them have collections of railroad pictures, time-tables, and other documents. Many American railroads have for several years followed a practice of running special Sunday or even week-end excursions for railroad fans, giving them an opportunity to visit railroad yards and shops, to inspect locomotives and cars, to visit places of historical importance in railroad development, and to learn numerous facts about the actual operation of railroads. These excursion trains are always crowded. They are financially profitable ventures, and they do much to stimulate and keep alive public interest in the welfare of our railroads.

The railroad business is one of the few large businesses in the United States about which popular magazines are published. There are many trade and professional magazines about all kinds of business enterprise, including railroads, but for the railroads there are regularly published magazines, sold at all news-stands, and read eagerly for the tales of the steel highway, historical articles, descriptions of all kinds of railroad equipment, and many items of scientific interest they contain.

Individual railroad enthusiasts have large private collections of railroad books and pictures. Some have collections of model cars and locomotives. Many persons who make a hobby of photography have highly valued collections of railroad photographs which they have taken themselves all over the United States and in many other parts of the world.

Perhaps the way in which the universal interest in railroads