When there's BLOOD ON THE MOON...death lurks in the shadows!

Lusty, violent, savage tale of the deadliest range war ever to EXPLODE on the screen!

Straight from the rip-roaring pages of the famous Saturday Evening Post serial story!

ROBERT MITCHUM
BARBARA BEL GEDDES
ROBERT PRESTON

in

BLOOD ON THE MOON

with

WALTER BRENNAN • PHYLLIS THAXTER
FRANK FAYLEN • TOM TULLY

Executive Producer SID ROGELL
Produced by THERON WARTH • Directed by ROBERT WISE
Screen Play by LILIE HAYWARD

He met his match—and his fate—in her arms!
BILL STOPPED
THE WILD BOAR'S
CHARGE AND THEN...

Wild turkey hunting in a Southern National Forest can hardly be classed as a dangerous sport, but when a wounded wild boar intrudes...

BANG! BANG!
Nailed him, eh? What the...
I figured he'd head for the clearing, so, I took a shortcut and...
Got here just in time to save my life!

When we borrowed Jeb's Scott's car, we shoulda taken his trailer. Be his house guest!

THAT'S ME, ALL RIGHT.
WHY THAT'S JEB SCOTT'S CAR!
THEN YOU MUST TOO.

Later
Blades, you bet! Try this thin Gillette

Where has this blade been all my life? That's the slickest shave I've had in years!

Thin Gillettes are mighty popular down here. They're plenty keen.

HE'S A FINE YOUNG MAN. EXCELLENT APPEARANCE AND VERY INTELLIGENT.
I knew you'd like him, Colonel. I've approached him regarding a junior partnership.

He's a fine young man, excellent appearance and very intelligent.

You enjoy swell, easy shaves... quick and clean... with thin Gillettes. They are the keenest blades in the low-price field and far outlast all others. Made to fit your Gillette razor precisely. Thin Gillettes cannot scrape or irritate your face. Ask for Thin Gillettes in the convenient New 10 Blade Package.

GILLETTE 10 ULTRA-FINE BLADES
10-25¢
4-10¢

New Ten-Blade Package Has Compartment for Used Blades
January, 1949  Vol. 47, No. 4  35 Cents

Cover: Rotaries in the Rockies (Great Northern)  
By Frederick Blakeslee

ILLUSTRATED FEATURES

Pacific Great Eastern .................................................. Richard L. Neuberger 10
Extra West on the Bell ............................................. Wallace W. Abbey, Jr. 32
Conqueror’s Bridge ................................................... H. H. Gross 42
Country Cousin Goes to Town ..................................... William L. Rohde 48

TRUE TALES

Cinders ................................................................. Charles A. Roach 74
Muddy Shoe Tells Tale in Court ............................... J. V. DeLaney 98
Measure of a Man ..................................................... Ralph Emerson Woods 106

FICTION

Mountain Standard Time (Part 1) .................................. Harry Bedwell 122

SHORT HAULS

A Visit from St. Nicholas ........................................... Harry B. Chase, Jr. 6
Sponsor Identification ............................................... Henry B. Comstock 8
Along the Iron Pike .................................................. Joe Easley 60
Locomotive of the Month (B&M Branchline Diesel) ...... 72
Locomotives of the Great Northern ......................... 82
Over the Hump ......................................................... 108
Fiddletown & Copperopolis Ry. (No. 5) ................... Carl Fallberg 110

DEPARTMENTS

Light of the Lantern (Erie on the Airwaves) ..................... 62
Electric Lines (Tuscaloosa Belt Line) ......................... 88
Out of the Car Shops (Milwaukee Rail Car) ................. 96
On the Spot (Switch Shanty Gossip) ......................... 111
Railroad Camera Club (Switch List, Model Trading Post) .... 141

EDITOR:  Henry B. Comstock  
ASSOCIATE:  H. H. Gross  
EDITORS:  E. M. Kennedy

ART EDITOR:  Thorkild S. Paaby  
ELEC. LINES:  Stephen D. Maguire  
ED. ASST.:  Shirley Chidsey

Published monthly by Popular Publications, Inc., at 2256 Grove Street, Chicago 16, Illinois. Editorial and Executive Offices, 205 East 42nd Street, New York 17, N. Y. Henry Steegir, President and Secretary. Harold S. Goldsmith, Vice-President and Treasurer. Entered as second-class matter January 6, 1943, at the Post Office at Chicago, Illinois, under the Act of March 3, 1879. Copyright, 1948, by Popular Publications, Inc. This issue is published simultaneously in the Dominion of Canada. Copyright under International Copyright Convention and Pan American Copyright Conventions. All rights reserved, including the right of reproduction, in whole or in part, in any form. Title registered in U. S. Patent Office. Single copy, 55¢. Annual subscription for U. S. A., its dependencies, and Canada, Mexico and Cuba, $3.50; other countries, 70c additional. Send subscriptions to 205 East 42nd Street, New York 17, N. Y. For advertising rates, address Sam J. Perry, 205 East 42nd Street, New York 17, N. Y. When submitting manuscripts, enclose stamped, self-addressed envelope for their return, if found unavailable. The publishers will exercise care in the handling of unsolicited manuscripts, but assume no responsibility for their return. Any resemblance between any character, appearing in fictional matter, and any person, living or dead, is entirely coincidental and unintentional. Printed in the U. S. A.
One or two promotions ... several pay raises ... and then that long, long stretch "on the shelf." You want to keep on climbing. You want to feel that you are getting somewhere. But how?

I. C. S. can show you. A little more training could be all you need to get back in the upswing. An advanced course or a "refresher"—studied in your spare time—will help prepare you for the next step, will show that you are ready to handle more responsibility, a better job.

Trained men get the "breaks"! That's a fact proved over and over again by the records of former I. C. S. students.

You don't want to bog down in your job. You don't want to remain "on the shelf" with the untrained. Mail the coupon today for complete information on how you can join the steady climbers.

---

INTERNATIONAL CORRESPONDENCE SCHOOLS

BOX 3276-Z, SCRANTON 9, PENNA.

Without cost or obligation, please send me full particulars about the course BEFORE which I have marked X;

Air Conditioning and Plumbing Courses
- Air Conditioning
- Heating
- Refrigeration
- Steam Fitting
- Plumbing
- Communications Courses
- Electrical
- Surveying and Mapping
- Electronics
- Practical Telephone
- Telephone
- Radio, General
- Radio Operating
- Radio Servicing
- Telegraph Engineering
- Electrical Courses
- Electrical Drafting
- Electrical Engineering
- Electrical Light and Power
- Lighting Technician
- Practical Electrician
- Internal Combustion Engines Courses
- Auto Technician
- Diesel
- Gas Engines
- Mechanical Courses
- Aeronautical Engineer's, Jr.
- Aircraft Drafting
- Flight Engineer
- Foundry Work
- Heat Treatment of Metals
- Industrial Engineering
- Structural Engineering
- Surveying and Mapping
- Mechanics Courses
- Transportation
- Automobile
- Machine Shop
- Mechanical Drafting
- Mechanical Engineering
- Mold-Loft Work
- Patternmaking—Wood, Metal
- Reading Shop Blueprints
- Sheet-Metal Drafting
- Sheet-Metal Worker
- Ship Drafting
- Tool Designing
- Welding Engineering
- Welding—Gas and Electric
- Railroad Courses
- Air Brake
- Diesel Locomotive
- Locomotive Engineer
- Locomotive Fireman
- Locomotive Machinist
- Railroad Section Foreman
- Steam Engineering Courses
- Boilermaking
- Combustion Engineering
- Engine Running
- Mine Engineering
- Steam Electric
- Steam Engr.

Textile Courses
- Cotton Manufacturing
- Loom Fixing
- Rayon Weaving
- Textile Designing
- Woolen Manufacturing
- Business and Academic Courses
- Accounting
- Business Administration
- Business Correspondence
- Commercial
der
- Cost Accounting
- Federal Tax
- First Year College
- Foremanship
- French
- Good English
- High School
- Higher Mathematics
- Motor Traffic
- Postal Civil Service
- Retailing
- Retail Store Management
- Secretarial
- Sign Lettering
- Spanish
- Traffic Management
- Stenography

Name
City
State
Home Address
Working Hours
A.M.
P.M.

Present Position
Employed by

Special tuition rates to members of the Armed Forces. Enrollment under G.I. Bill and P.L. 16 approved for World War II Veterans. Canadian residents send coupon to International Correspondence Schools, Ltd., Montreal, Canada.
A Visit from St. Nicholas

'TWAS the night before Christmas and out on the track
Old thirty-three-hundred was taking up slack.
The signal and switch lamps were lighted with care
In hopes that St. Nicholas soon would be there.
The signal maintainer was home in his bed,
While visions of overtime danced in his head.
Forgotten were overalls, jumper and cap
As he settled himself for a long winter's nap,
When down in the hall there arose such a clatter
He sprang from his bed to see what was the matter.
Away to the phone he flew like a flash,
Slipped on the stairs and came down with a crash.
The boss was phoning at eleven-fifteen:
"There's more snow on the iron than ever I've seen,
So go get your pants and your shirt and your jumper
And hook a ride up here on somebody's bumper,
And we'll let you work like a busy old beaver..."
The signalman cussed and hung up the receiver.

The freight yard resounded with moans and gripes,
And snowdrifts were frozen all over the pipes.
The towerman was trying to line up the route,
While the fast midnight freight was blockaded to boot.
The levers were jammed for two or three nights,
And something had happened to all of the lights.
'Twas a job without rest, compensation or thanks
To dig out the pipe lines and sweep off the cranks,
But finally the signalman straightened his back,
For the snowdrifts were all shoveled off of the track,
Returned to the tower and fell in the door.
To spend Christmas Eve sound asleep on the floor.
When on glancing around, his features turned blue—
For the snowplow was coming on track Number two,
With a little old hogger so lively and quick
He knew in a moment it must be St. Nick.

But old Santa, alas, just could not recall how
To slow down his engine or lift up his plow.
He hightailed on through with a leap and a bound,
While ballast and ice went flying around,
And seventeen tons of snowballs and rocks
Were piled on the pipe lines and pull wires and locks.
He spoke not a word, but yanked on the whistle,
And the steam blew away like the down on a thistle.
Then on down the line went the high-wheeling Saint,
While the signal maintainer fell down in a faint,
But later recovered though filled with a fear
Of shoveling snow for the rest of the year.
And he heard Santa call, ere he steamed out of sight,
"Merry Christmas to you, and do have a good night!"

By Harry B. Chase, Jr.
BIG NEWS from DeForest’s Training, Inc.

NOW you can get and KEEP all of this equipment to help you master...
RADIO — TELEVISION ELECTRONICS at Home!

You LEARN-BY-DOING from building:

(1) A modern 6-tube Superhet Receiver with MAGIC TUNING EYE, plus phono switch, tone control, and other features.
(2) A high grade, commercial-type MULTI-METER with jewel bearing movements.
(3) Over 200 instructive experiments from many shipments of Radio-Electronic parts, including tools.

You mount your parts on individual bases with spring clip terminals, enabling you to build new circuits and to experiment in a fraction of time normally required.

PLUS... the use of Learn-By-Seeing MOVIES. Only D.T.I. provides this remarkable training advantage in your own home to help you learn FASTER... EASIER!

PLUS... D.T.I.’s effective EMPLOYMENT SERVICE to aid you in getting started in Radio-Electronics-Television.

Mail the coupon today for FREE FACTS on how DeForest’s Training, Inc., sends you everything you need to prepare and get started in America’s great opportunity fields.

MAIL THIS OPPORTUNITY COUPON NOW!

DeForest’s Training, Inc.
2533 N. Ashland Ave., Dept. PP-FI
Chicago 14, Illinois

Send me complete details showing how I may make my start in Radio-Electronics-Television. No obligation.

Name
Age
Address
City
State
Apt.
Zone

If under 16, check here for special information.

If a discharged veteran of World War II, check here.

DeFOREST’S TRAINING, INC.
Chicago, Illinois
Associated with the DeVry Corporation,
Builders of Electronic and Movie Equipment
DIAL-TWISTERS from the Bangor & Aroostook to the San Diego & Arizona Eastern have been treated to forty-five seconds of spine-tingling railroad sound effects this month, at a cost to the Association of American Railroads of approximately $7 per chuff.

That, in the opinion of this radio listener, is the one feature of the Railroad Hour which is paying its way as public relations. Certainly the thumb-nail tones on taxes, 3 percent earnings and the fine, cooperative spirit existing between shipper and freight solicitor, are not of the sort to arouse the crusading instincts of the Take It Or Leave It fans. Sixty-four dollars is still big business to these holders of 1½ percent savings accounts and no amount of logic is going to make them sit down and write a red-hot letter to the Attorney General.

In fairness to the commercials, however, we’ve found them a bit more lively than the Show Train’s musical comedy dialogue. As a matter of fact we’re still not quite sure what a “show train” is—even Bob Young hasn’t promised to build one in 1952 and we sort of hope, now, that he won’t.

All of which is secondary to the golden opportunity which the Association of American Railroads has just let slip through its out-stretched couplers. In the parlance of the heterodyne hucksters the key to the success of any radio program is “sponsor identification.” In other words, the finest entertainment on the dial is no better than an Arlington time “sheep” if your audience doesn’t remember what brand of alphabet noodles contains no Vs so it can never spell Vishinsky in your borscht.

Unfortunately for most sponsors, their products are not of the sort which can be dramatized. Hence the need for some sort of a catalyst—preferably five Wurlitzer blasts—to blend the claims for the world’s most soluble soap with episode 696 of Waldo’s Other Mother-in-Law.

Railroading is, on the other hand, a natural for entertainment and commercial all rolled into one. If you doubt it consider the one million paid-attendance figure set by Wheels A’Rolling at last summer’s Railroad Fair. John Q. Pleasure-seeker and his wife and kids weren’t looking for name stars or statistics when they queued up at the gate. They only knew that beyond the stucco walls there was a heap of trains, and trains meant drama, color and excitement. They came away loaded with cinders and good will for the industry.

Apparently it’s going to be some time before the railroads recognize their extraordinary box-office-appeal. When they do and the tolling of an engine bell no longer fades into the exam-cowed voice of the college campus hero, but swells instead into the ringing sledge blows of the Great Jawn Henry, driving home a story of progress, in classic action, words and song, we’ll wager Old Man Hooper will give up trying to rate the Railroad Hour. Who’d bother to answer the phone?

Coming Next Month:

TEHACHAPI; Highlining to the Garden of the Sun
It's almost like being in the cab of a speeding Locomotive when you grip the Engineer Throttles on this new LIONEL Transformer! And this is only ONE of the many exciting features Lionel has in store for railroad fans this year! Send for the Special 25¢ Offer and

Special 25¢ Offer

1. This is what you get: beautiful 36-page full color LIONEL TRAIN Catalog.
2. Set of 3-Dimensional views of LIONEL TRAINS in Action.
3. Pair of Stereopticon Eyeglasses for viewing scenes.
4. Special Kit of 6 cut-out colorful buildings to create realism for your train layout.

See your nearest LIONEL dealer for complete details.

Catalog NOW and read about Electronic Control trains, new Diesels, Locomotives that puff Smoke and Whistle, streamlined Cars and LIONEL Construction Kits. Train set prices as low as $15.95! Yes, for real railroad fun and adventure you can't beat LIONEL Trains—the hobby that lasts a lifetime!

LIONEL TRAINS, P. O. BOX 346
Madison Square Station, New York 10, N. Y.

I enclose 25¢. Please send me Special Offer of 36-page full color Catalog, Stereopticon views of LIONEL TRAINS, Stereopticon Eyeglasses, and Kit of 6 building cut-outs.

NAME

ADDRESS

CITY_________________ ZONE____ STATE____
Pacific
Great Eastern

By RICHARD L. NEUBERGER

Will British Columbia’s "Greatest Expense" Fortify the Western Hemisphere’s Alaska Barricade? American Politicos Know the Answer

INTO THE mountainous core of British Columbia stretches a railway, its caribou-head medallion carrying the name "Pacific Great Eastern." This nomenclature was bestowed in hope and in trust by an Englishman nostalgic for the London Great Eastern of his distant homeland. The name reveals little about the Pacific Great Eastern. As yet, it is not "great." It emphatically is not "eastern," for it clings to the western rim of the North American continent. In one sense it may be considered "Pacific," because its southern terminus at Squamish Dock is washed by that vast ocean. However, its tortuous right-of-way and rugged terrain and weather preclude all use of the word "pacific" as a descriptive adjective.

Furthermore, the Pacific Great Eastern is the only North American railroad not on an island which regularly receives its loaded and empty freight cars in no other way except at the end of a salt-water lap. At its nearest point to Vancouver the
PGE offers the only highway link for 15-mile breach between Shalalth and Lillooet. Gas-electric, left, trails flatcars loaded with autos along Seton Lake.
PGE—and British Columbia knows the road primarily by its initials—is within 40 miles of the continent’s two biggest rail systems, the Canadian National and Canadian Pacific. And at a rocky juncture in the mountains walling off the Fraser Valley from the Coastal Range, a mere 28 miles separate the PGE from the main lines of Canada’s pair of rail giants. Yet notwithstanding this proximity, contact is never made. Only by barge and Diesel tug, through the narrow fiord of Howe Sound, does the PGE maintain any connection with the railroading world beyond its granite canyons. Its rails touch those of no other system, large or small.

But in spite of these eccentricities, the Pacific Great Eastern may be a route of destiny. The second word of its impressive name may yet be merited. Already a resolution has passed the United States Senate asking the President to begin negotiations with the Canadian government for the extension of the PGE on northward to the Alaskan boundary. The undertaking is non-partisan, for the legislation has been sponsored jointly by a Republican, Hugh Butler of Nebraska, and a Democrat, Warren G. Magnuson of Washington.

Alaska today is the American frontier closest to the Soviet Union. Only 55 miles of cold water lie between the two great powers at Bering Strait. Many military strategists believe that should another war tragically occur, Alaska would be the first theatre of action. Yet Alaska’s supply lines to the United States are slender and tenuous. Sea lanes always are vulnerable to enemy attack. Air is inadequate to carry heavy equipment. The 1,591-mile Alaska Highway could serve in an emergency, but it is not surfaced and immense truck convoys would use up more supplies than they could move into Fairbanks. This was demonstrated by the Army’s Northwest Service Command during World War II.

But what of a railway to Alaska? In the view of men who would be concerned with American logistics in another war, this is an imperative need. Already U. S. Army engineers have surveyed a 1,236-mile rail route up the “Rocky Mountain Trench,” a shallow valley of timber and meadows, which would tie together central British Columbia and Fairbanks. But what line of steel would link the British Columbia solitudes with the American Northwest, traditionally the source of virtually all cargo bound for Alaska?

The Pacific Great Eastern is the pin to anchor this strategic coupling. Last June Congressman Homer R. Jones of Washington told the House of Representatives: “The main route for hauling freight and passengers northward to Alaska will be over Great Northern tracks to Vancouver. From Vancouver tracks will be laid 42 miles to Squamish at the head of Howe Sound, where the existing tracks of the provincially-owned Pacific Great Eastern Railway lead over the Coast Range of mountains 347 miles to the town of Quesnel, the present northern terminus. From Quesnel the Pacific Great Eastern tracks will be extended to Prince George on the Canadian National Railway route from Edmonton to Prince Rupert, and about midway between those two cities of Canada.”

In more ways than one, the Pacific Great Eastern is entering its own. The United States Army is eyeing it as the key link in the first rail route in history to Alaska. Both Canadian rail systems have been reported to be interested in its joint purchase. A Delaware corporation known as the Canadian-American Railroad & Development Company is said to have been organized for the express purpose of acquiring the PGE from the British Columbia provincial government. In addition to all this, the Pacific Great Eastern is now a Class 1 railroad, a status achieved originally in 1946. That year revenues exceeded $1 million for the first time.

Tucked away behind high mountain barricades as it is, the PGE has been less widely known than other rail operations of comparable proportions. Suddenly it finds itself in the bright focus of international attention. Alaska has jus-
Anderson Lake, mirror of British Columbia’s natural beauty and some of its fabulous, untapped wealth. PGE steel, at left, skirts the water’s edge for 11 miles; passengers can debark nearby for off-trail fishing spots.
North Country Limited, famed PGE tri-weekly passenger train, got a boost in motive power when the road’s annual income topped $1 million in 1946. Heading the heavy consist southbound round a curve near Owl Creek is No. 161, one of four Mikados purchased from Canadian Locomotive Works recently.

tified the late General Billy Mitchell’s prophecy that “he who holds Alaska holds the world.” And the PGE is the strategic knot to tie Alaska to the American West Coast, where its supplies originate.

More than a third of a century ago, international attention was drawn to British Columbia, resulting in the construction of the first and only railway ever to run directly north and south in that immense province. This was the PGE. London investors wondered if a line of steel might not profitably tap the treasure-trove of minerals, timber and water power known to exist in the fastnesses of Canada’s Pacific seaboard.

Railroad booms characterized the Dominion of this period. After a stormy career on the Southern Pacific in the United States, bearded Charles Melville Hays had constructed the Grand Trunk Pacific across Canada to the remote new seaport of Prince Rupert, 590 miles up the forested coast from Vancouver. Despite the lonely location, it had one of the world’s fine harbors. Hays was enthusiastic over Prince Rupert—an enthusiasm ratified in 1943 when the U. S. Army made it the main port of embarkation to Alaska—but he also felt the urgent need for a Grand Trunk Pacific entrance into Vancouver.

At this time, which was the year 1912, the idea of the Pacific Great Eastern was conceived. It would be thrust northward through the British Columbia upland fastnesses to tap the Grand Trunk Pacific at Prince George on the Fraser River. The Pacific Great Eastern Railway Company was incorporated. Its announced purpose was to reach Prince George by way of the settlements of Squamish and Lillooet, a distance of 468 miles. The principal stockholders in the company were the contractors who would build the line: Foley-Welch & Stewart. Much of the capital came from the British Isles, which explains the origin and the imposing name of Pacific Great Eastern. And in an outburst of pioneering enthusiasm, the government of British Columbia guaranteed the bonds of the PGE.

Only a comparatively brief time elapsed before the undertaking encountered formidable difficulties. Construction up through the dark gorge of the Cheakamus River, the chosen route through the pre-
Pacific Great Eastern

cipitous Coast Range, proved far more costly than anticipated. Many tunnels and steel bridges were required. The line had to be anchored to the canyon wall with concrete and I-beams. Hard luck dogged the venture. The burly Hays went to his death on the liner Titanic, and the Grand Trunk Pacific bogged down. Prince Rupert's corduroy streets sank back into the muskeg. And just two years after the PGE was started, the first World War began. In 1914 British Tommies were fighting in Belgium.

Foley-Welch & Stewart found it impossible to complete the ambitious plans. Unexpectedly, the provincial government had to make good its guarantee. To the accompaniment of thunderous oratory in the parliament halls at Victoria, the province took over a proposed 468-mile railroad, of which only 165 miles had been constructed. This was the section between Squamish and Clinton. Still ahead—before the line of the Grand Trunk Pacific should be reached at Prince George—lay 261 unsurveyed miles. In addition, only 13 miles of the 40-mile stretch from Vancouver to Squamish had been finished. This lay through granite bluffs and escarpments rising above salt water. It was slow and expensive going.

Politics permitted the government to sustain only part of its guarantee. It never completed the line. It built another 182 miles from Clinton through to the mining district of Quesnel, but the needed 27 miles into Vancouver, metropolis of the Canadian West, went into limbo. On the 13 miles already finished, North Vancouver interurban cars operated for a few years: Then this service was abandoned. Several of the interurban coaches were stripped down, and made over into combination dining and parlor cars for the PGE.

WITH THE land route to Vancouver discarded, the Pacific Great Eastern looked at the deep salt water of Howe Sound. Then it bought tugs and scows and began a freight barge service. Passengers could not be carried on these vessels, however, and a contract was nego-
Inbound freight nears the end of its 42-mile journey up Howe Sound to Squamish Dock and the beginning of its run over PGE trackage. Aboard the railroad's car ferry are some B&O boxcars; during recent months foreign traffic has increased along British Columbia's wilderness road.
tiated with the Union Steamship Company for service between Vancouver and Squamish. Now comfortable, modern passenger boats serve the PGE docks at Squamish. The 42-mile ocean run from Vancouver requires four hours and 50 minutes, and most of the voyage is between timbered mountains which remind experienced wayfarers of the fiords of Norway. Union steamers meet all passenger trains.

Only 79 miles separate the present northern terminus at Quesnel from the contemplated end of track at Prince George. The provincial government graded this vital stretch, but never laid rails. Today the roadbed has deteriorated until hackberry bushes clog it and icy freshets have broken its embankments. A dominant reason for the government's failure to use the roadbed thus built was the fact that a bridge costing $1 million would be necessary to transfer the line from the east to the west bank of the Fraser Canyon, where more favorable terrain had been found for the run into Prince George. Should the American Army extend the PGE, Congressman Jones of Washington has told his colleagues that the Fraser bridge would be constructed and this west shore route put to use.

Since 1917 the Pacific Great Eastern has been operated by a government-owned company. The board of directors is appointed by the Lieutenant Governor of British Columbia, on the advice of the provincial Premier. The directors serve without pay, and the task has enlisted some of Canada's most illustrious citizens.

A measure of the significance of the Pacific Great Eastern to Western Canada is the fact that John Hart, on his recent retirement from the premiership of British Columbia, accepted the presidency of the road from the new government. Hart, for nearly a decade British Columbia's reigning public official, is now the head of the PGE. The general superintendent serves under his direction. Hart is said to favor a policy of staffing the Pacific Great Eastern as fully as possible with men who have been schooled in railroad ing with the Dominion's two great trans-continental lines, the Canadian Pacific and Canadian National.

Such a policy was carried into action when W. H. Tobey, retiring as PGE superintendent after eight years of service, was succeeded in September by J. A. Kennedy. For more than a dozen years Kennedy was superintendent of the Esquimalt & Nanaimo Railroad, the CPR subsidiary which operates on vast Vancouver Island. Because Tobey is a veteran of the CNR, this meant that the two Canadian giants were involved in the transfer of PGE supervising officials.

Today the Pacific Great Eastern is one of America's unique railroad operations. It begins nowhere and ends nowhere, yet with each passing year it carries more tonnage. It does not touch Vancouver, the great Canadian seaport which it was supposed to link to the vast interior. It does not reach Prince George, where the Canadian National now operates passenger and freight trains to Prince Rupert over the tracks constructed by Charles Melville Hays of the Grand Trunk Pacific.

Sir Wilfred Laurier himself, Canada's most famous prime minister of the early twentieth century, expected the line to Prince Rupert to become one of the principal North American arteries of commerce. And during World War II the United States Army shipped thousands of men and countless tons of supplies to Alaska over this wilderness thoroughfare. It also used the lonely wilderness rail route to Rupert for the shipment of practically all the blockbusters and other perilous cargo destined for the South Pacific.

But in spite of the failure to reach either Vancouver or the Rupert line, the Pacific Great Eastern continued in 1947 to be a Class I system with income exceeding $1 million. Freight yielded 80 percent of the revenue. The reason for this rising return is the fact that both Canada and the United States are roaming farther into the fastnesses in quest of resources. The British Columbia Electric Company has begun development of the immense hydroelectric resources of the Bridge River region, and the PGE hauls all generators,
poles, pit props, pulp material. Add to this the seasonal rushes of cattle and perishable goods.

But the PGE operates under a staggering debt load of $120 million. Since interest charges sustaining this debt total more than $4 million annually, it is not hard to understand why some British Columbia taxpayers jocularly suggest that the initials PGE mean in truth “Province’s Greatest Expense.” Yet the undeniable fact remains that the bulk of this indebtedness was incurred during the profligate construction era, when the contractors spent recklessly and without thought of the future. Bruce A. McKelvie of the Vancouver Daily Province, one of Western Canada’s noted historians, believes that had the government at Victoria not underwritten the construction bonds, Foley-Welch & Stewart might have operated far more frugally when the PGE was thrust northward through the granite crags of the Cheakamus.

The Pacific Great Eastern now is making a substantial profit. Were it not for the debt, squatting on the railroad like the Old Man of the Sea on the shoulders of Sinbad, the PGE would be a financially successful operation. Its current fiscal troubles stem not from present conditions, but from the red ledgers which the province inherited a third of a century ago.

The prevailing boom along the PGE can be traced directly to British Columbia’s prodigious increase in population since 1940. While the rest of the Dominion was gaining 11.7 percent during the past eight years, British Columbia soared 32 percent. From 1946 to 1947 alone, the income from forest products in Canada’s most westerly province shot up $42 million. Much of this increased output was in the fir and pine groves invaded by the PGE.

In spite of its debt from the past, the Pacific Great Eastern has been rehabilitating equipment recently to maintain pace with the bustling present. Four new general-purpose, oil-burning Mikado locomotives have been acquired from the Canadian Locomotive Works. Standard steel
Pullmans are on order from the Canadian Pacific, Canadian National and Great Northern to replace the ancient interurban electric discards which have served this use on the PGE for two or three decades. These Pullmans have been shunted aside by streamlined sleepers on the transcontinentals. Two dozen refrigerator cars have been obtained from Northern Refrigeration to protect the agricultural products of the Pavilion area from the sudden cold snaps which often grip the foothills in early autumn.

Although freight service constitutes a preponderance of the revenue, the Pacific Great Eastern's passenger train has made the line famous from the American border to the Alaskan boundary. This is the North Country Limited, providing tri-weekly transportation between Squamish Dock and Quesnel. The train leaves Squamish at 1:50 p.m. on Monday, Wednesday and Friday, and arrives in Ques-

*Above*: Canadian Pacific boxcar gets a heavy load of pit props at Quesnel, northern terminus. Forest products are PGE's main cargo, and freight contributes 80 percent to year's total income

Yardmen at Squamish know how to treat a good thing when they see it. PGE waited a long time for engines like No. 160, newly-purchased oil-burner
Open-air observation car—a sawed-off interurban—offers sightseers a panoramic display of 10,000-foot Garibaldi Range

British Columbia Gov’t.

advertisements of the Pacific Great Eastern. Stanley C. Jackson, veteran dining-car steward of the PGE, says that American tourists leave his car talking to themselves about the low cost of the food. Like many other PGE employes, Jackson is a graduate of one of Canada’s great coast-to-coast lines. Before going on the Pacific Great Eastern payroll in 1933, he was with the Canadian Pacific for 14 years.

The cars of the North Country Limited are painted a dull brick red, similar to those of the Canadian Pacific and Pennsylvania. The train carries all mail and parcel post for the vast Cariboo mining and forest region, so it invariably is headed by two or three express cars. These originated on the Oregon Electric in the Pacific Northwest, before it suspended passenger operation in 1934. A pair of passenger coaches, also from the Oregon Electric, come next in the train. These may be increased to four or five if graduation is about to occur at Cariboo Indian School (Mile 265), or if cowpunchers are arriving for the annual Williams Lake Stampede (Mile 276).

Between the coaches and the sleeping cars is coupled the combination diner and parlor. The old North Vancouver interurbans, which Stanley Jackson claims were chosen for their width, have been divided into two sections. Despite the ample space reserved for the parlor portion, the dining compartment handles 24 people at a sitting. The car is wide enough to permit tables for four on each side. On a typical evening, with dusk beginning to creep over the timbered wilderness, Jackson

nel at 9:25 the following mornings. Southbound, the North Country Limited gets the highball at Quesnel at 7 p.m. Its schedule calls for it to roll onto the planks of Squamish Dock at 2:10 the next afternoon. The southbound journey begins at Quesnel on Tuesday, Thursday and Saturday.

Two complete units of the North Country Limited are required to stabilize this service. Round-trip rates are slightly less than four cents a mile. A lower berth for the full 347 miles to Quesnel costs $4.15. There is no difference in the rail tickets needed for coach transportation and sleeping-car occupancy. The cost of the berth is the sole extra requirement.

Even in Canada, where food prices are from 15 to 40 percent below comparable costs in the United States, the PGE is celebrated for economical dining-car meals. A breakfast on the North Country Limited of cereal, ham and two eggs, toast and coffee is only 85 cents. One dollar buys a roast-beef dinner with all the trimmings, including pie with cheddar cheese and coffee. This is one of the principal passenger
Pacific Great Eastern need lay down no red carpet for North Country Limited passengers: hikers, mountain climbers, missionaries, wealthy cattlemen and miners, perhaps even an Indian chief, crowd Squamish’s wooden platform each Monday, Wednesday and Friday.
may be serving Tlingit Indians, lumberjacks, pretty nurses, half-breed trappers, Episcopalian or Catholic missionaries, buckaroos, mining engineers, Provincial police in olive-green tunics and perhaps a Mountie or two in scarlet and gold.

Sleeping accommodations provide the greatest variation in the makeup of the North Country Limited. The sleeping cars Barkerville, Pavilion and Clinton all come from the abandoned Indiana Electric Railway, purchased a decade ago through Iron & Steel Products of Chicago. Slightly narrower than the standard Pullman, their berths provide a tight squeeze for a six-foot Mountie constable or for a 225-pound Williams Lake cattleman. The Lilooet and Quesnel are Oregon Electric sleepers which once carried Portland lawyers up the darkened Willamette Valley to plead their cases before the State Supreme Court at Salem. The most spacious of the sleepers are the oldest—high-ceilinged wooden cars bought from the Lake Superior & Ishpeming Railroad in Michigan.

This heterogeneous assortment of sleeping-car equipment is in process now of being augmented with more orthodox rolling stock. Three standard sleepers are about to be delivered from transcontinental lines. Five more are on order. "As the major railroads of North America modernize their Pullmans, we of the Pacific Great Eastern plan to go into the market for the cars they have replaced," declares T. W. McDonough, the general passenger agent of the PGE, who once greeted tourists for the Canadian National at Jasper Park. McDonough believes that the streamlining of the major rail systems of the continent is a stroke of fortune for the Pacific Great Eastern, which can buy at bargain prices rolling stock that has served some of the great cities of Canada and the United States.

PGE equipment is almost as varied as PGE landscape. Sleepers Garibaldi and Lilooet were bought from U. S. interurban lines for a total $9027.
With the gradual arrival of new equipment, the PGE will do some retiring of its own. It will discard many of the old interurban cars which go to comprise the North Country Limited. This will revise the present system of lighting the train. Because the interurban coaches were illuminated and heated with juice from the overhead catenary, they were not fitted with generators. Thus both trains of the North Country Limited carry Diesel generators in the forward baggage car to provide juice to light the train. The power line hooks up between the cars like the signal cord of interurbans.

All locomotives of the Pacific Great Eastern burn oil. There has been some talk of converting the line to electricity, once the vast Bridge River hydroelectric power development is completed. This is highly unlikely, however, for the density of traffic would have a difficult time underwriting the huge expense of installing a trolley system.

Engine crews work in three divisions. These are Squamish Dock to Lillooet, a distance of 120 miles; Lillooet to Williams Lake, 146 miles; Williams Lake to Quesnel and back to Williams Lake, a total of 142 miles. All trains are dispatched by telephone.

As the demand has increased for lumber and base metals from the hinterland, PGE revenues have correspondingly soared. In 1945 the railroad grossed $876,356. This shot upward to $1,210,160 the next year. At one time the Pacific Great Eastern was pinched financially to pay $6,750 apiece for old Oregon Electric sleepers or $2,277 to the Lake Superior & Ishpeming for the ancient sleeper Caribou-massed Clinton once put in regular service between Indianapolis and Louisville. Berths are narrower than standard Pullman.

Notwithstanding the large debt, provincial officials at Victoria take the attitude that the line is a going operation at present. Authorization for new equipment has been easier to obtain than ever before. Additional tugs and barges have been purchased also, to float the line's 350 freight cars through the deep slot of Howe Sound. Most of the cars on the PGE are its own, because the outbound traffic exceeds overwhelmingly the incoming freight. The PGE tries to keep its limited quantity of rolling stock from roaming too far afield. However, the wilderness dwellers along the route see more and more medallions of the Baltimore & Ohio, Santa Fe and other distant lines.

In public opinion, the Pacific Great Eastern occupies a curious niche. Many British Columbia taxpayers would like to get the line off the province's shoulders. At the same time, they recognize its importance to the proposed railroad which
would serve Alaska. People in Vancouver and other British Columbia cities take the attitude that the sale of the PGE should not be authorized to "just anybody." As might be expected, Uncle Sam is the favorite prospective buyer. Next come Canada's trans continentals, and then the northeastern U. S. roads which variously have been discussed as interested in the Pacific Great Eastern—the Milwaukee, the Great Northern and the Northern Pacific.

The two southerly divisions are far and away the most spectacular of the PGE. Trains leave Squamish Dock in the shadow of Squamish Chief, a towering granite monolith nearly the height of the fabulous El Capitan in the Yosemite. After a few miles through willows, alder and other low country foliage, the line begins to ascend. The grade attains 1.9 percent, and a helper locomotive is necessary when extra day coaches are coupled into the North Country Limited. Only seven miles out of Squamish, the line encounters the cavern-like gorge of the Cheakamus. This is its route out of the sea-level swales along the Pacific.

The Cheakamus drops through the gorge in an angry, foaming staircase. Spray wets the passing trains. The track alternately clings to narrow ledges and bridges the chasm, seeking more favorable opportunities for tangents on the opposite side. Sometimes the right-of-way is a sheer 500 feet above the mountain torrent. Again, it is close enough for wayfarers in the open-air observation car to wipe wind-blown spume from their faces. Experienced travelers compare this rock-bound passage to the Royal Gorge of the Colorado, and often to the disadvantage of the latter.

Once out of the dark moat which has brought it from the ocean's shore, the PGE twists across a forested plateau at an elevation of 2,100 feet. It crosses the dizzy brink of Brandywine Falls, and coasts downhill 1,000 feet in altitude to two magnificent lakes—Anderson and Seton. Mount Garibaldi, perpetually clad in snow and ice, looms above the scene. For 34 miles the track twists along these blue sapphires set in the green wilderness of fir and spruce. Granite domes rear out of the ragged fringe of timberline. They are often a mile in elevation above the limpid lakes.

Then the track turns eastward into Lillooet, and the vegetation changes sharply. The Fraser River is in view, The
Timber traffic. British Columbia’s $42 million increase in lumber production for 1947 threw a burden—and a profit—PGE’s way. Freight after freight charged southward through the crags of Cheakamus Gorge, speeding carloads of lumber for export.
Coast Range has been crossed. Leit behind is the rainfall belt, where 90 inches of annual precipitation are not uncommon. To this inland side of the mountains, the soggy ocean-soaked clouds from the Alu-tians cannot penetrate. The fir forests of the seacoast, matted with elderberry and Devil's Club, give way at Lillooet to the dry, park-like pine groves of the interior.

On a high steel bridge the PGE spans the Fraser and seeks the slanting east bank. At this point the Pacific Great Eastern is only 28 miles away from the main lines of the Canadian Pacific and Canadian National at Ashcroft on the Thompson River, but these 28 miles are rugged and formidable. The American Army's survey calls for this redoubtable gap to be joined by heavy rail when at last a railway is constructed to Alaska. Canada's pair of transcontinentals would then be able to transfer freight to the PGE without first going into Vancouver.

From Lillooet southward, a gas-electric car hauls flats on which automobiles may be transported. This fills a 15-mile breach in the British Columbia highway system. At Shalalth the automobiles are unloaded and driven into the Bridge River region. The gas-electric makes four round trips daily over this stretch.

North of Lillooet, after the surging Fraser has been spanned, the PGE ascends the upper canyon of British Columbia's great river—the river which the first explorer of Western Canada, Alexander Mackenzie, originally mistook for the Columbia. If possible, this portion of the line is even more spectacular than that conquering the Cheakanus. After cutting through lush tomato fields near Pavilion, the track climbs out of the Fraser's abyss on a 1 percent grade. Gradually the pines recede and the plateau falls away until the PGE is again on a naked ledge. At its highest point above the Fraser—according to the British Columbia Bureau of Industrial Development—the right-of-way is at an elevation of 3,480 feet. The Fraser itself flows at 802 feet. This means a 2,678-foot drop from ties to water.

Many Officials of the Pacific Great Eastern believe that nowhere else on this continent is so stupendous a rail spectacle equalled. More than half a mile in elevation separates the track of the PGE and the silty torrent below. It is a drop which is virtually sheer. A passenger at his coffee in the wide dining car looks directly down, without sight of ledge or creosoted ties, into the dim, distant Fraser.

The river is seen from afar through a blue haze, like some painting of Maxfield Parrish. Trains proceed under slow bell along this dizzy stretch. There never has been a passenger fatality on the Pacific Great Eastern, a record the line's officials are anxious to preserve.

The railroad leaves the Fraser up the side chasm of Kelly Creek and rolls across sparsely-timbered uplands at an approximate elevation of 3,500 feet. Wide patches of grass checker the pine forests. Grazing cattle can be glimpsed. This is the old gold trail that men followed into the Cariboo. Nuggets blazed this path. The line crosses Deep Creek on 279-foot steel stilts, once the highest railroad bridge in the British Empire. It passes Lae La Hache, where 60-below-zero winter temperatures whiten engineers' eyebrows—and superintendents' hair. It winds along the edge of green lawns at Cariboo Indian Schools, where nurses and teachers help British Columbia's Indian youngsters to resist one of the highest tuberculosis death rates in the world.

No grade on the PGE is steeper than 2.2, and this is attained only briefly between Moran and Kelly Lake as the line makes its church-steeple climb out of the upper Fraser River. Occasionally a long freight will require three locomotives. Two are the maximum used on the North Country Limited, and the new Mikado-type engines have increased operating efficiency. Last year, however, an old locomotive toppled into Seton Lake on an outside curve, carrying an engineer and his fireman to a watery death.

The weight of the PGE rail is 60 pounds on tangents and 70 pounds along
Fraser River Bridge, north of Lillooet, lifts PGE single track over to the east bank and an easy grade. Here the Pacific Great Eastern is only 28 miles from CPR and CNR main lines; here, too, open grazing lands which some experts rate the best in Western North America.
grades and sharp curves. If the line is thrust on to Alaska, this probably will be increased to 100 or 115 pounds. Because the Pacific Great Eastern is wholly within the province of British Columbia, schedules are altered by provincial rulings. PGE timecards use daylight saving time when the government at Victoria orders the province to set clocks ahead.

Williams Lake, 70 miles from the railhead at Quesnel, is a town built by the stock business. More than 20,000 head of cattle are shipped from Williams Lake over the Pacific Great Eastern each year. This is one of the railroad’s main pay-loads. It helps account for the new *Mikado* locomotives. The *Cariboo Digest* once claimed that PGE equipment breakdowns knocked seven dollars off the value of each steer between Williams Lake and Squamish Dock. This challenge to efficient operation was taken up by the PGE the moment a boom in revenues gave the railroad its first real expense account.

The shiny engines from the Canadian Locomotive Works have eliminated this meat shrinkage. At the height of the beef shipments, cattle trains often take precedence over the *North Country Limited*. And although the *limited* is in no sense a mixed train, it frequently humps along a few stock cars on its southward journey, which is predominantly downgrade.

Many men with high-powered rifles get off the train in Williams Lake, too. This is at the core of one of North America’s great hunting areas. Moose forage along the sloughs and swamps. Massive 1,000-pound brown bears roam the hills. So do the hunters.

Between Williams Lake and Quesnel, the route of the railroad is comparatively unspectacular. It follows the Fraser, at an elevation of about 500 feet above the river. Homesteaders’ cabins peek through the trees and some are surrounded by lush gardens. Quesnel is the northern terminus. This is near the famous Barkerville mining region, where Canadians hunt for gold, a pursuit recently stimulated by the $7-an-ounce subsidy the Ot-tawa government has added to the prevailing U. S. price.

At Quesnel the rails trickle off into rusty ends, overgrown by weeds and underbrush. Yet through the foliage can be seen the roadbed which stretches 70 un-ballasted miles to Prince George. This roadbed, once ready for ties and steel, now has fallen into disrepair. The American government plans to rebuild it, however, as soon as the decision is made to construct, a railroad to Alaska—a decision which should be reached in the next few months.

**This IS** the real future of the Pacific Great Eastern. Ultimately it will be the strategic link in a railroad connecting the United States with its vast territorial rampart in the North. The Alaska Highway, fabulous engineering feat though it was in time of war, would not be adequate to supply Alaska were the two greatest world powers to fight on the Arctic gables of the planet.

A survey by General James A. O’Connor’s Northwest Service Command during World War II showed that 200 truck drivers, working in relays, would be necessary to transport over the Alaska Highway the same amount of cargo which could be hauled by one 70-car freight train. These 200 truck drivers would require food, clothing, medical treatment and similar services. In other words, they would consume a substantial portion of their own haul. The payload would be reduced. Then there’s the time element—and the difficulty of keeping the road open—to add to the Army’s woes.

The Butler-Magnuson Resolution, passed by the Senate as the 80th Congress adjourned, announced unequivocally that “existing transportation facilities between the Territory of Alaska and the United States are inadequate for the development of the resources and the defense of Alas-ka.”

Alaska is now served by air, sea and highway. The only inadequacy Congress could have referred to was the lack of a railroad.
Deep Creek was not idly named: PGE trains cross its rocky bed on stilts of steel 279 feet high. Once the highest railroad bridge in the British Empire, the span near Williams Lake still retains its power to awe even frontier passengers.
What would be the cost of extending the Pacific Great Eastern Railway to Alaska?

If 115-pound rail were to be used throughout the entire undertaking, the investment would amount to $375 million. To relay much of the PGE track and to extend it to Prince George over the abandoned roadbed built 30 years ago—and to construct the million-dollar span across the Fraser River Canyon—would cost approximately $50 million of this

Wherever you turn, the scenery along Pacific Great Eastern's right-of-way is magnificent. Author R. L. Neuberger shot the photograph, above, from open-decked observation car on North Country Limited, as his train followed the windings of Seton Lake. Second car ahead typifies the new order: PGE's replacement of sleeping-car equipment. The Canadian Pacific sleeper has yet to swap its legend

Left: Water tank near Squamish Dock, southern rail terminus of "Province's Greatest Expense". Early projectors planned on Vancouver, 40 miles south, as their last stop and even ironed 13 miles through rocky terrain. PGE President Hart hopes to cut the tape on this mainline soon

British Columbia Gov't.
total sum. The cost is high, yet only an infinitesimal fraction of what the loss of Alaska would mean to the U. S. in any conflict. The airfields at Annette Island are a mere 1,000 miles from Seattle, Spokane and Tocoma. And logistics—the maintenance of supply—are the key to modern war.

In August of 1948 President Truman told Edward L. Bartlett, delegate from Alaska, that a railroad should be constructed tying the Territory to the United States. Governor Ernest Gruening, who since 1939 has been Alaska's reigning executive, has said, "The development of Alaska is essential to the security and prosperity of the United States. A railroad to Alaska can hasten such development and bolster that security. Because this railroad should be linked by the most direct connection to our Pacific seaboard, the Pacific Great Eastern Railway of British Columbia is imperative to any such rail project."

The project presupposes many important rail links. The extended PGE at Prince George would cross the Prince Rupert Division of the Canadian National. From Lillooet on the Fraser, a spur would be constructed eastward 28 miles to the main lines of both Canadian Pacific and Canadian National. The PGE would also touch the big Canadian systems at Vancouver, where it would be thrust from Squamish Dock. And at Fairbanks, the proposed new international railway would be connected with the Alaska Railroad, extending 478 miles southward to Anchorage, headquarters of the Alaska Department of the U. S. Army. At Whitehorse on the Alaska Highway, the railroad would cross the 119-mile White Pass & Yukon. But of course the WP&Y's narrow-gage tracks would preclude any transfer or interchange of cars with the line from British Columbia.

Nearly four decades have passed since bearded Charles Melville Hays, who built a transcontinental to within 90 miles of Alaska's forested headlands, gave his blessing to the bustling little railroad which the ill-fated Foley-Welch & Stewart pioneered into the rocky battlements of the Cheakamus. When the United States reaches out a long rail arm to its prodigious possession in the North, the Pacific Great Eastern may come into its own. This destiny does not seem long distant.
EXTRA 3766 East, a train of green fruit, stormed under the signal and descended on the seemingly helpless building with the name "Ottawa Junction" painted on its weathered boards. I climbed the steps of the tower as the engine slammed by, and walked in on Operator Bert Van Nice. He looked up from the desk and spoke a word of greeting. It was promptly lost in the roar of the passing hotshot.

The waycar slid past the tower and Bert reported the 3766 by at 9:44 a.m. to the dispatcher. He turned and grinned at me, and then he noticed my camera case.

"Well, hello. Too bad you didn’t get
here a few minutes earlier. That train would’ve made a good picture.”

I shrugged. “Oh, well, there’ll be plenty of action for me to shoot before the day’s over. Or am I right?” I asked.

Bert just laughed in reply. Ottawa Junction is a busy intersection on the Santa Fe’s mainline 57 miles west of Kansas City. Sticking up like a valve handle, the tower diverts and controls the flow of traffic over the Eastern Division. It sits in a triangle of tracks, surrounded by three separate districts of the division. The double-tracked Second District—the Kansas City-Emporia main line—is on the north side of the tower. A third main track runs with these 2.7 miles west to HU, a mainline crossing with the Missouri Pacific. Two tracks cut off from the main line east of the tower and swinging to the south through a shallow cut comprise the Third District. These lead to Ottawa station and yards, narrow to single track and then proceed southward to Chanute, Kan., and to Tulsa, Oklahoma.

The Lawrence District disentangles itself from the Ottawa line south of the tower, crosses the Second District to the west which completes the tower’s triangle—and ambles across the quiet Kansas countryside northward toward Lawrence.

I slid my camera case into a corner and glanced at the track-circuit diagram. A train was coming west on the main line. “What’s new?” I asked Bert.

“Nothing much. Same old stuff.” He got up and crossed the tower to the interlocking machine.

Number 85, the Third District way freight, nosed into the westbound passing track. Bert threw the levers to close the
switch behind it and clear the signal for the mainline. He said another freight was right on the heels of the local which had just gone in the hole.

"Been pretty busy?" I inquired, knowing what kind of an answer my question would bring. Bert works the relief job between Ottawa Junction and HU. He gave me a pained look as I slid a film holder into my camera.

"If there were only two trains on the whole road," said Bert, "they'd get in each other's way right here."

But a day with only two trains would be a strange one indeed for this junction. During August, 1944—the peak month of the war traffic—an average of 66 trains a day passed Ottawa Junction. This number dropped to 58 for the month of Au-
gust, 1947. Yet the blocksheet for August 30, 1947, shows 64 entries, which are exclusive of switching movements.

Number 85 snaked its way through the interlocking at the east end of the siding. Bert fastened running and slow orders into a pair of delivery forks, along with a message for the train to head in at Ottawa Yard. We descended the steps as the engine swung through the Third District turnout and headed south.

The mid-morning sun bounced off the platform as Bert handed up 85’s authority to run from Ottawa to Chanute. The fireman grabbed the string with one smooth motion as the headend careened by. Half the cut of cars had passed us, when suddenly the train ground to a halt.

“Stopped to throw the switch so she can head into the yard,” Bert announced.

Drawbars tightened as the slack ran out, and the train moved on. The conductor on the drag leaned out from the caboose steps, tossed off his register check, and snared the triangle of string Van Nice held out to him.

RETURNING to the tower, I glanced up at the weather-beaten structure. This was one of the first sections of the Santa Fe to be put into service. A single-track line between Olathe and Ottawa Junction was opened in 1870, and service west to Emporia was started February 1, 1884. The Third and Lawrence districts were laid by the old Leavenworth, Lawrence & Galveston, beginning in 1867, and placed in service on the 28th of August, 1871.

Ottawa Junction Station consists of a waiting room with a tower built on the east end. The depot portion of the structure was built in 1895 and the tower was added in 1899. A mechanical interlocking plant was installed in 1900, then partially modernized and electrified in 1913.
Conductor Lake snags an order from Bert Van Nice as Extra 3179 West swings onto Third District trackage. The wayfreight's register check lies at the operator's feet.

Existing steel was replaced with 131-pound rail, and all main tracks were resurfaced with chat ballast, which replaced the limestone formerly used. Almost the entire district has undergone a sub-surface stabilization program, using the pressure-grouting method.

"You getting some good pictures?" Bert asked, as he lined up another route on the machine. I nodded, and turned to see what was "on the bell." The westbound approach light was dark, indicating that a train was coming over the hill to the east.

I pointed to the track diagram. "Who's that?" I asked Bert.

"The 2902 West. He's going to head in and wait for First 7."

"In that case, I'll go take some pictures," I said, reaching for the camera.

First 7 is the first section of the Fast Mail and Express, crack Chicago-Los Angeles mail train. Working for the Santa Fe at Chicago in 1944, I had often seen it pounding out of town behind one of the 3460-class 4-6-4s. Now Number 7 draws a Diesel from the pool assigned to the transcontinental flyers.

As I headed down the tower steps I could see 2902 crawling along, dragging her train slowly through the passing track. The sound of the mail train's air horn floated up from behind the waiting freight train. First 7 shot past the tower, grabbed the mail sack from the pickup crane and disappeared around the curve, green flags flying in colorful contrast to the red-and-yellow front end. Today the express was pulled by Engine 17, one of Santa Fe's new F-3s.

Down at the passing siding, the exhaust of the 2902 vibrated along the heat waves as she headed out to follow the mail. "IC—OS First 7 by at 11:05, Extra 2902 arrived 10:32, departed 11:06."

"How's 39, Bert?" I'd been watching for a sign of this Diesel-powered freight...
since it was reported out of Argentine (Kansas City).

“She’s out of Edgerton at 11:16, and ought to go by here about 11:40.”

Edgerton is the first OS point east of Ottawa Junction. Number 39 leaves Chicago at 6 p.m., runs overnight to Kansas City in 13½ hours, and turns southwest at Ellinor, Kan., heading toward Texas and the Gulf lines of the Santa Fe.

I figured that a picture of the Diesel-powered Number 39 would be best shot from the tower steps. Soon the freight growled under the highway viaduct east of the tower, and then its white-flagged Diesel was whipping up the dust along the platform. Van Nice waved an “all okay” sign to the conductor as the caboose came near, and entered the time of 39’s passing on the blocksheet. “OS 39, engine 104, by at 11:40.”

All freights, except a few second-class branchline trains, run extra on the Santa Fe. A freight schedule showing arrivals and departures is printed in the employees’ timecard, but it carries the notation that these trains have no timetable authority. Number 39, therefore, was technically known that Sunday as Extra 104 West. The 104 and her sister Diesels, inciden-
tally, have been cut three units, and the extra sections assembled into additional 3-unit locomotives.

BERT leaned back in his chair. "It's times like these, when my work's all caught up, that I wish I had something to do."

As if in direct reply, the telegraph sounder spat out the Ottawa Junction call. Bert feigned disgust and reached for the key. His typewriter rattled spasmodically as the sounder intoned words and numbers. It was a Western Union telegram for someone in town.

Bert finished copying the message, sent an okay and closed the key. "And then, it doesn't get lonesome here for very long at that."

An engine whistled down in Ottawa Yard. I looked inquiringly at Bert. "Number 70," he answered. "Follows 212 out — have to hold him here a while."

The annunciator bell rang and a light went out on the track diagram. Bert studied his watch a minute, then cleared a route for a train on the cutoff.

Stack extension raised to the cloudless Kansas sky, Extra 2902 West pulls out of the passing track, hard on the heels of First 7, the Fast Mail and Express
"Second 3 and 212 are both going to get here about the same time," he said. "Maybe you'd like a shot of them."

The coach section of Number Three, the *California Limited*, runs as an extra train from Kansas City to Emporia over the Ottawa cutoff, while the Pullmans take the scheduled single-track route through Lawrence and Topeka. The *Tulsa*, Number 212, is a streamlined Tulsa connection with Chicago-Oklahoma City Trains 11 and 12.

I left Bert's office, crossed the tracks and climbed the side of the cut south of the tower, where I could get a view of both trains. Today Number 212 had *Pacific* 3415 subbing for her regular Diesel. She drifted through the cut as Second 3, behind the 3757, and pulled away from the tower after making a station stop.

Contrary to general practice, trains on the Ottawa cutoff run on the left-hand track. A more desirable grade renders this operation favorable.

Then Number 70's big 2-10-2, the 3805, whistled off and followed the *Tulsa's* streamlined parlor car in a vain chase eastward toward Kansas City. Voices flitted back and forth along the thin strands of wire beside the track as Van Nice reported the extra "departed" to the dispatcher.

The sun was low over the vast bowl of Kansas farm country as an engine and about five cars streaked eastward out of the glare. Slowly I ascended once again to the Ottawa tower and asked the operator about the train's consist. "Stock pickup," Bert told me. "He'll go to Morris and load up with stockcars for Kansas City." Morris is the site of a large stock and feed yard.

Footsteps on the stairs heralded the approach of Bert's relief. Bert signed the operator's transfer, brought the second-trick man up to date on train movements, and we left for home.

"Don't forget to let me see some of those pictures," Bert said, as we crossed the track. I told him I wouldn't forget.

Returning home, my car rode over the bridge under which 20 trains had passed that quiet Sunday on the first trick. All was quiet below at the tower. The order board was dropped to signify no orders for a westbound train. The block was clear.
Oldtimers

Brooks' switcher built for the Burlington, Cedar Rapids & Northern two years before the road was taken over by the Rock Island in 1902

Another Rock Islander built by the Dunkirk plant. She went into passenger service in 1903

Schenectady beauty for the old St. Paul. Narrow-boilerd Pacific 796 bore construction date 1889
FIVE MONTHS after the Communist coup in Czechoslovakia, a single stick of type appeared somewhere in the back pages of nearly all the evening papers. On many an American it had the overwhelming effect of a looming engine suddenly montaged upon several hundred feet of confused film, its headlight growing monstrously as it closed up on a distorted, agonized face. Some 80 to 90 men and women had died in the wreck of a Pilsen-Prague express train. They had died in the tunnel just beyond the Wilson railroad station in Prague.

Americans noted the place rather than the fact of their deaths. Others had died before them and in no accidental fashion. Nobody knew how many Hitler had thrown to the Russian cannon between 1938 and 1945. Now, almost five years later, Jan Masaryk was dead of murder or suicide. Eduard Beneš was dead, too, and Red Premier Klement Gottwald had visited his grave in grisly pretense of tribute. To Americans, afraid of the irony they suddenly felt in the use of a name 30 years old, it seemed as if all Czechoslovakia, like a long train of high explosives, ran wild on spiral track, hurtling back on destruction in the tunnel where it started.
Sleek passenger expresses used to whirl down from the Polish Tatra, across southern Slovakia. But these are work days, and this is a miners' train leaving Praci Ces, between Vrucky and Zilina. Neon letters above tunnel flash the traditional greeting, "God Bring You Back to Praci Ces"—a place few prisoners who ride these outbound cars will ever see again.

"Over the Slovak the Czech; over the Czech the Austrian; and over all, the God-Almighty German." The bitter, proverbial pattern of worker, overseer, landlord and foreign conqueror was cracked but not destroyed by the Wilson-inspired peace treaties concluding World War I. The Slovak peasant received his share of the Austrian's divided farmland, but by and large he remained a low-income worker; while the Czech retained his influence and position by turning to police work or to well-paying industries such as railroading and munitions manufacture. Under the forms of democracy, the old social cleavage still obtained.

Nor had geography changed to suit the ideals of the Wilson Committee. Germany and Austria still lay to the northwest, the west and south; Poland's borders on the northeast had receded only slightly; and on the southeast enigmatic Hungary held the space between the Slovaks and German-dominated Rumania. Still further east, looking at the Danube from the Black Sea, Russia waited. Western dreamers with maps spread before them talked of the First Republic as a bridge over which peace would pass from west to east. Czechoslovakians dreamed, too, but more practically. They envisaged their country as a rail division point controlling the flow of east-west commerce and holding its independence through the financial pressure its communication lines would exert upon the surrounding powers.

Between 1930 and 1935, Slovak trackmen and Czech engineers on the Czechoslovak State Railways constructed a new 100-mile mainline and doubled some 125 miles of single track on the east-west line across Bohemia and Slovakia. The old Austro-Hungarian Railways had focused on Prague and Vienna and Budapest from north to south, leaving the rich farmlands of Carpathian Rutheria, the upper Moravian forests around Hruby Jesenik, and the coal lands in the mountains of northern Bohemia with no inter-state outlet. But by the end of 1936, steel ribboned the productive areas of the country and the total number of rail miles in the Republic was close to 7300. In addition a total of 30 route miles had been electrified.

"Over all, the God-Almighty German..." Today, Russia is the conqueror and the God-Almighty German, 70,000 of him, works the uranium mines of Tachymov. Perhaps he remembers there that it was he who added to the 7300 rail miles of Czechoslovakia the great Danube-Oder canal down which Slovakian wheat and Czech munitions float toward Russia's Black Sea bases.

From the very beginning of the First Republic, the German had made trouble in Bohemia and Moravia. In 1926, on the heels of a Communist invasion from Hungary and an attempted Hungarian royalist coup, he openly entered the government under the protection of the frightened Czech middle classes. Three years later, his numbers in the Cabinet were increased to three, and German workers in such manufacturing centers as Pilsen organized the Sudeten Germany Party. The press of the expanding Third Reich now launched vehement attacks on the Czech civil-rights policy, claiming that Czech workers were preferred above Germans in districts where Germans were in numerical majority. Other minorities, Hungarians, Poles and, most disastrous of all, the Slovaks, clamored for greater autonomy—in effect, for the dismemberment of the Republic. In 1938, the Accord of Munich created the so-called Second Republic and ceded one-third of Czechoslovakia's people and one-third of her territory to Germany, Hungary and Poland. A year later, on March 14th, Nazi-loving Slovakia proclaimed her independ-
In third-class coaches like this one, at left, Sudeten Germans began an anti-Semitic campaign. One effective dodge was crowding Jews' luggage off the wide racks, then attacking them with insults and blows. Czech trainmen tried to maintain non-Jim Crow cars until after Munich.

In 1940, Slovakia altered rates, began to paint cars with the letters, SZ. Motorized express, below, was once part of the Czechoslovak State Railways.
Eastbound she carried refugees from the Sudetenland; westbound, escaped Jews and Communists from Vienna; unloaded them all in friendly Brno, capital of Moravia. Nazis had a saying: "The Slovak Arrow flies traitors away from us.”

which even in Slovakia and Ruthenia was largely Czech—and conducted a virulent anti-Semitic and anti-Czech campaign.

This policy succeeded in replacing the Czech police and nearly all the officials and trainmen on the New Slovak State Railways with fanatical Nazis. Hitler rewarded Slovakia for its devotion with the restoration of the Teschen coal and industrial area, an addition which brought Slovakian railway mileage up to 1583 miles. Meanwhile, the completion of the Danube-Oder Canal increased the importance of Slovak rail lines. Bratislava, on the Danube, opened Czechoslovakia to the Black Sea.

THE communication lines planned by the First Republic had been built, but the dream of dominating surrounding powers by control of east-west commerce had become a bitter nightmare. Not only was Czechoslovakia divided, her independence gone and her citizens, such as were not in concentration camps, engaged either in vengeful strife or in the most degrading pretenses, but by 1943 the failures of Hitler's army and the attacks of his enemies were destroying not only the farmlands and the industrial plants, but even the precious railroads. Many a Czech engineer, who had stayed alive with the foul taste of Nazi allegiance on his tongue, died in the wreck of a bombed train. At Pilsen, the vast Skoda Works, once a locomotive plant famous even in South America and the main source of Hitler armament since early in 1940, was bombed into silence and uselessness.

The full extent of damage was not known until January, 1946, when Minister of Transport, General Antonin Hasal, announced that at war's end only 600 miles of trackage, in short and disconnected sectors, remained unscathed in the whole of former Czechoslovakia. Seven tunnels, 690 bridges and 1560 railway buildings had been destroyed in Bohemia and Moravia and 830 bridges, 31 tunnels and 75 percent of all above-ground railway buildings irreparably wrecked in Slovakia. Loss of rolling stock was comparably high; as against 4010 locomotives, 12,256 passenger cars, 93,818 freight cars and 6487 mail trucks in use in 1938, there remained only 3617 engines, 8167 passenger cars and 75,957 freight cars. The total amount of war damage sustained by the
Skoda outshopped the Pacific-type, above, in pre-war days. Engine detail on all types was markedly uniform, to meet standard specifications of the State Railways.

Czechoslovak Railways amounted to over 20,411 kronen.

"The Red Army," Minister Hasal concluded his report, "requested more than 4500 trains which contained 225,000 cars." This ambiguous remark from the anti-Communist general meant that practically all cars were being used for Red transport even though the "liberating" Russians were supposed to have evacuated the country in the fall of 1945.

Minister Hasal was not impressed by the Reds; other Czechs were. The Russian claim of "liberator", enforced by the presence of Communist partisans who alone since 1938 had actively opposed Nazi rule, was received everywhere as the truth. But the largest factor in the conversion of Czechoslovakia to Communism was the Red Army's extreme industry in the work of reconstructing damaged plants and railroads. Between the spring and fall of 1945, Russians rebuilt or replaced 151 bridges and started construction on 112 others, in addition to extensive reconstruction of track. Four steel works in Bohemia and Moravia were repaired and were actually producing steel by early December. The job done at the famous Skoda Works in Pilsen was spectacular; toward the end of December Skoda completed and put on the tracks the first locomotive to be produced in the whole of liberated Europe. No other war-damaged country on the Continent had made an industrial recovery so rapid.

Most important, from the Russian viewpoint, was the completion in January of 1946 of the great Danube bridges at Bratislava, Komarno and Parkani. Over these bridges, designed once to carry peace from west to east across the centerpiece of Europe, the Czech government-in-exile returned to Prague by way of Moscow. The intent and effect of Communist industry was at once apparent: at the free elections of May, 1946, the Communist vote won 114 seats in Parliament. Eduard Beneš, a non-party man and the disciple of democratic Thomas Masaryk, retained the presidency and Foreign Minister Jan Masaryk stayed in office;
but the most powerful members of the new government, Premier Klement Gottwald and Minister of Interior, Vaclav Nosek, were Communists.

They struck, after a 2-year period of consolidation, on February 25, 1948, when Nosek’s police surrounded the government offices with Tommy guns and bayonetted rifles. The next day officials and workers at the Ministry of Transport in Prague (remember there were 704 of them in 1929) were sent on “permanent leave.” At the same time, national and local officials were replaced by Communist action committees and the National Labor Organization ordered unionists to hold all factories employing more than 50 until the Party could take over. The Prague Workers Militia marched the streets four abreast, carrying new rifles from Skoda Works while the same loudspeakers that heralded Hitler’s advance in 1939 blared out the *Internationale*.

All this happened in the space of two days’ time. On February 27th, late in the afternoon, the last nerve of democracy died in Czechoslovakia. Foreign correspondents were warned by the Ministry of Information to “rely solely on official sources.”

Since that date, no detailed, reliable in-

formation has come from the rail bridge lying hidden behind the Iron Curtain. How many of the 97,386 rail workers in Bohemia and Moravia, along with thousands of workers in other industries, died or went to concentration camps after the Red purge began in Wenceslaus Square, Americans have no way of learning. We know from ex-Minister of Transport Hasal, who escaped to Paris in August of 1948, that Czech heavy industry, and that includes the Skoda plant, now works for Russians only and that 45,000 Red police guard the borders and patrol the forests and rail lines. Commerce? It’s as non-existent as the independence Czechoslovakia hoped to maintain through its communication lines. But the trains run—heavy toward the east, empty on the return.

And now and then, or often (who knows with unhappy men at the throttle and in the switch towers?) an express train is wrecked and Americans—ex-Wilson men who believed in that “bridge of peace” and ex-G.I.s who halted 50 miles from Prague to let their honourable, Tartar ally parade as liberators in the flower-decked streets—read the words “By Cable From Prague” and the date, heading a stick of futile type.

Christmas present from the Red Army to President Beneš in 1945. Forewarned for 1948, Beneš resigned in June, one day before the Communist Cabinet could present him with a new Soviet-type constitution.
Country Cousin Goes to Town

By WILLIAM L. ROHDE

MANY people living in the New York area are interested in railroads, and they travel hundreds of miles each year to find interesting lines and fit subjects for their busy cameras. Yet most of them don't know that there is a real old-timer operating efficiently and regularly right in their own backyard, with an elevated line running to its southern terminus. If they did know they would be highly interested in this largely single-tracked line that uses high-boilered ten-wheelers for passenger and freight traffic, and has two Morse wires for communication with its dispatcher, who is located far from the right-of-way in Grand Central Station. Of course the dispatcher is a New York Central man assigned to the Putnam Division which is a part of the water-level carrier, but the Putnam
Left: Putnam's southern terminus at Sedgwick Avenue in Manhattan adjoins the Ninth Avenue Elevated and overlooks the twin tracks of New York Central's Electric Division.

Southbound freight at right has just passed JS Station in Van Cortland Park where single-track north officially begins.

Below: Snowy-plumed and proud 4000 Class ups the grade between Tilly Foster and Brewster, Putnam "division point" and one-time focus for the tea-pot war of the New York & New England against NYNH&H and NYC in the '80s.

does operate as a completely independent railroad.

Its trains move up and down the winding, fifty-three miles that is its main and only right-of-way, without bisecting or interchanging with any other road. The small stations on the upper section of the Division have quaint oil lamps burning at night to light the late traveler on his way, and each of the well-kept, two-tone green buildings has its own Chic Sale, properly numbered and labeled with the date it was last painted!

The stations and three towers operate with one or two tricks, for at night after the late theater crowd is safely carried home, the Putnam Division closes up shop. There are a few veteran agents at the stations, but many of the operators are youngsters, having a hard time learning Morse.

Traffic on the Division, and that's...
counting the industrial sidings which rather sparsely dot its length, is mainly in two waves . . . a flood of commuters into New York on the nine morning trains, and their return on the seven afternoon and evening scheduled first-class runs. In addition there are two regular trains spaced through the rest of the day, and a run that covers only the top of the Division and reaches Grand Central via the Harlem Division. There are still other trains operated during the vacation season, but on Sundays there are just four round trips.

Don’t be discouraged if you fail to read a timetable for the Putnam Division. It is footnoted and symboled until it presents a maze even to those very familiar with the passenger puzzlers. The trains are all on it, and they run. A bit of patience and searching will tell you when and where.

New visitors to the Putnam’s southern terminal may be surprised to find elevated trains running over the Harlem River bridge, mentioned in the very meager records of the railroad, as the Putnam’s channel to 155th Street at Eighth Avenue. The Putnam pulled in its tracks some years ago to make the New York Central station at Sedgwick Avenue its starting point, and the elevated rents the bridge from the NYC. The railroad still owns the land and structures along the river, and the bridge is listed on the books at $243,121.

An old man who operates a boatyard near the bridge pointed out the route of the early trackage.

"I remember," he said, "when we’d all ride the ‘Put’ up to the woods for German beer parties. Fine country up there.

The Saturday and Sunday schedules are still excellent for excursions to Yorktown Heights, thirty-six miles into the rolling hills, and small groups still make the trip. More people would undoubtedly take the ride if the service was properly advertised, for the Putnam offers one of the handiest and most reasonable channels to the country from New York.

With one-eighth of its route within the city limits of New York, the Putnam Division spends much of its fifty-three miles in parks, golf courses, and well-tended parkway areas. The Saw Mill River motor parkway was superimposed on, under, and alongside the Putnam Division’s earth-ballasted single track, and the highway did right by the railroad. In addition to free landscaping, the right-of-way is lined with attractive stone bridges, rustic wood fences and gateways, and well-kept footbridges, and, the entire parkway area is free of billboards, hot-dog stands, and gas stations.
THE southermost station, Sedgwick Avenue, adjoins the Ninth Avenue El platforms, but Morse sounders and ancient ticket punches distinguish the railroad’s office from the change booth. The tracks are stub sidings, and on one track are loaded hoppers of coal, awaiting their spin up the steep little switchback to the coal ramp. A caboose lays over in the station each night from the way freight.

A tower flanks the main line to the left of Sedgwick Avenue, and on the right is an unpainted, two-stall wooden engine house that belongs on the Sandy River, instead of within a stone’s throw of an ant-heap apartment building.

One track from the little engine shed runs across a turntable, just large enough to hold the ten-wheelers, and huddled tightly around the merry-go-round stands a wooden water tower, ash conveyor, and the gravity coal ramp. There are a few sidings, used as storage tracks for the commuter coaches and the engines, and a small force of car inspectors and hostlers groom them during the day. Every night the “division point” closes up completely.

A sturdy, almost solid, fence separates Sedgwick Avenue from the terminal installations, and it is doubtful if even regular passers-by know that just below them is a cluster of little ten-wheel engines, all numbered in the 800’s. You can drive right by the terminal during the day and see nothing but a few threads of smoke.

Harlem bridge, channel over which NY&N shuttled New England freight into Manhattan at 155th Street, is now a crossover for the Eighth Avenue Elevated.
At night, the little trains are resting up for their morning jobs in Yorktown Heights or Brewster.

When an 800 backs its two coaches and a combine into Sedgwick Avenue station for the run to Yorktown Heights, it doesn't seem to mind at all that one of its marker lights is missing and part of the forward frame has been removed. The running gear is clean, and you may note that the side-rods are tight and well-greased.

The engineer will explain, "We all sorta work together on the Put, because we're a little piece of a big railroad, and we've gotta live up to the boys on the main lines."

The conductor, who exchanges greetings with about half of the fifty passengers who have reached the railroad via the elevated, has his own way of pleasing the customers. He makes everyone he knows feel at home—a novel touch indeed, in the city where "nobody knows anyone else."

More passengers from Grand Central will board the train at High Bridge, the connection with the Electric Division which can be seen on the river's edge, one mile down a gentle grade. Since the skipper can see the connecting train when it passes him on the lower level, he waits ten minutes over the scheduled departure time, to give late-comers from the elevated a chance to make the train. When the big mainline electric roars past with twelve green coaches, he gives a placid highball and the 800 puffs smoothly down the incline to High Bridge.

Another thirty-odd passengers board the coaches at the connection, where the ticket agent sells newspapers and cigarettes as well as transportation. We are on an off-hour run, so there is plenty of room for everyone. Occasionally, when all the commuters decide to take the same morning or evening train, the Putnam glories in standing room only.

The light rails of the Putnam Division parallel the four twin steel bands of the Electric Division's mainline, up the Harlem River to its junction with the Hudson. The stations of Morris Heights, University Heights (West 177th and 207th Sts.),
Country Cousin Goes to Town

Left: New York Central has improved the Putnam with a sparse hand since 1891, but plans are under way now for changes at High Bridge.

Keystone of Putnam power, one of the fifteen F-12s assigned to freight and passenger work, No. 831 steams through upper Manhattan.

Another ten-wheeler, the 824, below, belches black smoke at Sedgwick Avenue terminus. Th' city's street is at left, across the fence.

and Kings Bridge are on the short section of roadbed that is stone-ballasted and double-tracked. The first two stations are used jointly with the Electric Division, but north of Van Cortland Park (West 242nd St.), the Put becomes strictly a pioneer, single-iron, manually-blocked railroad.

Juice fans might be interested to note that the Putman adjoins and passes more trolley car lines than any comparable short line—or short division—in the country. At Morris Heights a single-track overhead-wire streetcar line terminates a few yards from the station; but unfortunately, not many passengers use these interchanges.

Entering its rural, wonderfully landscaped route at Van Cortland Park, the Putman looks very much like Philadelphia's recently abandoned Fairmount Park electric railroad. Curves and grades abound. Third-rails, used only by freight locomotives, now end above BN tower, at the point where the Electric and Putnam divisions part ways.
Gray Oaks—pretty little buildings surrounded by weeping willows and overlooking golf courses or landscape parkway.

Here and there new creosoted ties indicate that the Putnam's roadbed is not being forgotten, although sometimes a spike protrudes and bounces much more than it should.

People wave to the trains from the cars that whiz past on the four-lane roads, and from the tops of foot-bridges that look as if they were designed to match the landscape. The motorists have to pay a double toll to get to Westchester, something the commuter by train avoids.

Past Dunwoodie the engine grunts bravely as it mounts several more sharp rises and the mellow-toned whistle blows for a crossing; locomotives on the Putnam have whistles loud enough to warn, but not harsh or jarring on the ears. The train passes several sidings which look as if they belong on streetcar lines; tracks just long enough to hold an engine and one or two cars between the two switches.

At Nepperhan, a little seven-car freight tootles a greeting from the freight branch. It has headed in to work the day away at Yonkers, a valuable freight traffic area for the railroad. More golf courses line the tracks—there are seven on the Putnam—and some of the more distant stations are staffed by young agents or operators. The dispatchers have had a bit of trouble with the few youngsters who could not telegraph and were inexperienced at blocking trains. Such inexperience can be fatal on a system that depends upon positive manual blocks. The new men are learning by doing, however, and most of their uncertainties have disappeared. The way things stack up now, a passenger on the Put is safer than in his own home.

THE little stations are just short pauses in the 800's sturdy huffing and puffing, as it labors a bit up the grades past Lincoln, Dunwoodie, Bryn Mawr Park,
The flag stops of Chauncey, Woodlands, and Worthington require three whistles from the engine in answer to the conductor’s signal, and at each stop a few ladies are helped from the train with their shopping bags and children. At Woodlands, a particularly attractive outdoor cafe, looking like a color picture from a Parisian park, surrounds the pond which borders the tracks and tiny station. There are dozens of ducks floating on the water, and the 800 seems to puff through the scene just a little more quietly in order not to disturb the diners.

More golf courses and a few rock cuts and we reach Briarcliff Manor, as aristocratic as its name, with a comfortable station of concrete trimmed with patterns of green wood. Beyond is Millwood, where a passenger car of the 1880’s serves as a freight shed. It is newly painted and unmarred.

The agent at Kitchawan is a lonely man, but with the view of Croton Reservoir and the brass tongues of the Morse sounders to keep him abreast of events, he seems quite content. He helps three passengers off with their luggage and waves cheerfully.

Now the 800 crosses the biggest bridge on the line, a modest iron affair that does not clash with the gentle hills that border Croton Reservoir, and chugs mightily up the winding curves that lead to Yorktown Heights. At the two flag stops of Croton Lake and Croton Heights, the oil lamps are burning bravely in their wrought-iron holders, ready for the passengers who will arrive tonight.

Yorktown Heights boasts a turntable and a neat building to house the crews who lay over night on the runs that terminate here. The buildings are clean and well-painted, and the screens are intact.

Lake Mahopac and the Thompson House are the big attractions at milepost
forty-three, where a branch line joins the Putnam from the Harlem Division at Golden’s Bridge. The narrow single track through the trees and bushes might almost make you believe you had strayed onto the Saint Johnsbury & Lake Champlain!

Tilly Foster, where the railroad once served the mines, and Brewster are the northern anchor posts of the Putnam. At Brewster the New York, New Haven, & Hartford’s Maybrook freight line tops the T of the Putnam, and the Harlem Division of the NYC cuts through to the north.

A gentleman who rode over the Putnam Division in 1888, left a record of his trip called, The Country North of the Harlem River including the Great Croton Watershed on the line of the New York & Northern Railway Company. He was closer to local history than we are today, but his general comments on the landscape, the countryside, and the real estate opportunities along the Putnam might have been written just lately.

He wrote, “... its (the railroad’s) route through the most historic and wealthy portion of Westchester and Putnam counties – at once presents itself as the abode, in the near future, of thousands who object to crossing ferries or fighting mosquitoes... it offers excellent transportation from the Battery to Yonkers.”

Above: Twilight washes the skies over Yorktown Heights. No third trick op ever burns a lamp in the windows at left. Closing time means just that for op as well as the rails who rode the afternoon train to a stop here.

Switcher No. 152 at BN tower where the sidings of the “Sawmill River Branch” serve Yonkers, N.Y.

Wide clearances were responsible for this sight in Van Cortland Park, at right, Train of Tomorrow entering the Empire City on the little Put’s light tracks.
At that time, the passenger depot was at 155th Street, under the same roof as the Manhattan Elevated, and he refers to Morris Heights as "Morris Dock," and evidently University Heights was at that time called "Fordham."

A brick and marble station, our unknown traveler notes, was opened at Yonkers on March 11, 1888. It was "unusually fine, and three stories high."

He informs us that Ardsley was a favorite camping ground of the Mohicans, and that General Washington and Governor Clinton met there to sign the final papers after the Revolution. The area along the Hudson "contains more costly and elegant villas than any other equal distance in this hemisphere." The old Putnam served the gentry!

As a matter of fact, the territory pierced by the Putnam is very rich in historical interest. The line passes within sight of Washington Irving's Sleepy Hollow, and north of Yorktown station stood the farmhouse where the Revolutionary spy André breakfasted early on the morning of his capture.

The history of the railroad itself began in 1872, when it was constructed in three sections, the last segment being completed in 1881. Construction was by the West Side & Yonkers Railroad Company, on the southern end, and by the New York & Boston Railroad Company on the north, between Putnam Junction and the mines at Tilly Foster. The ambitious NY&B also started construction of the 51-mile stretch from New York north, but this project was completed by the New York City & Northern Railroad. The latter road evolved into the New York & Northern, which completed the branch to Yonkers in 1888.

As mentioned above, this first network had its southern terminus at the northern station of the Ninth Avenue Elevated at 155th Street. It began operating in the spring of 1881 with two passenger trains and one mixed train to Brewster daily, another to Mahopac and return, and seventeen trains daily between 155th Street and Van Cortland.

For a short time Pullman cars were attached to the best trains, but they proved unprofitable.

Apparently every blossoming financier of the period had a crack at the new lines ... but the Putnam outlasted them all. The Mahopac Falls Railroad Company constructed the line from Baldwin Place to Mahopac Mines in 1884, and this too
pass to the New York Central & Hudson Railroad and thence to the New York Central. The reasons for the constant juggling and refinancing of the beautiful, but sparsely settled little road are simple.

A separate railroad into Manhattan Island, even though curvacious and steeply graded and reaching only to the northern tip of New York City, was always a potential menace to those who sought to control the steam traffic of the booming city. The owners of the New York Central & Hudson River, were always faced with the probability that someone might buy the Putnam, rebuild it and have a new transportation line into the heart of New York.

When the New York & New England attempted to rival the New Haven and the Boston & Albany, it considered using the New York & Putnam, which it approached within a mile at Brewster. Indeed, among the very early notes concerning the Putnam, is a reference to it as the New York, Northern & Montreal, an indication that some of the pioneer builders thought they were really going places.

The New York Central & Hudson settled all arguments when, in 1894, it leased the Putnam for the term of its corporate existence.

Today, in addition to the steady commuter traffic, the Putnam handles a fairly solid volume of freight in its two daily freight extras—one each way. In addition a U 0-8-0 switcher manages to keep busy all day on the southern portion of the division, where an extra large collection of sidings, called the Saw Mill River Branch, serve Yonkers and the Smith Carpet Company.

The Put has a specialty, too—handling all the oversize carloads whose clearances are too great for other NYC Divisions and other New York railroads. Tanks, generators, boats, oversize machinery, all receive a ride via the Putnam, which has no obstructions to high-and-wide loads. Even General Motors' Train of Tomorrow, eighteen inches too high for most New York tracks, came to the Empire City via the Putnam. The ultra-modern unit made two trips over the line with newsmen, and was turned on the wye at Spuyten Duyvil after unloading its passengers at Van Cortland Park.

The Putnam does not interchange freight cars with any foreign railroad, but confines its yard activities to the Electric Division, at BN, and the Harlem. The New Haven switches at Brewster are located on the Harlem.

In addition to the 0-8-0 switcher, which lately has been feeling its age and has required frequent shopping, fifteen F-12 ten-wheelers haul the passenger trains, and the regular and extra freights. These high-boilered, 31,000-pound tractive-effort oldsters were delivered in 1907 and '08, and the New York Central has fifty-eight of them still in service.

The power may be ancient and picturesque, but the engineers who pilot the commuter trains, claim that on a percentage basis they are on time more regularly than the trains on any other division on the Central. Certainly one does not hear the condemnation that comes in a steady stream from users of the more
modern Long Island Railroad. Indeed, one regular traveler took it upon himself to praise the road.

"Notice the smooth ride up those hills?" he said as we set up our camera. "Takes good engineers to do that. I've been riding the Put fifteen years, and I think the men deserve a lot of credit."

Asked if he was connected with railroading, he said, "Nope, but I wish you'd send me one of those pictures."

The future of the Putnam Division is uncertain in some respects, although it will continue to roll up and down the clipped green meadows and hills for a long time to come. The question is, how much improvement and when?

Mr. J. D. Carkhuff, assistant superintendent of the NYC at New York, is unable to furnish definite information on the rumors of Dieselization. "I'm sure we'll go ahead with improvements eventually," he says confidently, "but just when, or how, I can't say. However, you will see some changes for the better at High Bridge. Some method of making it easier for passengers to make connections, or the elimination of the overhead walk or changing trains, is being considered."

The NYC's public relations department, headed by Mr. C. R. Dugan, is keeping its eye on any improvements or extensions of service made by the operating officials. The Putnam, with some advertising, might pick up a lot more business from those who use their cars to commute but do not like New York's traffic conditions nor the double toll they have to pay on the parkways.

Another official puts it this way: "With most of the areas on our New York lines saturated, as far as available land goes," he said, "I believe the territory reached by the Putnam Division is due for some sudden expansion. People have not yet realized it is the one area near New York that is easily accessible, but not yet fully developed."

The most obvious improvement for railroading on the Put would be to run the trains into Grand Central Station as soon as Diesel power begins to replace the 800's. It would be a simple matter to route the trains via the Electric Division from High Bridge; but room must be found for these trains in Grand Central Terminal, which is now handling about 623 units a day. The sixty-seven stub tracks of the big station are loaded to capacity, and it is a question whether the movement of passenger traffic back to the highways, will not be balanced by a greater flood of new train travelers from expanding population centers.

Another project which promises to brighten the future of the scenic line, is a government housing development which may one day be erected on the lands north of New York through which the Putnam winds its way. If this happens, the railroad will find itself burdened with boom-time traffic.

| Construction Dates and Mileage Completed on the New York Central’s Putnam Division |
|---------------------------------|-------|-------|
| Putnam Jct. to Tilly Foster Mines | 1.98 Miles | 1872 |
| High Bridge to Tilly Foster      | 50.71 Miles | 1880 |
| 155th Street and 8th Avenue to High Bridge | 1.04 Miles | 1881 |
| Van Cortland Park to Getty Square, Yonkers | 3.01 Miles | 1888 |
MIDGET MONORAIL TRAIN IS PRE-CHRISTMAS ATTRACTION AT STEWART’S DEPARTMENT STORE IN BALTIMORE. THREE CARS WHIRL OVER TOY COUNTERS, PROPELLED BY ELECTRIC MOTOR TRAILER (Robert W. Janssen, Baltimore, Md.)
SNOWBOUND—IN
MORE WAYS THAN ONE. OLD DIAMOND-
STACKER CARVED OF SNOW AND ICE WAS MAIN
ATTRACTION ON MICHIGAN TECH CAMPUS DURING
1948 WINTER CARNIVAL (Adolf Heinemann, Middle, Ia.)

WHEN ALASKA FREIGHT MADE
STOP IN DEEP SNOW CUT 62 MILES SOUTH
OF ANCHORAGE LAST SPRING, A MOOSE
JUMPED ONTO A FLATCAR. SHE TOOK OFF
AS THE TRAIN GOT UNDER WAY AGAIN
(Raymond E. McMurdo, 158
Main St., Spencer, Mass.)

SPRIGS OF HOLLY WORN BY B&O TICKET
AGENTS AND TRAIN CREWS DURING CHRISTMAS WEEK,
COME FROM GIANT 90-FOOT TREE OWNED BY THE RAIL-
ROAD. PROTECTED BY A STEEL FENCE IT STANDS BesIDE
THE RIGHT-OF-WAY NEAR JACKSON, MD. (B&O Magazine)
SAFER, speedier train operation is the goal of Erie’s new 4-way radio installation, linking Marion, O., with Salamanca, N. Y. Under this hookup an engineer or conductor can contact the rear or head end of his train, communicate with way-stations and trains within radio range; and station-to-station bridges are also provided. This 315-mile stretch of mainline was selected since it posed railroad’s toughest problems: heavy grades, harsh weather conditions and multiple- and single-track operation. So far only Diesels and cabooses have been radio-equipped. But plans for future expansion include radio stations from Chicago to Jersey City and possibly the installation of radio sets in steam engines.

Erie engineer uses his cab “mike” to contact conductor, wayside operators or trains within radio range. Stub antenna is fixed on the roof between air horns.
Night and day 14 transmitter stations stand guard over 315 miles of Erie mainline. Engineers spent 18 months perfecting the radio hookup, testing reception between land sets and trains moving at 50 mph. Above, Operator John Williams mans a typical tower installation.

Right: Axle-driven generator for train's radio system gets the once-over from Supervisor V. J. Taylor in Marion Yards. Storage-battery unit is mounted under the caboose floor, convenient spot for inspection and maintenance work.
Passing signals the easy way. With a radio control unit, hand set and speaker at his finger tips, a freight-train conductor can forget the perils of sending messages to his engineer through snow, fog and sleet and concentrate on cutting operation costs. Immediate result of walkie-talkie radio: reduction of train delays and broken drawbars.

Economy plus efficiency keynotes Erie's program. Left: Floodlight tower in Marion Yards supports antenna while radio apparatus is housed at its base, eliminating expense of a separate structure. Some stations use signal towers, but in four cases poor reception demanded remote-control circuits at elevated locations. Polk, for example, is operated from Creston offices, 18 miles away.
Caboose C242 broadcasts its communications system on its side walls as well as along the line. Soon all Erie Diesels will be radio-equipped, since they're hauling all through passenger, 60 percent through freight, traffic. Today's goal: contact with Jersey City.
INFORMATION BOOTH

Each month the Lantern Department prints answers to rail questions of general interest, submitted by our readers. We do not send replies by mail.

EXPLAIN how the Norfolk & Western's Roanoke Shops' smoke abatement system operates.

Early last year electric-eye devices—which indicate excessive smoke by bells and flashing lights—were placed on all stacks in the Roanoke Shops. A beam focused on a photo-electric cell shines through a flue through which all smoke must pass before reaching the stack. The light's intensity, hampered more or less by smoke, is translated by the cell into a dial reading set above draft and fuel controls in the boiler room. Attendants are notified first by the red light, then by the bell. Within less than 30 seconds they can regulate the flow of air and pulverized coal to any of the eight boilers, thus checking the smoke discharge.

Two stacks, each with a magic eye installed at its base, serve eight boilers. An additional mechanism indicates by lighted numbers which boiler or boilers is experiencing improper combustion. This plant provides steam and compressed air for the shops, passenger and freight stations, the railway's general offices and the Hotel Roanoke. Another plant at Shafter's Crossing two miles west, which serves the enginehouse and other nearby installations, has also been equipped with the smoke device.

As part of its program to reduce excessive smoke, the N&W has installed overfire air jets on 195 locomotives, including all yard goats. A major job of the railway's coal bureaus on and off the line is to advise consumers on smoke control. Norfolk & Western is cooperating with other carriers in the numerous projects sponsored by Bituminous Coal Research, Inc., leading toward the eventual elimination of smoke. One of these is the development of the coal-fired, gas-turbine locomotive.

WHAT is the longest RPO run in the United States?

The 1171 miles between Williston, N. D. and Seattle, Wash. on the Great Northern, is the longest unbroken run without transfer of mail.

I'VE SEEN C&O and Southern trains operating over the same tracks between Orange, Va. and Washington. Which road owns this trackage?

Southern Railway owns the 76.5 miles between Orange and Alexandria, Va. The remaining 8.2 miles into Washington, over which both lines operate, belongs to the Richmond, Fredericksburg & Potomac. It is estimated that there are about 30,000 miles of track in the United States over which more than one railroad operates.

SUPPLY information on the Long Island Rail Road's microwave-beam radio system for remote control of power substations, switches and signals.

Last July the Long Island set up an experimental radio system which promises an eventual cut in operating costs. So far the pioneer installation consists of two trial stations: one at Jamaica, the other at Floral Park. There are twin 4-foot parabolic reflectors, one pair atop the road's Jamaica office building and the other pair on a pole east of the Floral Park passenger station. The Jamaica end is the control center, sending electrical impulses over a narrow radio beam from one of its reflectors to the counterpart in Floral Park. So
Chimneys at N&W's Roanoke Shops show a clear exhaust. Photo-electric eye keeps stationary fireman posted on smoke density.

far, the circuit has been rigged to manipulate controls in the Floral Park power substation, and to carry two-way telephone, teletype and facsimile communications.

As a trial feature the system has also been arranged to simulate the throwing of the Floral Park track switches by a controller in Jamaica. The present signal system on the Long Island rules out the actual adaptation here, however. The new device is a joint development of the
Section cars have handled 1200-foot lengths of continuous welded rail, and served as paycars, pilot engines and ambulances, but this NRHS excursion over the Wheeling & Lake Erie topped all previous assignments.

LIRR, the Sperry Gyroscope Company, and Union Switch and Signal. The Long Island originally approached these two firms to discover some means of remotely controlling a number of the new power substations built to increase the supply of electricity for running Long Island trains.

But when the plan was under way, the engineers decided to experiment with other uses for the microwave-beam. Among its advantages would be the elimination of costly land lines to carry remote-control impulses, and the beam's invulnerability to storm damage. The most difficult part of the operation was installation of the reflectors: the microwave-beam is extremely narrow and follows the line of sight. Sperry and Union Switch engineers used floodlights and a surveyor's transit to make certain that both sets of reflectors were aimed properly.

I HAVE an employe's pass from the Arcata & Mad River. Can you furnish any information on this line?

Organized December 29, 1881 under California laws, this road was opened in 1893. All track was originally 3-foot, 9½-inch gage, running the 12 miles from Arcata Wharf to Korbel, Calif., and 18 miles from Arcata to Camp Eight, Mad River—a total of 30 miles. The A&MR was laid with 35-pound steel rail.

Poor's Railroad Manual for 1914, however, gives the road's mileage as 21.25, listing track from Arcata Wharf to Korbel, and Korbel to Canyon Creek; in addition there were 6.75 miles of sidings. The equipment roster numbered 6 locomotives, 5 passenger cars, 208 freightcars—7 boxcars and 201 flatcars—and 40 service cars. Then in 1918 the Manual shows only 12.91 miles of track operated. And by March, 1933, the Official Guide describes this Arcata-Korbel mileage as narrow-gage, and the 7.5 miles between Korbel and Korblex, where connection is made with the Northwestern Pacific, as standard-gage.

Originally incorporated as the Arcata Transportation Company, the road's name was changed to Arcata & Mad River Railroad in 1902. For many years all capital stock has been owned by the Northern Redwood Lumber Company. Passenger service was discontinued early in the 1920s. Recent statements of the A&MR list 2 locomotives, 213 freight cars and 1 service car. Only the standard-gage trackage between Korblex and Korbel is in operation.
SOUTHERN PACIFIC’S Diesel-Electric switcher 1022, assigned to Pacific Electric’s State Street Yards, is equipped with an auxiliary trolley pole. Is this to collect current for the traction motors when the switcher’s in electrified territory?

The installation was made solely for the purpose of activating grade-crossing signals on lines where trolley contact brushes are used to activate crossing signals. A similar installation was pictured in Joe Easley’s *Along the Iron Pike*, April, 1948.

I READ last August of the dedication of a railroad connecting San Jose, Bolivia with Corumba, Brazil. What’s the story?

This is a link in what will eventually be South America’s longest railroad and second transcontinental. Its 240-mile stretch of track provides a continuous line of 1300 miles, joining the Brazilian coffee port of Santos with the eastern Bolivian town of San Jose. Only about 500 miles of construction remain—between San Jose and Cochabamba, Bolivia—and then there will be a direct 2300-mile steel trail from Santos to the north Chilean port of Arica on the Pacific. But this final section will be the most difficult part of the project.

Rails must bridge mountain streams, pass through fever-ridden land inhabited by hostile Indians, and ascend steep Andean slopes. Material and labor are scarce and communication poor in land-locked Bolivia, South America’s most sparsely-populated country in spite of its wealth of oil, tin and rubber. Development has been handicapped by lack of a seaport and inadequate transportation, but the new railroad through central Bolivia will pave the way for industrial growth by furnishing an outlet to world markets.

That Brazil, too, expects to benefit by the road is evidenced by the fact that she has agreed to finance the construction work ahead which will pass entirely through Bolivian territory. Completion of the 2300-mile Santos-Arica railroad will be a political as well as economic victory for Brazil, which for many years has been competing with Argentina for control of Bolivian resources. Two railways project northward from Argentina into Bolivia; one is in operation and the other under construction, but neither is as important as the Santos-Arica line. Brazilian Foreign Minister Raul Fernandez calls it a dry-land Panama Canal. The road will be more than 1400 miles longer than the line from Buenos Aires, Argentina to Valparaiso, Chile, the only South American coast-to-coast railroad now operating.

Alco freight Diesels built for the Missouri Pacific have unusually pleasing color treatment. Cabs are a rich blue, with nose and side striping of complementary gray, bordered with cream.
COMPARiE the dimensions of the United States Railroad Administration’s standardized heavy and light 2-8-2s built by Lima, Alco, and Baldwin.

<table>
<thead>
<tr>
<th>Cylinders</th>
<th>Drivers</th>
<th>Pressure</th>
<th>Grate Area</th>
<th>Weight</th>
<th>Tractive Effort</th>
<th>Wheelbase (Eng. &amp; Tender)</th>
<th>Clearance (Length Overall)</th>
</tr>
</thead>
<tbody>
<tr>
<td>27x32</td>
<td>63</td>
<td>190</td>
<td>70.3</td>
<td>320,000</td>
<td>60,000</td>
<td>71’-81/2”</td>
<td>82’-33/4”</td>
</tr>
<tr>
<td>26x30</td>
<td>63</td>
<td>200</td>
<td>66.7</td>
<td>292,000</td>
<td>54,725</td>
<td>71’-41/2”</td>
<td>81’-113/4”</td>
</tr>
</tbody>
</table>

LIST Diesel passenger-locomotive assignments on the New York Central and Pennsylvania railroads.

New York Central Regularly Assigned Diesel-Powered Trains
As of August 18, 1948

<table>
<thead>
<tr>
<th>Train Nos.</th>
<th>Train Names</th>
<th>Run</th>
<th>Locomotives Required (Not Units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-26</td>
<td>Century</td>
<td>Harmon-Chicago-Harmon</td>
<td>2</td>
</tr>
<tr>
<td>67-68</td>
<td>Com. Vanderbilt</td>
<td>Harmon-Chicago-Harmon</td>
<td>2</td>
</tr>
<tr>
<td>1-2</td>
<td>Pacemaker</td>
<td>Harmon-Chicago-Harmon</td>
<td>2</td>
</tr>
<tr>
<td>29-90</td>
<td>Chicagoan</td>
<td>Harmon-Chicago-Harmon</td>
<td>2</td>
</tr>
<tr>
<td>19-64</td>
<td>Water Leel</td>
<td>Harmon-Chicago-Harmon</td>
<td>1</td>
</tr>
<tr>
<td>51-427</td>
<td>Emp. State Exp., Gateway</td>
<td>Harmon-Collinwood-St. Louis</td>
<td>1</td>
</tr>
<tr>
<td>41-24</td>
<td>Knickerbocker</td>
<td>Harmon-St. Louis-Harmon</td>
<td>2</td>
</tr>
<tr>
<td>11-12</td>
<td>Southwestern Ltd.</td>
<td>Harmon-St. Louis-Harmon</td>
<td>2</td>
</tr>
<tr>
<td>27-28</td>
<td>New England States</td>
<td>Collinwood-Chicago-Collinwood</td>
<td>5</td>
</tr>
<tr>
<td>67-96</td>
<td>Paul Revere</td>
<td>Collinwood-Chicago-Collinwood</td>
<td>5</td>
</tr>
<tr>
<td>17-8</td>
<td>Wolverine</td>
<td>Harmon-Chicago-Harmon</td>
<td>2</td>
</tr>
<tr>
<td>Pool</td>
<td>(Various)</td>
<td>As locos. are Available</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>28 locomotives</td>
</tr>
</tbody>
</table>

Pennsylvania Railroad Regularly Assigned Diesel-Powered Trains
As of August 18, 1948

<table>
<thead>
<tr>
<th>Train Nos.</th>
<th>Train Names</th>
<th>Run</th>
<th>Locomotives Required (Not Units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>29-29</td>
<td>Broadway</td>
<td>Harrisburg-Chicago-Harrisburg</td>
<td>2</td>
</tr>
<tr>
<td>554-59</td>
<td>Juniata Liberty Ltd.</td>
<td>Harrisburg-Chicago-Baltimore-Chicago</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>Manhattan Ltd.</td>
<td>Harrisburg-Chicago-Baltimore-Harrisburg</td>
<td>2</td>
</tr>
<tr>
<td>58-571</td>
<td>Liberty Ltd.; No. 571</td>
<td>Harrisburg-Chicago-Harrisburg</td>
<td>2</td>
</tr>
<tr>
<td>49-48</td>
<td>General</td>
<td>Harrisburg-Chicago-Harrisburg</td>
<td>2</td>
</tr>
<tr>
<td>77-76</td>
<td>Trail Blazer</td>
<td>Harrisburg-Chicago-Harrisburg</td>
<td>2</td>
</tr>
<tr>
<td>71-70</td>
<td>Admiral</td>
<td>Harrisburg-Chicago-Harrisburg</td>
<td>2</td>
</tr>
<tr>
<td>116-115</td>
<td>Daylight Exp.</td>
<td>Harrisburg-Chicago-Logansport-Chicago-Harrisburg</td>
<td>3</td>
</tr>
<tr>
<td>25-44</td>
<td>Metropolitan</td>
<td>Harrisburg-Chicago-Logansport-Chicago-Harrisburg</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Pennsylvania Ltd.</td>
<td>Harrisburg-Chicago-Logansport-Chicago-Harrisburg</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Pennsylvania Ltd.</td>
<td>Chicago-Harrisburg</td>
<td>1</td>
</tr>
<tr>
<td>216-207</td>
<td>Union</td>
<td>Harrisburg-Chicago-Pittsburgh-Harrisburg</td>
<td>2</td>
</tr>
<tr>
<td>54</td>
<td>Gotham Ltd.</td>
<td>Harrisburg-St. Louis-Harrisburg</td>
<td>2</td>
</tr>
<tr>
<td>22</td>
<td>Manhattan Ltd.</td>
<td>Harrisburg-St. Louis-Harrisburg</td>
<td>2</td>
</tr>
<tr>
<td>79-62-72</td>
<td>Pennsylvaniaian</td>
<td>Harrisburg-St. Louis-Harrisburg</td>
<td>3</td>
</tr>
<tr>
<td>33-30</td>
<td>Spirit of St. Louis</td>
<td>Harrisburg-St. Louis-Harrisburg</td>
<td>3</td>
</tr>
<tr>
<td>31-32</td>
<td>Spirit of St. Louis</td>
<td>Harrisburg-St. Louis-Harrisburg</td>
<td>3</td>
</tr>
<tr>
<td>13-64</td>
<td>No. 18; Jeffersonian</td>
<td>Harrisburg-St. Louis-Harrisburg</td>
<td>3</td>
</tr>
<tr>
<td>65-20-74</td>
<td>Jeffersonian</td>
<td>Harrisburg-St. Louis-Harrisburg</td>
<td>3</td>
</tr>
<tr>
<td>67-4</td>
<td>American Eagle</td>
<td>Harrisburg-St. Louis-Harrisburg</td>
<td>3</td>
</tr>
<tr>
<td>3-66</td>
<td>Texas Eagle</td>
<td>Harrisburg-St. Louis-Harrisburg</td>
<td>3</td>
</tr>
<tr>
<td>41-40</td>
<td>Cincinnati Limited</td>
<td>Harrisburg-Cincinnati-Harrisburg</td>
<td>2</td>
</tr>
<tr>
<td>69-68</td>
<td>Red Arrow</td>
<td>Harrisburg-Detroit-Harrisburg</td>
<td>2</td>
</tr>
<tr>
<td>39-38</td>
<td>Clevelandr</td>
<td>Harrisburg-Cleveland-Pittsburgh</td>
<td>2</td>
</tr>
<tr>
<td>318-323</td>
<td></td>
<td>Total</td>
<td>40 locomotives</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Locomotives on roster</td>
<td>41 locomotives</td>
</tr>
</tbody>
</table>
Modern coaling station with adjacent water column for single-stop servicing loads tenders of the world’s largest locomotives in eight minutes flat.
CONTINUING its Dieselization program, Boston & Maine recently accepted delivery of two General Motors’ engines of a new type which has been undergoing exhaustive road tests for the better part of a year. This is the 1500 hp., branchline Diesel-electric—an outgrowth of the conventional road switcher with medium-speed gearing which has found favor in commuting service on a number of roads.

The 1550 and 1551, so designated to distinguish them from a 1500 hp. road switcher acquired by the B&M about a month earlier, are semi-streamlined, with recessed channels extending backward and forward from the cab to increase visibility. Front and rear riding platforms have been retained for use in switching service and a steam generator has been provided in the nose of each to supply car heat during the winter months. Trucks are of the standard freight-engine type.

The Diesels, which are approximately 7 feet longer than F-3 units, and cost in the neighborhood of $150,000 apiece, are
now assigned, on weekdays, to the Boston to Providence local freight, the High Car local freight from Boston to Salem via Wakefield Junction and Danvers, 3 round-trip passenger jobs between Boston and Portsmouth, and a Portsmouth to Boston freight. On Sundays they cover 3 round-trip passenger assignments on the Gloucester Branch. Two similar locomotives currently on order will shortly take over 4 passenger trains in and out of Concord, together with the Lincoln local freight.
BACK in 1907 after the Sixteen Hour Law had been put into operation, and while the Santa Fe was doing a land office business handling the seasonal fruit rush, with the California passenger traffic on the boom and with extra fare trains running in two to four sections, I drifted into La Junta, Colorado, looking for a job. I didn't have to do much looking. Shacks, snakes and all kinds of train service men were so scarce that yard masters, trainmasters and all other officials lined the platform to greet a boomer with smiles and a hope that he would stop and work for a while. The new custom that crews had acquired, of climbing off their engines and going to bed after working sixteen hours, was responsible for all this good will. Like all the other railroads, the Santa Fe had been running crews just as long as they could stand on their feet and keep moving.

So, understanding just how rails had gotten a break at last, I chose a bright, sunny evening, and I tied into the train service as a brakeman. After getting my name on the extra board, I wandered over to a beanery and signed up for a pie card, in order to throw a feed into my anatomy like I had bought the pike.
My independence was short lived, for I'd hardly lit my pipe when this smiling lad drifted up with a broad grin. "You're Roach, ain'tchu?" And he stuck out his book for me to sign.

"You're called for the night local. Leaves here at 7:48 p.m. You'll find the crummy on the east end of track 9. Wish you luck," he recited, and dived out the beanerv door.

Looking at the wall clock, I saw it was six-thirty; just as well order a dozen sandwiches put in a sack, and wander over to track 9. When I climbed the crummy steps, some loud and very profane language was emanating from the inside. I opened the end door cautiously, peered inside, and saw the Big Ox sitting in his desk chair, with his feet cocked up on his desk, letting a brakeman try to dig a cinder out of his optic.

Feeling safe to enter, I stepped inside. "Howdy, gents. I'm a new addition to the crew on this wagon. And would like to get a lantern for the night trip."

The shack's fists looked better suited for shoveling coal than lifting a small cinder out of the skipper's eye. I made a motion to take a try at the job.

The skipper spoke up quickly. "Am 6 den is nervous, his hands are too clumsy. You look like a dependable man, maybe you can get it out. It's been giving me hell all night."

I took out a toothpick and chewed the end to soften it into a kind of brush. Then I held the skipper's head with one hand, squinted in his eye, and soon located the
cinder. A single easy swipe brought it out.

He grunted with relief. "Gosh, feller, I'm sure glad you drifted in! That job is worth a good drink on me," he added, opening a locker and pulling out a bottle of Scotch. "Take a nip. My name is Bromley."

I poured a stiff shot into a tin cup. "Roach," I told him, "just hired. This will be my first trip on this pike." I lifted the cup. It was good stuff.

Bromley stood rubbing his eye and talking about cinders while he pulled out a large chunk of twist tobacco and tore off about half of it. As he shoved the chunk into his wide maw, and got that slug working, his big, blue eyes sparkled with satisfaction.

"Well, Roach, I'm glad you come along. Some of these damned shackses don't like to work with me. They call me a Down East Yankee 'cause I chaw twist and spit out the cupola window, which causes section men to be alert when my train passes. They step way back for fear I'll shoot some of this Kentucky tobacco juice on 'em."

Chuckling, he picked up a lantern and started out for the office to get his traveling papers. Departing time was close.

As a conductor, he amused me. He was so short and round, like a barrel, and wearing a wide-brimmed Stetson hat a couple of sizes too big and set way down over his ears, made him look like a scared kid trying to hide from somebody.

Amsden, the rear man, laughed. "You mustn't believe everything the Weedkiller says."

I'd opened a locker to put my coat inside and was hoping I'd find an old jumper and overalls to wear for the trip. I stopped at Amsden's remark. "Weedkiller!" I looked to him to explain the queer handle.

"Sure, that's a funny name but it's what the Clown is called along the line. You saw what a whoppin' chaw he stuffed in his hash chopper. Well, when that stuff gets wet and he gets to chawin' an' spittin' like a house on fire, why you'll see why he's called a weed killer."

He handed me a lantern for the trip, and stood grinning. He added, "About a year ago we had a boomer parlor man that got stewed one trip and suddenly decided to scrub off the old hack. He got hold of some strong soap, a long handled brush and a bucket of hot water, and went to work. The results of that bath showed the paint was nearly all off. Our crummy looked like hell, and everybody was stopping and staring. We were called up on the carpet. The boomer, bug-eyed over what he'd done, blurted out that Bromley took the paint off by ejecting tobacco juice out the cupola window every trip. So then Bromley blew up and had the boomer fired. But Bromley has been called the Weedkiller ever since. Get it? If the strong tobacco juice took the paint off a crummy, it would kill weeds."

Amsden chuckled. "The super ordered another caboose for our crew, with instructions not to let such a condition occur again. If it did... every man on the crew would be fired."

This was surprising dope. "What happened then?" I asked.

"Well, the skipper had a tinsmith make
a funnel and a long stem and put them in the crummy near where he sat usually. This long tin stem went down through the floor, so any tobacco juice that came down it would spill on the track. That was funny, for the super accidentally saw the funnel and stem outlet and it caused him to roar with laughter. ‘Well, if that ain’t one for the book,’ he said. ‘The Weedkiller sure has an outlet for his tobacco juice.’ Then everybody had to come over and see the tin funnel for re-routing tobacco juice onto the track instead of down the side of the crummy. It was a very amusing thing to all, and the skipper has wore the nickname of Weedkiller ever since.”

I was amazed at such a queer yarn, but just then I felt the slack run out and we started moving out of the yard. I grabbed my lantern and went high, to be on deck leaving the terminal. Bromley, the Weedkiller, was standing beside the track waiting for the buggy. When he finally grabbed it, I hightailed the hogger, got two long blasts, and we were off.

Gratitude for me getting the cinder out of his eye made Bromley assign me to take the swing shift instead of the head end, where a new man is usually worked.

We left La Junta at 7:48 p.m. with orders to protect against all timecard trains. I looked over the train consist and saw we had sixty-two cars, with a 1400-Class engine. The tonnage rating was that of a through train not making local stops and doing station switching.

Naturally, when we rolled into Timpas, the first station, the red board was out and we had a wait order for a fruit train special east. We did our local work, and then backed down the mainline to head in the passing track and wait for this fruit special—which was going to have to saw by us, as our train filled the passing track with three cars and the crummy over.

Now a DS is supposed to know just how many cars any passing track holds, as well as the conditions of grade and the difficulties an engine would have handling a train into or out of such passing tracks. I decided right then and there that this DS was either lacking in good judgement or was trying to delay our progress over the division. It was a screwy move anyway, for our three cars and crummy delayed the fruit special fifteen minutes and brought a lot of hot air from the hogger on the special. While Bromley and I cursed back in several languages, because we were not to blame.

After that, the red board was out against us at every station we rolled into, even when we had a meet or wait order. At Thatcher, the second station, we unloaded our local freight and then pulled up a half mile and backed in to clear the east end gate. There we waited thirty minutes for a varnished special west-bound, Number 3 the day before, but now over twelve hours late on account of a washout back east somewhere. When she rolled, we pulled out and made Tyrone. There the red eye was still shining against us; the night op handed the hogger a take siding order for a special east.

We backed up on the mainline for half a mile, so as to clear the gate, and headed in to wait thirty minutes more. When this special had arrived and skipped out, we were allowed to proceed west to Earl.

We had the red board facing us again. Another sawing job, and then a wait order for three extra fruit trains which must not be delayed under any circumstances.

It was nearing 3 a.m. before Bromley asked for orders to leave Earl. What he got was another wait order for the second section of the Chief, a westbound tourist special running nearly ten hours late, a fact which didn’t help our good humor.

It was just getting daylight, along about 4:30 a.m. when Bromley again asked for traveling papers. The DS came right back with: “Where you been since leaving Earl?”

When Bromley could get his breath, he answered patiently: “We are at Earl now, been waiting for all trains specified on your 3 a.m. order.”

I’ve met trainmen who never heard of a DS losing a train. Well, if this wasn’t a case of a lost freight, I don’t know snow
from mud. And it happened on one of the biggest pikes in the U.S.A.

The DS pulled in his horns to advise us that Trinidad yards were blocked and we’d have to stay in the clear at Earl until a crew was sent from Raton to take a train out of the yards for the west, Trinidad being a set-out station for west loads whenever a train pulled in with more tonnage than it was rated to pull over the Raton hump.

The whole thing was a laugh. We all trooped over to the section house and had breakfast. Afterward Bromley and I strolled into the operators' cage to wait for dope on when we could move to Trinidad. At 7:15 the DS asked the op if we were there. When the op got through laughing, the DS issued orders for us to make Trinidad for El Capitan due in Trinidad at 8:23 a.m., westbound. Bromley stated that since his train was over the tonnage rating he was supposed to drag over Raton grade and he would be obliged to set out all tonnage over his rating, he could not make Trinidad on such short time, and clear Number 21 without delaying her. It was 7:26 a.m. now, so the DS gave Bromley a wait at Earl for Number 21. We rolled into Trinidad right behind El Capitan, with plenty of local switching to do.

THOUGH there was a yard goat on the job in Trinidad, it was used to shift coal cars in and out of the coal mines around there. The C&S and the D&RG transfers for the Santa Fe were usually taken care of by this switcher, but the local crew did the freight house shifting, placing bad order cars for the small shop crew or chaining them up for handling into some shop west or east. The local crews also made up trains for moving over the Raton mountain, a real yard job that usually involved from three to seven hours of steady switching.

On this day, after we took water and coal and our hogger had squirted oil on everything from the rear tank truck to the pilot, Bromley decided he was ready for the first move.

I shoved all cars over our tonnage rating down in Number 1 track. Our crummy and local cars going west, I shoved into track Number 5, then pulled the freight house, kicking west local onto our train and east local on Number 4. This brought my switching down to shifting the rip track for two temporary repair jobs bound for Raton shops. There was also on the rip track a gondola loaded with silt, or thin mud, which the water service had taken out of the water tank the day before. The tank was cleaned once a year—and here we are made the lucky guys to handle this damned stuff! It was very thin and sloshed back and forth when the car was moved or stopped quickly. That feature kept a shack from riding the mud car.

As I sized up the rip track moves, I decided to drag a car of cinders out of the cinder pit and kick it down the main as a starter, and then build onto it with the stuff I pulled out of the rip track. Then it occurred to me that picking up the mud first and kicking it down against the cinders would be a quick way to handle it, as well as preventing Shorty Kelly, our head shack, from getting a mud bath.

At that time the mainline from the east spread out to double track right in front of the water tank in Trinidad, with the yards on the north side comprising six or seven tracks, each with a capacity of perhaps forty cars. They were all full after I shoved our train in the clear.

Well, Amsden grabbed the mud car as it rolled, faster and faster, down toward the cinders. He tried the brake, discovered there was no chain to the brake staff, and unloaded. The mud car smashed into the car of cinders like two wild bulls butt ing each other on a spring morning in a clover field. The loud crescendo brought Bromley out of the telegraph office to see if we had torn down the water tank or coal chute. His comments were quite clear and to the point, but not printable. The ratchet holding the center drop doors of the cinder car had been released with the shock, and the whole load of cinders was dropped right there.
This situation brought a pause to all action while we gathered about to figure what was best to do. The mainline was impassable until the cinders could be cleaned off, but how the hell to do it was the problem. He eyed me, and scratched his head.

While we were still thinking it over, the roadmaster showed up and began giving orders. Three section men appeared with small shovels which were useless, for there was no place to toss the cinders off the mainline, since the house track was on the south side and, on the north, Number 5 track, with our train on it. The situation was simply a case of the great Santa Fe mainline being blocked.

Every man jack there stared at each other and shook his head as if it was nothing for him to worry over, and all the time we knew we'd have to do something—and do it quick. There was a long drag of fruit trains due in from California any second and we were ordered to clear when they showed up rolling down off the double track. The westbound Chief, Number 19 would also be showing up in ten minutes. Sure, the DS had it all figured out to a fine point until a boomer trying to do some fancy switching busted up the whole set-up.
The roadmaster managed to get a track tie across the track in front of the rear wheels on the cinder car. Then he ordered our engine to back down slowly, shove the cinder car against the tie, and then keep shoving. The cinder car wheels would slide after getting blocked with the creosoted tie. The idea was to spread the cinders over quite a distance, allow trains to move, and then clean up the cinder mess later with an extra gang. Our hogger backed down and I coupled him into the mud car, then eased up against the cinder car to shove the whole mess along.

It worked just as the roadmaster had figured—until the cinder car wheels climbed over the track tie, eased off towards the north and turned entirely across the track. This really blocked the main line and still those fruit trains were rolling towards the blocked track, and the Chief was showing her smoke over the hills east of town.

Bromley rushed in to report the situation to the DS; he soon jumped out with an order for Amsden to go east and flag Number 19, and have its conductor come to the telegraph office for instructions.

Two long fruit trains rolled down on the double track and stopped until we cleared the blockade.

When I walked over to the engine, the hogger was orating: "We pulled out of La Junta at 7:48 p.m. last night. Here it is getting near to El Capitan's time, and you know the DS will not let us out of here if there is any possibility of us delaying her. With us held here the track is clear, but our working time is running out. At exactly 11:48 a.m. we will have worked sixteen hours. If we work over that time we'll be subject to a fine. So I'm climbing off this engine the minute my time is up."

I calculated mentally that we had spent all night covering about 85 miles, with trains holding rights over us in both directions. It did look as if we might spend our first tie-up on a sixteen-hour shift right in the D&RG transfer at El Moro, Colorado. However, Bromley had the D&RG op ask the DS on our line if we could return to Trinidad soon, explaining that we were nearing the end of a sixteen-hour shift. After some fifty minutes' wait, Bromley got an order to proceed to Trinidad and tie up there. We did just that. The wrecker had cleared the main, so we pulled our train into Number 5 again and rolled into the hay for a rest.

I had just dozed off, when the Weed-killer shook me and asked: "Say, Slim, what would you say really caused all the trouble with that cinder car?" He seemed befuddled.

I thought the matter over. "Well, you started this trip with a cinder in your eye, and a car of cinders caused us to tie up here. So I'd say cinders was the cause of the delay."

"But that doesn't cover the cause of the accident!"

"The hell it doesn't. If there had been no car of cinders to handle there would not have been any delay, nor an accident to report."

That afternoon when we all turned out to feed, I looked at the copy of his accident report, and laughed out loud... He had wired: "Cinders caused accident. Cinders caused delay to all trains," and he had signed it, "Jack Bromley, Conductor."
Not in the Wheel Report

By JOSEPH EASLEY

“Look, Buddy! If you want to stay on this run you’ll have to marry one of the skipper’s daughters—I did!”
L. Ferguson, Hanford, Wash.

Biggest user of Belpaire fireboxes west of the Mississippi is the Great Northern. Even its eight-wheeled switchers above are flat tops. Walschaert link blocks dropped to full stroke, Pacific 1366 below is ready to haul the Gopher eastward out of Superior, Wis. Bottom: No. 2022 was representative of Mallet compounds which GN has since rebuilt as simple articulateds

Rail Photo Service, 93 Mass. Ave., Boston 15

Robert Graham, St. Paul, Minn.
The rebuilt 2005, running light against the Rocky Mountain backdrop comprising Glacier National Park. Railroad skirts the southern boundary with tourist gates at Glacier Park station and Belton.

Locomotives of the Great Northern

Steam Locomotives

<table>
<thead>
<tr>
<th>Class</th>
<th>Numbers</th>
<th>Cylinders</th>
<th>Drivers</th>
<th>Pressure</th>
<th>Engine Weight</th>
<th>Tractive Effort</th>
<th>Builder and Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1</td>
<td>810-812, 818, 819, 822, 825, 829, 830, 836, 837, 839, 841, 843, 845, 847-849</td>
<td>26 x 28</td>
<td>55</td>
<td>210</td>
<td>253,200</td>
<td>61,430</td>
<td>Baldwin, 1918</td>
</tr>
<tr>
<td>C-1</td>
<td>813-817, 820, 821, 823-824, 826-828, 831-835, 838, 840, 842, 844, 846</td>
<td>26 x 28</td>
<td>55</td>
<td>210</td>
<td>245,640†</td>
<td>61,430</td>
<td>Baldwin, 1918</td>
</tr>
<tr>
<td>H-4</td>
<td>1441-1445, 1449, 1450, 1452, 1453, 1455, 1457-1459</td>
<td>23½ x 30</td>
<td>73</td>
<td>210</td>
<td>273,760†</td>
<td>40,511</td>
<td>Baldwin, 1909</td>
</tr>
<tr>
<td>H-4</td>
<td>1461-1463, 1465, 1469, 1470, 1474-1476, 1479, 1484</td>
<td>23½ x 30</td>
<td>73</td>
<td>210</td>
<td>280,260</td>
<td>40,511</td>
<td>Lima, 1914</td>
</tr>
<tr>
<td>H-4</td>
<td>1464, 1467, 1471, 1473, 1477</td>
<td>23½ x 30</td>
<td>73</td>
<td>210</td>
<td>273,760†</td>
<td>40,511</td>
<td>Lima, 1914</td>
</tr>
<tr>
<td>H-4</td>
<td>1454</td>
<td>23½ x 30</td>
<td>73</td>
<td>210</td>
<td>284,800</td>
<td>40,511</td>
<td>Baldwin, 1909</td>
</tr>
<tr>
<td>H-4</td>
<td>1448, 1456</td>
<td>23½ x 30</td>
<td>73</td>
<td>210</td>
<td>280,260†</td>
<td>40,511</td>
<td>Baldwin, 1909</td>
</tr>
<tr>
<td>H-5</td>
<td>1354, 1356, 1357</td>
<td>23½ x 30</td>
<td>73</td>
<td>210</td>
<td>285,240</td>
<td>40,511</td>
<td>GN shops, 1921-1927</td>
</tr>
<tr>
<td>H-5</td>
<td>1350, 1358, 1359</td>
<td>23½ x 30</td>
<td>73</td>
<td>210</td>
<td>279,000†</td>
<td>40,511</td>
<td>GN shops, 1921-1927</td>
</tr>
</tbody>
</table>

(Continued on page 84)
### Steam Locomotives (cont.)

<table>
<thead>
<tr>
<th>Class</th>
<th>Numbers</th>
<th>Cylinders</th>
<th>Drivers</th>
<th>Pressure</th>
<th>Engine Weight</th>
<th>Tractive Effort</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-5</td>
<td>1365–1367</td>
<td>23½ x 30</td>
<td>73</td>
<td>210</td>
<td>289,840</td>
<td>40,511</td>
</tr>
<tr>
<td>H-5</td>
<td>1360–1364, 1369–1374</td>
<td>23½ x 30</td>
<td>73</td>
<td>210</td>
<td>283,600†</td>
<td>40,511†</td>
</tr>
<tr>
<td>H-5</td>
<td>1359, 1358, 1355, 1368</td>
<td>23½ x 30</td>
<td>73</td>
<td>210</td>
<td>279,000†</td>
<td>40,511†</td>
</tr>
<tr>
<td>H-6</td>
<td>1711, 1712, 1715–1721</td>
<td>23½ x 30</td>
<td>69</td>
<td>210</td>
<td>260,420†</td>
<td>42,859†</td>
</tr>
<tr>
<td>H-6</td>
<td>1710, 1713, 1714, 1722–1724</td>
<td>23½ x 30</td>
<td>69</td>
<td>210</td>
<td>271,020†</td>
<td>42,859†</td>
</tr>
<tr>
<td>H-7</td>
<td>1375–1377, 1380–1384</td>
<td>23½ x 30</td>
<td>73</td>
<td>210</td>
<td>294,520†</td>
<td>40,511†</td>
</tr>
</tbody>
</table>

#### 2-8-8-0 (Articulated) Type

- **N-3**: 2015

- **O-4**: 3220, 3224, 3250
- **O-4**: 3226, 3229, 3247
- **O-4**: 3210–3218, 3221, 3222, 3225, 3227, 3228, 3230, 3232–3246, 3248, 3249, 3251, 3253
- **O-4**: 3223, 3231, 3252, 3254
- **O-6**: 3350–3364, 3366–3370
- **O-8**: 3375, 3377, 3381–3390
- **O-8**: 3376, 3378–3380

**Builder and Date**
- Baldwin, 1906 (4-6-0s); rebuilt as H-5, GN, 26’ 27
- Baldwin, 1906 (6-6-0s); rebuilt to H-5, GN, 26’ 27
- Baldwin, 1906, '07 (J-1, J-2 2-6-2s); rebuilt by GN to H-6, 1923, 28’
- Baldwin, 1907 (J-1 and J-2 2-6-2s); rebuilt to H-6 by GN, 1920
- GN shops, 1920, '27

#### 2-8-2 (Mikado) Type

- **P-2**: 2500–2527

**Builder and Date**
- Baldwin, 1920

#### 4-8-2 (Mountain) Type

- **Q-2**: 2175, 2178, 2180–2182, 2184, 2187–2189
- **Q-2**: 2176, 2177, 2179, 2183, 2185, 2186

**Builder and Date**
- Baldwin, 1923

#### 2-10-2 (Santa Fe) Type

- **Q-2**: 2175, 2178, 2180–2182, 2184, 2187–2189
- **Q-2**: 2176, 2177, 2179, 2183, 2185, 2186

**Builder and Date**
- Lima, 1914; rebuilt GN, '28

#### 2-8-8-2 (Articulated) Type

- **R-1**: 2030–2033
- **R-1**: 2034–2038
- **R-1**: 2039–2043
- **R-2**: 2044–2059

**Builder and Date**
- Baldwin, 1923
- Baldwin, 1929
- Baldwin, 1929
- Baldwin, 1930

#### 4-8-4 (Northern) Type

- **S-1**: 2550, 2551, 2553–2555
- **S-1**: 2552
- **S-1**: 2575, 2576, 2578–2580
- **S-2**: 2583–2585
- **S-2**: 2577, 2582, 2586–2588

**Builder and Date**
- Baldwin, 1929
- Baldwin, 1929
- Baldwin, 1930
- Baldwin, 1930

#### 4-6-6-4 (Articulated) Type

- **Z-6**: 4000

**Builder and Date**
- Alco, 1937

### Diesel Locomotives

<table>
<thead>
<tr>
<th>Numbers</th>
<th>Drivers</th>
<th>Horsepower</th>
<th>Engine Weight</th>
<th>Tractive Effort</th>
<th>Builder and Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>33</td>
<td>360</td>
<td>80,112</td>
<td>22,280</td>
<td>GE, 1940</td>
</tr>
<tr>
<td>75, 76</td>
<td>40</td>
<td>600</td>
<td>202,730</td>
<td>50,583</td>
<td>EMD, 1939</td>
</tr>
<tr>
<td>77-79</td>
<td>40</td>
<td>600</td>
<td>202,730</td>
<td>50,583</td>
<td>EMD, 1941</td>
</tr>
<tr>
<td>100</td>
<td>40</td>
<td>900</td>
<td>260,900</td>
<td>65,225</td>
<td>EMD, 1938</td>
</tr>
<tr>
<td>101</td>
<td>40</td>
<td>900</td>
<td>254,590</td>
<td>63,647</td>
<td>EMD, 1939</td>
</tr>
<tr>
<td>102–123</td>
<td>40</td>
<td>1000</td>
<td>250,760</td>
<td>62,690</td>
<td>EMD, 1941</td>
</tr>
<tr>
<td>124–191</td>
<td>40</td>
<td>1000</td>
<td>250,760</td>
<td>62,690</td>
<td>EMD, 1941</td>
</tr>
</tbody>
</table>

(Continued on page 87)
Big Mikado. Oil-burning 3248 came from Baldwin in 1920. Below: Mountain engine 2501 develops 69,780 pounds' tractive effort.

Fifteen 2-10-2s built by Lima in 1914 and later modernized by GN are assigned to heavy drags. No. 2181 is not equipped with booster.
Most impressive of all Big-G power is the R-2 Class. Above: The 2047 just out of Hillyard Shop. Below: 4000 horsepower for the Empire Builder

World's largest single-unit electric locomotives, GN's 5018, 5019 each weigh in at 735,000 pounds. Designed for heavy mountain service they have a continuous rating of 5000 hp. at the rail with 180,000 pounds' tractive effort available at starting.
### Diesel Locomotives (cont.)

<table>
<thead>
<tr>
<th>Numbers</th>
<th>Drivers</th>
<th>Horsepower</th>
<th>Engine Weight</th>
<th>Traction Effort</th>
<th>Builder and Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>134–136</td>
<td>40</td>
<td>1000</td>
<td>250,750</td>
<td>62,690</td>
<td>EMD, 1942</td>
</tr>
<tr>
<td>145–150</td>
<td>40</td>
<td>1000</td>
<td>250,750</td>
<td>62,690</td>
<td>EMD, 1945</td>
</tr>
<tr>
<td>152–153</td>
<td>40</td>
<td>1000</td>
<td>239,780</td>
<td>59,945</td>
<td>Baldwin, 1941</td>
</tr>
<tr>
<td>137–144</td>
<td>40</td>
<td>1000</td>
<td>241,100</td>
<td>60,275</td>
<td>Baldwin, 1943,’44</td>
</tr>
<tr>
<td>175, 176</td>
<td>38</td>
<td>1000</td>
<td>214,000</td>
<td>53,500</td>
<td>EMD, 1939</td>
</tr>
<tr>
<td>177</td>
<td>38</td>
<td>1000</td>
<td>214,000</td>
<td>53,500</td>
<td>EMD, 1940</td>
</tr>
<tr>
<td>178</td>
<td>38</td>
<td>1000</td>
<td>214,000</td>
<td>53,500</td>
<td>EMD, 1941</td>
</tr>
<tr>
<td>179–181</td>
<td>38</td>
<td>1000</td>
<td>214,000</td>
<td>53,500</td>
<td>EMD, 1942</td>
</tr>
<tr>
<td>182–185</td>
<td>40</td>
<td>1000</td>
<td>243,000</td>
<td>61,250</td>
<td>Alco, 1944</td>
</tr>
<tr>
<td>186–195</td>
<td>40</td>
<td>1000</td>
<td>216,000</td>
<td>54,000</td>
<td>EMD, 1946</td>
</tr>
<tr>
<td>200–202</td>
<td>40</td>
<td>1500</td>
<td>233,800</td>
<td>58,450</td>
<td>Alco, 1947</td>
</tr>
<tr>
<td>203–207</td>
<td>40</td>
<td>1500</td>
<td>244,000</td>
<td>61,000</td>
<td>Alco, 1947</td>
</tr>
<tr>
<td>225–227</td>
<td>40</td>
<td>1500</td>
<td>242,500</td>
<td>60,625</td>
<td>EMD, 1946</td>
</tr>
<tr>
<td>228–231</td>
<td>40</td>
<td>1500</td>
<td>247,600</td>
<td>61,900</td>
<td>EMD, 1947</td>
</tr>
<tr>
<td>250, 251</td>
<td>40</td>
<td>2700</td>
<td>453,660</td>
<td>113,415</td>
<td>EMD, 1941</td>
</tr>
<tr>
<td>260, 261</td>
<td>40</td>
<td>3000</td>
<td>405,500</td>
<td>120,875</td>
<td>EMD, 1947</td>
</tr>
<tr>
<td>252</td>
<td>40</td>
<td>2700</td>
<td>462,520</td>
<td>115,630</td>
<td>EMD, 1945</td>
</tr>
<tr>
<td>253–258</td>
<td>40</td>
<td>2700</td>
<td>452,000</td>
<td>113,000</td>
<td>EMD, 1945,’45</td>
</tr>
<tr>
<td>259</td>
<td>40</td>
<td>3000</td>
<td>469,000</td>
<td>117,260</td>
<td>EMD, 1947</td>
</tr>
<tr>
<td>262, 263</td>
<td>40</td>
<td>3000</td>
<td>461,000</td>
<td>115,250</td>
<td>EMD, 1947</td>
</tr>
<tr>
<td>500–504</td>
<td>36</td>
<td>4000–</td>
<td>429,780</td>
<td>107,445</td>
<td>EMD, 1945</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>300†</td>
<td>40</td>
<td>4050</td>
<td>678,830</td>
<td>169,707</td>
<td>EMD, 1941,’45</td>
</tr>
<tr>
<td>301–305</td>
<td>40</td>
<td>4050</td>
<td>691,800</td>
<td>172,950</td>
<td>EMD, 1945</td>
</tr>
<tr>
<td>350–358</td>
<td>40</td>
<td>4500</td>
<td>741,600</td>
<td>183,400</td>
<td>EMD, 1947</td>
</tr>
<tr>
<td>400–428</td>
<td>40</td>
<td>5400</td>
<td>925,650</td>
<td>231,412</td>
<td>EMD, 1943,’44,’45</td>
</tr>
<tr>
<td>(even nos. only)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>510–512</td>
<td>36</td>
<td>2000</td>
<td>217,770</td>
<td>54,442</td>
<td>EMD, 1947</td>
</tr>
</tbody>
</table>

### Electric Locomotives

#### 2 (1-D-1) Type

<table>
<thead>
<tr>
<th>Class</th>
<th>Numbers</th>
<th>Drivers</th>
<th>Engine Weight</th>
<th>Starting Traction Effort</th>
<th>Builder and Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z-1</td>
<td>5004 A &amp; B, 5006 A &amp; B</td>
<td>56</td>
<td>714,400</td>
<td>137,500</td>
<td>Baldwin-Westinghouse, 1926</td>
</tr>
</tbody>
</table>

#### 1-C + C-1 Type

<table>
<thead>
<tr>
<th>Class</th>
<th>Numbers</th>
<th>Drivers</th>
<th>Engine Weight</th>
<th>Starting Traction Effort</th>
<th>Builder and Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y-1</td>
<td>5010</td>
<td>55</td>
<td>518,250</td>
<td>102,645</td>
<td>Alco-GE, 1927</td>
</tr>
<tr>
<td>Y-Ja</td>
<td>5011</td>
<td>55</td>
<td>518,250</td>
<td>102,645</td>
<td>Alco-GE, 1927; rebuilt with streamlined cab, GN ’45</td>
</tr>
<tr>
<td>Y-1</td>
<td>5012–5017</td>
<td>55</td>
<td>527,200</td>
<td>105,150</td>
<td>Alco-GE, 1928,’30</td>
</tr>
</tbody>
</table>

#### 2-D + D-2 Type

<table>
<thead>
<tr>
<th>Class</th>
<th>Numbers</th>
<th>Drivers</th>
<th>Engine Weight</th>
<th>Starting Traction Effort</th>
<th>Builder and Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-1</td>
<td>5018, 5019</td>
<td>42</td>
<td>735,000</td>
<td>183,750</td>
<td>GE, 1946</td>
</tr>
</tbody>
</table>

*Engine with booster, add 12,290 pounds t.e.*

(Oil burners.

†No. 390’s triple units carry A, B, C designations.

#Rebuilt date
USCALOOSA’S 8-mile passenger and freight belt line has run the gamut from steam to Diesel operation in its 50-year history. Constructed before the turn of the century as a steam-powered shortline, the original trackage made a wide 3-mile loop around Tuscaloosa—county seat located in central Alabama, 50 miles west of Birmingham—and then continued 4 miles off into the country to Holt, Ala. This community was the site of a paper mill and foundry, source of much of the TBR’s freight traffic. Even today freight is heavy enough to keep the Belt Railway in existence, if only under Diesel operation.

Interchange with all steam roads entering Tuscaloosa was made via the TBR. In addition to this, the road handled lcl shipments into and out of the downtown business district. The loop around the city enabled the line to provide passenger service locally, while the right-of-way to Holt served the workers heading toward or returning from the mills.

As a steam road, the Tuscaloosa Belt Railway used small dummy engines and had three closed and two open cars for passenger service. They were pulled through town and along the stretches of private track in regular service until the coming of the electrics. A maze of freight sidings were, and still are, located in the busy section around 4th Street. As late as 1914 it was a familiar sight to see freight trains steaming up and down the broad,
Alabama Power Co. meet at the wye in front of Druid City Hospital, Jan., 1941; cars were No. 202 just in from Holt, Loop car No. 220, and Holt-bound No. 204

But in 1907 the steam road was purchased by the Birmingham & Gulf Railway & Navigation Company, operators of steamboats between Tuscaloosa, Montgomery, Mobile and New Orleans. Seven years later they sold it to the Birmingham-Tuscaloosa Railway & Utilities and it was natural that the new owners would seek to electrify the line, making it a consumer of the power it had for sale. Tuscaloosa's citizens offered no objections; the change would eliminate the noise and smoke of the steam trains, and there was to be no interference with the service which would utilize the old trackage. There remained the 3-mile belt around the city, four miles of rail off to Holt and a mile or more of sidings in downtown Tuscaloosa.

The power line ordered five streetcars to replace the passenger coaches and two electric engines for the freight traffic. For more than 25 years the trolleys handled the same schedules, until in November, 1941 they were replaced by buses. Three cars were in regular use and two were kept as spares. One ran around the Tuscaloosa Loop in a clockwise direction on a 30-minute headway; the other pair ran counter-clockwise round the loop, then out to Holt where they halted at the mill. But on each trip the three would meet at Lawn Station, a wye just east of the University of Alabama campus—the car returning from Holt, the car headed for Holt and the Loop car.

Various types of tracks were found throughout the residential city of Tuscaloosa. Inbound from Holt the single track was laid entirely along private right-of-
way, leaving it at Lawn Station—the city limits—to run on unpaved streets. After continuing southward for about a mile, the rails bent west into GM&O trackage, running alongside the adjoining Alabama Great Southern iron. On it went, past the AGS station, turning off to pass between buildings to 25th Avenue, then north up unpaved 25th Avenue to 13th Street. There it twisted east and north again on broad 24th Avenue, one of the principal streets of Tuscaloosa.

Track on 24th Avenue was on a grassed center strip. The single track continued
ties Company, which name it carried until absorbed by the large Alabama Power Company approximately 20 years later. Eventually the APC operated nearly all the small electric-railway properties in the State of Alabama, the Tuscaloosa being the last one to hold out with streetcars.

An attractive, compact brick car barn was built on 4th Street, just a block from Broad Street. It contained two tracks and could handle all five cars. These trolleys were painted yellow with cream and blue trim, and the numbers and company symbol were stenciled in blue. The

for a short distance, becoming double track and finally merging into the middle of the street when the island came to an end near the business district. Moving past the court house, it turned east at Broad Street, principal east-west thoroughfare, and ran along Broad Street and then University Avenue, past the University's buildings to Lawn Station wye to a meet with the other cars.

In 1915 the corporate name was changed to Tuscaloosa Railway & Utili-
Southern Car Company built all this equipment and Number 200, 202 and 204— cars used on the Holt run—were identical. While Car 220 and 402 differed somewhat from the design of the others, streetcars were steel, double-truckcd with double ends. The locomotives were numbered 101 and 102, while the single linecar was Number 300.

When the passenger electrics lost their place to buses—a month before Pearl Harbor—TBR freight was not affected.

Tuscaloosa car barn housed five cream-and-blue-trimmed passenger cars. Two freight motors and a line car completed APC roster.
No. 402, making County Court House stop. Only one of her type, she saw wartime tripper service in Montreal.

But this lasted only for the duration of the war. In 1945 arrangements were made with the GM&O to power the roadway with Diesel locomotives, bringing an end to all electrified street railway operation.

But what happened to the equipment on the TBR, or rather the Alabama Power Company—APC—as it was then called? Well, when local service ended in 1941, the five trolleys were not scrapped, but shipped to Montreal. The Montreal Tramways bought the streetcars and operated them as tripper cars during the war years. They were renumbered as follows: APC 402 became MTC 2036; APC 220, MTC 2037; APC 204, MTC 2038; APC 202, MTC 2039; APC 200, MTC 2040.

The two freight locomotives, however, did not meet with such a happy fate. On abandonment, the juice engines were shunted to the scrap pile, along with the single linecar. So vanished the small belt railway operated by electricity for more than 30 years. And except for the busy Birmingham Electric Company, the Alabama Power Company’s Tuscaloosa line was the last electric pike to operate in the State of Alabama.

Carbarn Comments

SINCE our October story on the rapid-transit subway of Rochester, N. Y.—highlighting the failure of this city to make adequate use of an off-the-crowded-streets carryall—we have received reports from many readers, leading us to believe that this neglect stems from city ownership. It is true that the privately-owned Rochester Transit Corporation does provide the remainder of the city’s local transportation and does develop a certain amount of competition between rival routes. But the management of the subway has been placed in RTC hands, thus creating a monopoly in surface transportation. And it seems quite logical that Boss John Uffert is not too interested in encouraging subway traffic: it means splitting the profits. On the RTC, revenue, not service, comes first.

A great politician, Jack Uffert owns a nice place up along Lake Ontario, where he takes the boys and entertains them royally. Yet in Rochester where he seems to dominate RTC policies, Uffert doesn’t appear to care about operating the subway at all. Readers intimate that nothing would suit him better than to have the whole property junked, and its riders
siphoned into the routes of his bus lines. It would be a matter of lowered overhead.

Fortunately the subway has grown in spite of RTC or Jack Uffert, yet there has been a marked hesitancy in providing bus routes to feed into the subway. The answer to efficient service would be for an independent, fair-minded local operator to take over the subway and win the right to run feeder buses into it at convenient stations. This might drive the RTC out of business, but it would solve the overcrowding downtown which has existed ever since the streetcars were removed in 1940.

*   *   *

ADDING to last month's interesting information about the Anaconda (Mont.) Street Railway, operated by the Anaconda Copper Mining Company, George Chope of Oakland, Calif., tells how the branch line to Opportunity came into being.

The copper company owned some pits in a farming area about eight miles outside Anaconda. A short steam road, the Montana Union Railroad hauled ore from these pits to the smelter located at Butte. Unfortunately, the strong fumes from the smelter killed all vegetation; Butte had neither grass nor trees. And the fumes drifted out toward the pits, ruining the productive farmlands. The farmers sued the company but it did not give them back their farms. So either they moved on to other fertile regions, or they went to work for the Anaconda Company.

Finally the ACM bought up all this desolate land and moved its smelter from Butte to the top of a high mountain overlooking Anaconda. There they erected a stack over 500 feet high, tall enough so that the fumes no longer damaged the land. Lots in the newly-acquired territory were offered at $14 an acre and the place was named Opportunity. Along with these inducements, the company guaranteed transportation to and from Anaconda. They bought up the right-of-way of the then-abandoned Montana Union and electrified it for service in conjunction with their Anaconda street railway.

The Opportunity line operates together with the main route of the Anaconda streetcars. Several years ago there was some talk about substituting buses. At present, however, there appears to be no radical change contemplated.

Chope also tells us that San Francisco
Electric Lines

hasn't given up all hope of getting the 45 new PCC cars they were scheduled to purchase. As you read earlier in this department, an appropriation was made for the cars at the price the latest five were obtained for—$26,840 each. By the time the city got around to asking for bids, however, the lowest offer made was more than $10,000 a car above the former list price. So for the present, the city has decided to buy gas buses. The question of more electrics at the higher price will be brought up again at a later date.

Calvin Lawton, 56 Poplar Ave., Redwood City, Calif., calls the following news from San Francisco a pipe dream; we hope he's wrong. It seems that Frisco's Mayor Robinson has recently been con-

sidering the conversion of Muny's San Mateo suburban line to a rapid-transit route with train operation by electric cars. The Mayor's electric line would deviate from the existing right-of-way through Daly City, entering San Francisco through the old Bernal cutoff and a projected tunnel under the Church Street hills.

As we have said before—regarding any

ers of the same design to handle traffic.

"London has decided to repair its tramways as far as possible, and to this end some track is to be renewed. Newly-painted cars are making their appearances and carbon-skid trolley heads are replacing the old wheels. As yet no one can be certain if this means a reversal of the bus policy of the old London Transport Board by

FROM OVERSEAS, C. George Stevens, 62 Seymour Rd., Leyton, London, East 10, England, comments, "Every month I read your magazine's list of abandonments of the smaller U. S. tramway lines. I believe it has been suggested that a single-truck version of the PCC car might save some of these. With this in mind, it occurs to me that you might be interested in knowing that Amsterdam, Netherlands, has put into service a group of new cars—each quite small—but of a PCC type. In all, there will be 58 new cars with motors and 50 additional trail-

Is this the oldest streetcar in regular U. S. service? Buit by St. Louis Car Co. in 1901, No. 10 gets a breather at Opportunity, Mont., before reversing her Anaconda Street Ry. route
the nationalized London Transport Executive. We'll wait and see what happens."

* * *

WHILE these columns have frequently carried news and information on electric lines around Chicago, San Francisco, New York, Salt Lake City and other popular spots for juicelovers, one correspondent sadly relates that almost forgotten are a group of electrics which ran in the Missouri-Kansas-Oklahoma corner of the U. S. Among the lines serving this territory were the Joplin-Pittsburg Railway, Southwest Missouri Railway and Northeast Oklahoma Railway and others.

These were not small roads, either. Less than 20 years ago you could travel directly from Picher to Joplin, a distance of 50 miles, or go via Columbus, Kans., and Pittsburg, Mo., for a 90-mile trek by trolley. Yet today these roads are all but forgotten.

Just delivered to Municipal Ry. of San Francisco. PCCer 1009 still carries warning "Do Not Hump This Car." She's one of five new reasons for not riding buses

NOW available is a history of Manhattan and Queens Traction Company which, until 1937, linked New York City with South Jamaica via the Queensboro Bridge. Copies of this 8-page story contained in the Marker—publication of the North Jersey Chapter of NRHS—can be obtained from R. S. Wendeling, 114 Oakley St., Roselle, N. J., at 25 cents each.

* * *

RUNAWAY TROLLEY. "Years ago when I lived in Vicksburg, Miss., and that city was served by the street railway," writes Thomas J. Roddy, U. S. Veterans Center, Biloxi, Miss., "an accident occurred one Sunday morning that had the whole town by the ears. As everyone who has lived in or even visited Vicksburg knows, the place has numerous hills; old residents called it Hilly City. Well it was one of the hills that did it—caused the runaway trolley, I mean.

"Vicksburg's streetcars were small 4-wheeled affairs, with a rail on the outside used by passengers for loading and un-
Snow fell on Mississippi, Vicksburg that is, in 1920, compelling 135's motorman to probe for slush-choked switch

loading and by conductors going from the front to the rear to collect fares. One of these cars started down a single-track grade at a snail's pace that day when suddenly, as it began to pick up speed, the motorman realized it was out of control. Immediately the man made frantic efforts with his hand brake, using all the strength he could muster. But since the electric current was off, even using his controller in reverse failed to reduce the speed of the runaway. The front end began to rock—as it did whenever the car made 15 or 20 miles an hour—and after a third attempt to slow her with the controller, the motorman warned his passengers to unload while they still had a chance.

"The motorman and conductor disappeared in a cloud of dust near South Washington. Soon afterward they were followed by the more daring souls—it was a case of follow the leader. The trolley shot down the grade, its whining wheels attracting the attention of great numbers of pedestrians. It continued its wild ride for four blocks farther and then left the rails on a curve, crashing through a brick wall and on into a saloon. As it mounted the sidewalk, it struck and killed an old colored man who was sitting in front of the building enjoying the warm sunshine.

"The head end of the trolley came to a stop with its drawbar stuck hard and fast into a barrel of whisky after demolishing several others. It narrowly missed hitting the bartender and the story goes that the next morning there was a new man at his post: one bartender had given up his profession for life. Since the car was empty when it struck, only the poor old Negro lost his life in the accident. Yet there were a good many passengers who were scraped and bruised and most uncomfortable for the next few weeks.

"Don't think that the clergymen in town didn't make use of this story on the following Sunday. They noted that no good Christian, at church when he should have been, suffered any injury from the runaway. And runaways did not occur often enough to let people soon forget this accident."

* * *

CREDITS. Our apologies to the photographers whose names were unfortunately omitted in our November issue: State Senator Chauncey Hammond of Elmira, N. Y., who sent us the fine Elmira, Corning & Waverly photograph (page 83); and to John Tolley, 375 Hutchinson Blvd., Mount Vernon, N. Y., whose persistent efforts uncovered the New York & Stamford open car (page 83).

Coming Next Month:

"Not A Wheel Turning"—a Trolley Fiction Story
Out of the Car Shops:

Milwaukee Rail Car

First "car of the month" to house a 1000-horsepower Diesel engine beneath its streamlined sheath, the Milwaukee Road's 5900—and its sister 5901—is an experimental rail car being put through its paces with actual loads and schedules. For the past eight months Number 5901 has averaged 400 miles a day on the branch line between Harlowton and Great Falls, Mont.; meanwhile, the 5900 has been tested at different points along the Northern Division to assay its full powers and limitations.

Rated at speeds up to a maximum 75 miles an hour while hauling four or five trailers, the Diesel baggage units are performing the job designers once blueprinted for gasoline-driven motor cars. And the Milwaukee is optimistic about the yearly cost for fuel and repairs. Officials figure that each unit will net an annual saving of $50,000, as against coal-fired steam operation on similar runs.

Company engineers designed the models and laid down the first on December 15, 1947, in the road's Milwaukee Shops. On
April 30, 1948, this car was released for service. Exactly 85 feet long over couplers, it is divided into two sections: 35-foot forward portion includes the operator's cab, power equipment and the steam boilers, capable of supplying 1600 pounds of steam per hour; the rear half—45 feet, 8½ inches long—houses the wash room and ample baggage space. Resting upon 6-wheel trucks of cast-steel, spring-motion design—with coil and semi-elliptic springs in series equalizing weight distribution on all wheels to provide easy riding—the baggage-car body is modified to permit the use of 36-inch wheels, while still maintaining standard height of the draft gears and couplers. Total weight is 221,710 pounds; starting tractive effort, 23,455 pounds. Two of the axles in the front truck are gear-driven from two electric traction motors mounted in the truck.

Number 5900 and 5901 are a further step in the direction of overall Dieselization. Since their power equipment duplicates that used in General Motors passenger engines, Milwaukee brass looks forward to interchange of parts and a smaller parts inventory. Yet in exterior design, the Diesel hybrids depart somewhat from standard contours. A short nose—embodying both headlight and white oscillating beam—backset windows and 35-foot stretch beyond the usual length of a Diesel single unit give these rail cars a distinctive, rather massive, appearance.

Milwaukee's new baggage units carry heaviest packages up front—1000 hp. Diesel engines mounted securely on center sills
SAY "personal damages" to a Western railroad official around 1919 and the chances are that two out of three would turn white. Why? For three or four years at least the railroads of the West had been victimized by a firm of attorneys who specialized in injury cases. It was a racket. All they needed to get into action was a minor accident; any tumble would do, where the man refused assistance because he was certain no harm had been done. But one of their assistants would visit this fellow, sympathize with his ill-treatment by the road and then warn him of the future complications of his internal injury. Was he prepared to be a cripple all his life, with no compensation for his trouble? No! Well, sign this document and they would get him justice.
Because the sympathy of jurors in the case of a large corporation vs. John Doe goes out to the little man, the railroads were losing a heavy percentage of these trials. Too many! So in February, 1919, I was sent to a rural town in northern Minnesota to defend the railroad against such a case. It was cold, bitterly cold when I arrived at K-Ville, as I will call it, and I knew the job ahead of me would be anything but pleasant. My superiors had briefed me well in the particulars of this case and I had strict orders: whatever the cost I was to win this judgment! The U. S. Railway Administration stood behind me to offer all assistance, since this was now a matter of the administration's domain. A wartime emergency act had placed all carriers in the hands of the government, and the administration had contracted to handle all matters that originated before January 1, 1918.

The plaintiff in this case was a young girl. According to her testimony she had been injured while attempting to board a passenger train in Minneapolis Station.
It had been freezing cold and wet that day; the steps had been slippery, so she was being very careful. Just as she was about to reach the top, however, the train gave a sudden jerk which threw her backward to the ground. Her spine struck the edge of the metal stool used to assist passengers on and off the train, which no doubt caused the trouble that followed.

Yet she completed her journey that day without making any complaint to the train crew. It wasn’t until two months later that the railroad heard anything about it, and the news item was a far from friendly report. A suit for $200,000 damages was filed against the line for personal injury resulting in tuberculosis of or in the sacroiliac joint of the spine.

Well, most of the people in K-Ville were of Scandinavian descent, as was the girl. We knew our chances of getting a favorable verdict were very slim, yet we had to try. The case was to open on Tuesday morning and I arrived in town on the preceding Sunday night. Only two men there could recognize me as someone connected with this suit, for we wanted it that way. Those two were local attorneys, who had formerly taken care of the railroad’s affairs, and until Tuesday they were to be busy with the selection of a jury for the trial.

First, however, they announced to the court that a Railway Administration lawyer would appear later to handle the case. They had to ask each man proposed as a jury member if he were acquainted with the writer of this article, or if this man DeLaney had ever been his own attorney. Of course, the answer was “no.”

The first day I made no appearance at the court house. Since it was a small town with only one hotel, the manager soon remarked on the fact that I had called at neither the bank, the stores nor the court. What was I doing there then? I saw that query written on his face as I went into the dining room for meals. I suppose he passed the word along to the hometown boys, for that evening the Scandinavian minister dropped in to see me. He was just passing by and had made a practice of stopping in to say hello to strangers.

It was only a few minutes until he asked quietly, “Are you interested in the outcome of this case?”


“I’m sorry,” he said apologetically, “but I thought everyone knew about it. even strangers. It’s one of our Scandinavian girls. She was dreadfully injured in a train accident some time ago and now the railroad’s trying to cheat her out of her rightful damages. That’s why I’ve come to town today, to give her moral support. They won’t get away with this, though, not if we have anything to say in the matter. We’ve a good Scandinavian judge and the honest townspeople will see that the right thing is done.”

“If sure they will,” I replied sincerely. I was tempted to add, “when they know the real facts.”

THAT WAS Monday night. Tuesday morning the court opened promptly at nine. By that time the jury had been chosen by the two opposing attorneys, and it was agreed upon by my associates and myself that I would remain incognito until a signal was given. I went to the court house that morning merely as a spectator, strolling along the muddy street and walk that led up to that imposing building. Many were there ahead of me, when I took my seat at the back of the room. The whole town was in that room—well, it looked that way.

We’d arranged to have our lawyers read a short concise statement, denying everything the opposing attorneys had claimed. It was up to them then to prove the damage. So the trial began dramatically when the first witness called was the Minneapolis physician who attended the girl, and hastily reviewed the facts of the case. I say hastily intentionally, since he warned us all before he started that he had to hurry back to the city to perform a very delicate operation. Then he described the girl’s injury, a serious bruise or crack at or on the sacroiliac bone
—that section of the spine where the column meets the hip bones and forms a joint. As a result of this bruise or crack, a bone infection had set in, an infection that was causing the paralysis of the left leg. My associates cross-examined the doctor thoroughly and then the court was adjourned for lunch. The doctor went back to Minneapolis.

The real scene came when the jury returned from lunch. The girl herself took the witness chair, after being carried down the aisle in a wheel chair supported by three men. It was a pathetic sight, that young girl unable ever to drag her leg, condemned for the rest of her life to being crippled. You could hear murmurs running through that room; if there was one man present who might be personally blamed for the accident, there might have been threats of lynching. But as it was, they only grumbled, the women saving their tears for the sad tale they knew was bound to come.

Gently, her attorney asked her to speak to the court, to tell them what had happened that terrible day in Minneapolis, when she had tried to board the train. With no more encouragement, that girl began the woeful story, which I as a hard-boiled court lawyer recognized as well-rehearsed. It was plausible, of course; she had struck her spine and soon the pain began. Next thing she was confined to a Minneapolis hospital for treatment, and all summer long she lay on her back, while her left leg grew more and more useless. Finally there was no feeling in it at all. She learned to move around, but only with the aid of crutches. Most of the time she sat in a wheel chair.

They came then to the final question. “When you use your crutches in an endeavor to move around,” said the counsel in loud tones, “can you put your left foot on the ground at all?”

The witness hesitated. Before she spoke, she opened her purse and drew out a small handkerchief. For a moment it looked as though she might weep. But
pulling herself together with obvious effort, she held back her tears. “No, I cannot put my left foot to the ground at all,” she told the jury in lowered tones. “I can’t move it or feel it at all.”

“Your witness,” her attorney announced, making a sweeping gesture toward my associates.

I rose to my feet at this moment, the signal to my companions to introduce me to the court. One defending counsel stepped up to the judge. “May it please the court,” he said, “this is Mr. DeLaney, whom we mentioned before at the selection of the jury, who will now take charge of the defense, the jury having been interrogated as to any knowing him, or being influenced by any connection he may have had in the past with Mr. DeLaney.”

“Let the record show Mr. DeLaney as one of the defense counsel,” replied the court with due ceremony. “Proceed.”

I bowed and took my place close to the witness box. While those seated outside the railing were still craning for a look at me, I asked my first question. I could see instantly that the witness had not been prepared for this one; but I got greater pleasure at the startled look on the faces of my own associates.

“May it please the court, at this time the defendant asks that he may be allowed to have the left shoe of the plaintiff marked as plaintiff’s exhibit for identification, Number 1, being impossible to offer same as evidence on cross-examination without agreement of counsel.”

That set off the fireworks! The girl’s counselors began shouting objections with such intensity that no one could be heard. Their excitement caused confusion among the jurors and the people assembled outside. These people had no idea of what I was driving at, so they were very shaken by the attitude of the plaintiff’s lawyers. When these fellows calmed down a bit and I could make myself heard, I told the judge that I had no objections to the court giving them time to argue this out. However, I did object to their arguing in the presence of the jury.

“Will the counsel tell us why he makes this unusual request at this time?” asked the court.

“Your Honor,” I replied, “I feel this is merely a trick to keep me out of this trial. For if I answer your question, it may be said that I gave important testimony and also reviewed evidence also given. I’ve no objection to giving my reasons and letting her counsel argue same, if I’m allowed to answer him, too. But, of course, this must be in the absence of the jury.”

“Counsel’s correct on that,” returned the judge. “All such argument must be in the absence of the jury.”

THE JURY was sent out of the room. So for the next 40 minutes we all wrangled over this point. I refused to tell why I wanted the shoe marked as Exhibit 1 until I had cross-examined the star witness, since then and only then could I offer it as evidence. I agreed, however, to have her wear the shoe, even though it were considered evidence, if we were allowed to see it for only a few moments. It was a pretty exhausting battle, but in the end I was satisfied. The court granted me the right to the shoe’s being marked as evidence.

At a sign from the judge, the jury was recalled and I continued my questioning of the girl. “You testified that you cannot put your left foot to the ground nor use it because you have no feeling in it or power. Then will you please tell the court and jury how did so much mud get on the shoe, marked defendant’s Exhibit 1? Did you get that mud on your shoe as you crossed the street?”

I held my breath as she answered the question, answered it before her own counsel could shout a warning. “Yes, I did,” she said simply.

You could hear the effect in the silent room. The girl they had come to save had denied their help; she was beyond any assistance they could give. I felt sorry for them; almost sorry for the girl who’d allowed herself to be talked into this deal. But no matter how you looked at it, pay-
ing out good money for an injury that didn’t exist was a swindle. And these crook lawyers had been using the greed of the supposed victims as a comeon for their high-priced racket.

The opposing counsel rose to his feet to demand that her answer be struck from the record. The court promptly denied this request. They ordered me to continue with my cross-examination. You could see new interest on the faces of the jury.

“How long have you worn these shoes?” I asked.

“Two or three times.”

Again there was a violent argument by her lawyer. Again his motion was overruled. “Has the counsel for the plaintiff any redirect examination?”

“No,” he admitted angrily. “But we will use her as a rebuttal witness.”

It was my turn to address the judge. “Now, Your Honor, I do not want to be unfair or cruel to this young lady, and have her go home without her left shoe on. So I will ask that she remove her left shoe for a few minutes that we may offer it in evidence as to the condition only, and then return it to her.” It took at least ten minutes’ bitter argument, but again we won out. The court requested the girl to remove her shoe so that the jurors might see it. The jury, of course, had heard her remarks about not being able to even put her foot on the ground. I needed only to say, “Look at the sole and the heel of this shoe, that sworn testimony says was worn only twice. Please pass it along to the other jurors then, so that they, too, can examine its condition.”

All eyes in the courtroom were focused on those twelve men and women. It was obvious as the shoe passed from one man to his neighbor that their sympathies were being changed. When the jury had finished, the clerk of the court returned the shoe to the witness herself. She replaced Exhibit 1 on her damaged foot and I resumed my questioning.

“Do you play tennis?”

“I did before I got hurt,” she answered, “but not since.”

At that point the plaintiff’s attorney rose from his chair. “If it please, Your Honor,” he announced deferentially, “the plaintiff asks for a few minutes’ conference with the attorneys for the defense. We feel that we can shorten this case considerably.”

“Is it agreeable to you?” the judge asked. I nodded.

Well, that conference was something for the books. Not only did the plaintiff’s attorneys regard me with awe, but I could see my own associates were anxious to get me alone for an explanation. I knew they’d wait. My first
I looked at my watch. It was almost time for the court to close for that day. “All right. But that’s the extent of my leniency,” I replied sternly.

That night I was careful to stay out of their way, though it wasn’t an easy job. Her lawyers were rooming in K-Ville’s one hotel also, and they did their best to waylay me going to dinner. So I arranged to have my meal sent up, dining with my associates. I wanted no charge of conversing with the jurors, neither did I want to become embroiled in any discussion. Eventually they had to send a message asking me to join them.

“I’m sorry,” I told the bell hop, “but I’m too busy. Perhaps they could come up in about an hour and I’ll try to see them then.”

Sixty minutes went by and they were rapping on my door. Our conference was short but pointed. We went over the facts of the case: I told them we had a person working in the hospital, where their client was supposedly a patient, and he’d taken photos of her when no one saw his camera; we also had a shot of her with our witness, talking between halves. We weren’t attempting to deny that the girl was hospitalized for a short time, but we did deny that this visit was caused by personal injuries. We weren’t interested in stealing her reputation, still we weren’t going to let her steal our railroad.

“See you in court in the morning,” was the only comment. I opened the door and closed it quietly behind the attorneys.

As soon as the court opened, the plaintiff’s counsel rose and made a motion to dismiss the suit, without giving any explanation. I’d expected this, so I was on my feet in a flash. I was having no part of this, for if the case were merely dismissed at their request, there was nothing to prevent their reopening it at a later
date. If it were to be dismissed then it must be dismissed "with prejudice"; this would give the truth of the accident to these honest townspeople. I didn’t want them to go away thinking that once again the railroad had cheated "the little man."

The judge saw my point instantly. He denied the attorney’s motion, unless he included the words "with prejudice."

Into writing then went the plaintiff’s motion, "Comes now the plaintiff by her attorneys and moves this court that this cause be dismissed with prejudice, on motion of attorneys for plaintiff."

You can be mighty sure that the large farm audience was disappointed. They filed out of that courtroom like people who had paid their money for a bad show. My associates, however, were anything but chagrined. Right off the bat they wanted to hole up in my room and hear what had happened to cause me to change our plans. We’d never once figured on taking the offensive; we’d a clear-cut defense, which was the best we could hope for. Yet we never used our defense testimony in court.

"We figured this must have been your first appearance in court," one of them admitted. "When you pulled that business about the shoe, I considered asking the court for a recess to find out what was in the back of your mind."

I laughed. "I surely couldn’t have told you ahead of time, because it was a bit of luck I never thought of. Sitting out with the gallery, I saw mud on her rubber and the top of her shoe, and I knew you wouldn’t notice since her feet were out of your vision. There was only one way she could have gotten so much mud on her rubbers and stockings . . . by crossing the street to the court that morning. I hoped to find her left shoe worn then, but there was a chance that her lawyers would have her wear new shoes. I’d have been sunk then, unless I got the jury to accept the mud as proof she had been walking."

"But why didn’t you send us a note?" he asked.

"I was afraid to do anything to arouse their suspicions. You never know what they might have tried; after all, they’re professionals in this game. And I had a big stake, even besides winning the case for the railroad. That Scandinavian minister who visited me assured me ‘God always favors the just and truthful.’ I wanted to prove him right. If I could help it, there’d be no chance for these boys to crawl out a back way."

Don’t think this trial didn’t have its effect in the West. The U. S. Railway Administration never again had to try a case against this pair of attorneys. And it was the beginning of a new era in Minnesota trials against the railroads: the carriers found they could expect to be treated like any other defendant.

I didn’t come out badly myself. Before I left K-Ville, I was invited to return the following summer for the town’s famous sport, fishing. When I went I received a cordial welcome, and through the years I’ve spent many happy hours there. Now that the war’s over, I hope to go back.

---

**Headache Relief**

Thanks to Famous Bromo-Seltzer

_Millions turn to Bromo-Seltzer to relieve ordinary headache three ways. It’s famous for giving fast, pleasant help. Caution: Use only as directed. Get Bromo-Seltzer at your drugstore fountain or counter today. A product of Emerson Drug Company since 1887._
Measure of a Man

By RALPH EMERSON WOODS

Back in the late 1880s there occurred a great strike of trainmen on the Chicago, Burlington & Quincy Railroad, and the disgruntled workers resorted to considerable violence in their efforts to win their demands. Powdered emery was placed in the journals of locomotives and rolling stock. Trains manned by white-collar workers would start out from division points but become stalled within a few miles by blazing hot-boxes and the entire train put out of commission. In an effort to paralyze the system, they even placed chemicals in the water tanks to make the boilers foam.

Young George W. Perkins had recently been elevated to the position of president of the Burlington. Perkins fought the strikers tooth and nail, purchasing new locomotives, borrowing equipment from other roads and placing a U.S. mail car in each train. It was a prolonged and expensive struggle, and in the end the trainmen lost their case.

Naturally, there was a great deal of bitterness over the result. For enginemen and conductors who had worked up from the bottom were summarily dismissed and blacklisted. Jobs, elsewhere, were not too easy to get either.

In my travels I made friends with a retired engine runner known as Jack, who had drifted west after his dismissal, landing finally in Pocatello, Idaho. Due to a natural pass in the mountains, Pocatello is known as the “Gateway to the Northwest” and in the beginning was really a tough town. Its population consisted of railroad men and their families, with a sprinkling of cowhands and Bannock In-
ians thrown in as if to add to the picturesqueness of the scene. There was a very large wooden station and lunch room, waiting room and ticket office on the main floor and executive offices upstairs. This has long ago given way to a structure of modern architecture and conveniences.

As late as 25 years ago oldtimers in Pocatello spoke of the narrow-gage line that had run up to Butte. Years ago, the Oregon Short Line Railway merged with the rails of the Oregon (Washington) Railroad & Navigation Company to complete another transcontinental line across the country. My friend Jack picked up an assignment on the shortline as engineer on a switcher. Jack often said that the members of his crew were about as tough as they made them; in liquor and profanity, they excelled. They also prided themselves in the skill and speed they used in breaking up a string of rattlers, shuffling them around like a professional card sharp and placing them in their proper place.

Now Jack considered himself a pretty fast man with steam until he met up with this crew, who never stopped screaming for more speed, flailing their arms in windmill fashion. He stepped up his tempo. When they’d pull open a string of varnish to set in a sleeper or a diner, Jack would open full up, upset the fire, and throw cinders, smoke and steam rolling high into the air, before putting them back together as gently as if they’d been made from egg shells.

Well, one evening when they came to work, they saw a beautiful private car on a siding. Word quickly passed around that it was the traveling residence of George W. Perkins, his family and friends, who were touring the West. The party was traveling only during daylight to get a better view of the country.

Nearly all of the crew were old Burlington employees. As the night wore on the flames of an old hatred were fanned by consumption of considerable whisky, with continuous replenishments from a nearby saloon. There was much muttering and cursing, and around the small hours of the night they decided to give George W. Perkins of the mighty Burlington a good shaking up and the scare of his life. Pushing a loaded car they bore down on the Perkins car, whose occupants were resting in peaceful slumber.

It was the crew’s intention to hit the varnish car with just enough momentum to shake up the occupants; but according to Jack’s version, the man numbed with liquor failed to signal quickly enough, or not at all, with the result that they rammed the beautiful car with terrific impact. As the sharp crack of the collision settled, the silence of the night was ripped up by the shattering of glass and the screams of terrified women and children. Then a door opened quickly. George Perkins came out, attired only in his night garments. “Men,” he said, “if you bear against me a personal grudge and wish to kill me, I am here. But for God’s sake and your own sakes, do spare the women and children.”

The situation was dramatic in its intensity. The official remained standing in the open under a fading moon, twinkling stars and a background of great purple mountains. The silence was unbroken and in the dim light the men stood sullen and immovable. A wisp of steam hissed from the dome, black smoke curled up from the stack and a man in white stood on the platform, defiant and unafraid.

Finally the foreman signaled the engineer to back away and they rolled slowly away to the switch shanty. Sober now, the crew talked the matter over seriously and concluded it had been a great mistake on their part. As one remarked, “God, what a man!”

From that night on Perkins was a hero. They would often mention his name, when one of the men boasted as how he would run a railroad if he were in charge.

“If you was only half the man that George Perkins is,” another would tell him off, “you too might be a brass hat and riding the varnish, instead of switching cars like the dumb ass you are!” The old animosity was forgotten.
Over the Hump

It’s as easy as falling down a ladder. In fact, that’s what freight cars at Pocatello, Idaho, have been doing since Union Pacific erected the artificial hump that gave Pocatello’s classification yard operations over to gravity. These assembly lines must first disassemble trains from the receiving yard. Retarder yardmaster, at left, directs all proceedings; he first charts cars for tracks according to destination, then directs switchmen how to cut cars from incoming trains for the roll down to the twenty-eight tracks below.

Inside the towers at left and right in foreground, operators face lighted boards showing which cars have passed onto tracks designated by the retarder yardmaster. Loudspeakers instruct the operators on car weights and what air pressure is needed in the pneumatic retarders.
Car in right foreground, *above*, has just turned onto tracks it was charted for. Retarders hold its speed to a steady three to five miles per hour to point, *below*, where Pocatello's departure yard begins. Here Diesel power takes over to make up outgoing road trains.
FIDDLETOWN & COPPEROPOLIS RY.

No. 5 Yuletide Conviviality at the Roundhouse Gathers Guiding Spirits of the F & C.

Reading from left to right, standing: Forney Hobbs, Master Mechanic; C. C. Crum, Treasurer; Artemus Bagley, Vice President & Gen'l Mgr.; Theophilus Stone, Freight Agent; J. W. Sines, Trainmaster; Unidentified Engineer. ** Seated, left to right: Anson Q. Updyke, Superintendent; Lucius Smiley, Legal Counsel; Dillon P. Yancey, President; Zebulon Poe, Roadmaster; Enoch Pinchpenny, Conductor. ** Floor, left to right: Darius Crouch, Dispatcher; Gideon Foster, Shop Foreman; Judah Merkle, Locomotive Repair Foreman; Smokey, Office Cat. ** Unable to pose for this picture because of previous commitments at the Golden Nugget Saloon were Traffic Manager Dabney Panfill, Boiler Shop Foreman Geo. Poe and Car Shop Foreman Abraham Potts.

by Carl Fallberg
MOST EXCITING event in the rail-telegraphy career of Elise Agnes Mielke, now living at 202 W. Plata St., Tucson, Ariz., centered around the first major wreck she witnessed, back in 1910. Seventeen-year-old Elise was then working for the Northern Pacific at Cocolalla, one of the loneliest stations in the mountains of northern Idaho. Her quarters were a condemned boxcar.

"That afternoon," she recalls, "while I rode the engine of the wrecking train to see how the big hook operated, the fireman told me about some terrible things that had happened to certain railroaders who had got in trouble with foreign-born section gangs. Most of us naturally dis-like having our way of life criticized, and the swarthy laborers I saw gathered around the wrecked train were no exception.

Of course, I intended no harm. But their big loaves of bread looked quite different from those to which I was accustomed. The loaves were mixed up grotesquely with the wreckage, some impaled on splintered boards and held aloft at crazy angles. To me at the time they seemed funny, and I made some wisecracks. The laborers did not appreciate my remarks. Later, I shuddered at the recollection of their threatening glances.

"That night, when the alarm clock awoke me after a few hours' sleep, I thought of those men's faces. Whatever humor I might have felt during the afternoon vanished in the darkness of my boxcar home. A slight noise outside gave me the first case of jumpy nerves I had ever known. I was sure I saw a dark face peering in at a window. Shutting off the alarm, I drew the shades, lit a small kerosene lamp, and dressed quickly.

"I regretted my wisecracks. 'You and your big mouth!' I scolded my image in the mirror as I began to prepare some lunch. Tossing sandwiches and a couple of doughnuts into a paper bag, I blew out the light, then drew a long breath to quiet my pounding heart, and sprinted across 30 yards of darkness to the friendly glow of the telegraph office. You can't imagine how glad I was to see Mrs. Frank Owen, our second-trick brass pounder. Mrs. Owen, whose husband worked the first trick, expressed surprise.

"'Elise,' she said, 'it isn't even ten o'clock yet. Why are you up so early?'

"I explained about the noise and the face at the window. She said with a smile, 'I hear you've invoked the wrath of our extra gang. Would you feel safer if I loaned you Frank's six-shooter?' I nodded. Mrs. Owen handed me the weapon. Later she made a transfer of duties and retired to the apartment she shared with her husband in the rear of the station.

"As soon as she left, I dimmed the light and shaded the lamp. I was about to seek the shadows behind the big pot-bellied stove that heated the room in cold weather when the operator at Paradise, our eastern-terminal telegraph office, called me for a message. The message informed me that a westbound banana train was due in Cocolalla for re-icing at 2 a.m.

"After timing the message, I hooked it, aware that I'd have to go down through the uncertain darkness to call the icing crew at midnight so as to allow them time enough to get the ice ready. Then the trouble started. Extra 1504 west arrived at 11:30 with instructions to pick up 8 banana cars which had already been re-iced and set out on the eastward passing track.

"Suddenly a splintering crash rent the air. I shivered. No. 1504 had plowed into a string of outfit cars in which the trackmen were sleeping! Screams and imprecations told me that there were casualties. I reached for the phone, called Dispatcher Sam Whitely.
"'I'm afraid,' I faltered into the mouth-piece, 'there's been a terrible wreck here.' I informed him what I knew about it, and then went out to get further details.

'A rifle shot in the darkness sent a bullet whizzing close to me. Two more followed in quick succession. I heard men running toward me, shouting wildly. One of them followed me into the office and rushed to the dark corner behind the stove, covering himself with empty mail sacks. 'Hide me! Hide me!' he pleaded. I tossed the remaining sacks over him, but could not get a word of explanation. I judged him to be the fireman.

"Five more men tumbled in, slammed the door shut, locked it, and wedged themselves against it. They were the rest of the crew and the interpreter for the extra

Million-dollar blaze swept CNR's Montreal freight sheds last August. Flames raged more than 8 hours, but historic Bonaventure Station was unscathed.

Canada Wide Photo
The fireman came out of his hiding place rather sheepishly and helped them to barricade the door.

"Outside, I saw and heard a gesticulating mob armed with clubs, daggers, rifles and pistols. Quickly I blew out the light. The dispatcher's bell rang. 'What's going on down there?' Mr. Whitely inquired.

'Just a minute,' I replied. 'Conductor Ed Prideaux is here. I'll ask him...' He says you should give No. 4 a message telling them that the mainline is blocked just east of Cocolalla. There may be some laborers killed or wounded. No. 4 had better stay a safe distance west of the station. We'll signal when it's safe to approach. I'll get you the whole story while you give that message to Four. Just a min—'

"Wait! Are you in danger?"

"'Oh, I think we can take care of ourselves,' I blurted out with a nervous laugh. 'Those fellows are armed and they're trying to break in the door, but the office is dark and they can't see us.'"

"'Well, keep your chin up! Guess there's nothing we can do for you from here.'"

"Conductor Prideaux spoke up then. He chewed at his white, tobacco-stained mustache as he explained what had happened. 'We tried a flying switch, to save time, and our engine rammed into several of the outfit cars. They gave us no time to investigate the extent of the damage done or find out how many men in the cars were killed or injured; they were after us like a swarm of bees. Crazy, that's what they are. Can't say I blame them much.'"

"He turned to the engineer, George Belmore. 'Say, George, how's the boiler fixed for water?'"

"'Chances are she'll be needing some Soon,' he answered, 'but I'll let her blow up before I risk my life with this mob.'"

"'We can't do that!' cried Prideaux. 'A lot more men would be killed. I'm going down to turn the injector on.'"
No. 6, on the old St. Louis & Hannibal line, may never have handled long circus trains for Ringling; but reduction to a single buggy seems unfair.

"The other men tried to prevent him from going, but he pushed them aside. 'Hell, I'm over eighty. I ought to be dead anyway. If they get me, there'll be little harm done.'

"He slipped quietly through the door that led to the kitchen of the Owen's living quarters and went on out to the rear of the station, following a circuitous route. That plucky fellow did not seem to know the meaning of the word fear. He returned safely with the news that he'd found the water gage showing empty.

"No. 4 approached from the west. Her engineer called repeatedly for signals. None was given. He stopped his train, a 12-car passenger, some distance from the station, and walked over to the mob with his fireman. Both men toted guns. The dazed trackmen backed away.

"When the newcomers entered our office, the interpreter, Ted James, said he thought he could reason with the besiegers, now that there were guns to sustain his argument. The trackmen capitulated. Arrangements were made to put the dead and injured into the baggage car and take them to Sand Point, where the injured could be given hospital treatment.

"The following night, after I thought the trouble had been cleared up, I heard a wild, blood-curdling scream that paralyzed me with terror. Some killer must have struck! Had a trackman gone berserk as a result of the tragedy the night before? Would I be the next victim, merely because of those silly remarks I'd made about bread impaled in the train wreckage?

"Eventually a conductor, John Garber, calmed my fears by pointing out that what I had heard was only the cry of a cougar. Well, that was bad enough. But not one-sixteenth as bad as a human killer. Only a cougar! As I said, I was just barely seventeen, and Cocolalla was a very lonely station in the mountains of northern Idaho."

* * *

MEMORIES of the old St. Louis & Hannibal, abandoned in 1944, come to Lad G. Arend, Rte. 2, Franklin, O., who found both romance and adventure on it. Arend was a short-line boomer. The StL&H was the eighth short line among those he worked on that later passed into history.

"It makes me sad and a little weary," he writes, "to see these roads go. However, they will always live in my fond recollection. The StL&H was one of the last survivors of the Ringling lines. Back in 1917, the circus man John Ringling came to the rescue of this line. At that
time its rails extended from Hannibal, Mo., southward through New London, Frankford, Bowling Green, Eolia, White-side, Silex, Troy, Moscow Mills and Gilmore, where it connected with the Wabash for St. Louis. A branch ran from Ralls Jct. just out of New London up through Center to Perry, a distance of 20 miles. It was to have been extended to Mexico, Mo., and was partly graded, but never went beyond Perry.

"Part of the road, when built into Bowling Green, was called the Pike County Short Line. The StL&H carried the name ‘Short Line’ up to the time it was abandoned. I worked on that road for years as station accountant and traveling auditor. When Ringling took over, the road was running a passenger train which left Hannibal at 5:15 a.m. and arrived at Gilmore about 3:30 p.m. After the Wabash connection came in, the train returned to Hannibal, arriving about 3:30 p.m.

"Conductor Jake Totch ran the main-line varnish, and woe to the man who would turn over the seat ahead of him and rest his feet on the cushions! This train was Jake’s pride. He saw to it that passengers had clean seats. Besides the varnish, there was a freight each way, and there were occasional extras. The road was then hauling much cement traffic from the Atlas Portland Cement Co. Ray Mosley, who skippered the branch mixed train, fell off a car one day while switching, and the wheels rolled over him. Sam Biggers then took the run.

"Ringling found they needed heavier power for the cement drags, so he sent some old Erie engines from another of his lines, the Dayton, Toledo & Chicago, to relieve the situation. He also bought a lot of New York Central engines, both freight and passenger, along with several hundred produce cars. The StL&H built a large car shop near Oakwood and purchased most of the carshop machinery from the old Barney & Smith Car Co. of Dayton, O., for its own use.

"An amusing situation occurred when an extension was built to the engine house to take care of the larger power. Several weeks after this had been completed and the heavy doors put in place, the repairs and painting on old No. 7 were finished. She was ready to go back into service, but lo and behold, she was walled in at one end! Part of the new extension had to be removed to allow her to get out of the house.

"At length a motor highway was built to parallel the railroad, and passenger business dropped to almost zero. Freight, too, fell off. The line south of Bowling Green was abandoned first. Rail-buses were put into service to handle what little traffic was left over the rest of the road. Then the branch was abandoned. Finally, in 1944, the last remaining 30 miles folded up. I tried in vain to buy and operate that part of the line between Troy and Moscow Mills. However, the Burlington did purchase about a mile of track and sidings in the Hannibal city limits to supply the coal yards and gas and oil stations. The rest of the StL&H was junked."

![New-type door for Train X as demonstrated at the Railroad Fair on a full-scale model. Idea of jack-knee hinges is protection for passengers’ hands and clothing](image)
FROM time to time another magazine publishes a short true tale that we wish had come to us first. With the permission of the Whiting Limited, Harvey, Ill., and author H. Casey, we are reprinting “Train Cutting”:

“Cutting a train at a crossing to relieve traffic is a common affair, but what I am to relate is one for the books.

“Years ago in Northern California there was a logging railroad that ran from a place called Star right down through a deep canyon to another burg known as Rats (Star spelled backwards). Now this canyon was about 50 miles long, and half way it turned sharply at right angles. There was insufficient room to put in a railroad curve so the smart road engineers made a long curved tunnel with only one opening.

“The train would climb an easy grade from Star, enter the tunnel, circle around and come out the same hole at right angles to the entering track, and cross it on a diamond placed right at the tunnel’s entrance. Then the train could proceed down the remainder of the canyon to Rats. Now this little old tunnel could handle the locomotive and 30 logging cars nicely and things worked out in fine shape for a number of years. Then one day the management placed in service a number of new logging cars that were 5 feet longer than the old cars. A whole train of them, going light, was dispatched to Rats. As usual it was a 30-car train—but the officials forgot that this particular train was 150 feet longer than usual.

“Do you know what happened? Well, the engineer still had part of his train coming into the tunnel as he was coming out, and his locomotive cut through the rear of his train exactly between the 28th and 29th car, just ahead of the caboose. The air was filled with smoke and the impact was so slight that he continued on to Rats without noting a loss of three cars. The crew in the rear were unaware of what had occurred and before they realized what had happened, they were drifting down-grade back to Star with their caboose and two empty cars. Such an event will probably never happen again.

“This was long before my time, but old railroad men noted for their veracity told me this remarkable story and I am inclined to believe it.”

RACING the stork, in the opinion of Lester Carmichael, Signal Maintainer at Norden, Calif., is a little too exciting. Last April, during one of the worst snow storms of the winter, a call came in to Trainmaster Tom Billingly, in charge of storm operations at Norden, for passage for a Mexican section laborer’s wife from Blue Canyon to the hospital at Colfax, 24 miles west of Norden. The only piece of equipment going west, Extra 2816 with flanger 6319, had just pulled out of Norden. Billingly called Emigrant Gap, the first telegraph station west and ordered Conductor Hooker and Engineer Marston to go down to Blue Canyon with the flanger and pick the lady up and take her to Colfax. The snow level was up to 97 inches, and the flanger was due to turn back east at Emigrant Gap. But Hooker and Marston took the flanger down and brought the lady out to the hospital—just in time.

* * *

REMARKABLE train order printed in “On the Spot” (page 140, August ’48) particularly interested E. M. Shaler, 842 S. Highland Ave., Los Angeles. “With averted eyes and blushes—on my nose if not my cheeks—I confess that I was the perpetrator of this masterpiece which, in retrospect, reads more like a Chinese puzzle than a train order. At the time I was applying my talents on the eastern district of the L. A. Division (Indio to Yuma sub) instead of the western district as stated, and first addressee was No. 823 instead of 832. It’s my recollection that all of the meets stood up with no more than an average delay of around 25 minutes—well, anyway, not more than 2 hours and 25 minutes.
"Here is a transcript of a train order issued at Burbank, Calif., November 25, 1944, after I'd been transferred from the desert to the coast district:

Train order 64
C&E Third 831
No. 8333
Eng. 4263
Extra 1824 west take siding meet Extras 1735 and 4202 east at Camarillo.

Eng. 4263 run extra Burbank Jct. to Oxnard meet Extra 4202 east at Santa Susana Extra 1735 east at Moorpark take siding at Santa Susana and Moorpark and has right over Second 834 Burbank Jct. to Moorpark and right over No. 832 Burbank Jct. to Oxnard.

Eng. 1735 run extra Oxnard to Los Angeles yard has right over Third 831 Oxnard to Strathearn and right over No. 833 Oxnard to Chatsworth.

Eng. 4202 run extra Oxnard to Los Angeles yard has right over Third 831 Oxnard to Chatsworth and right over No. 833 Oxnard to Burbank Jct.

Third 831 has right over Second 834 Burbank Jct. to Chatsworth hold main track at Chatsworth against Second 834 and has right over No. 832 Burbank Jct. to Camarillo.

(Sig) F.A.F. (Chief Dispatcher)
Made Complete Time 6:45 a.m.
Hytner Opr.

"Bill Nichols—God rest his soul—probably turned a few double somersaults in his final resting place when verbal cocktails like this were dished out. He was sternly opposed to a hodge-podge of running orders, meets, and rights of track, involving so many trains and places, all in one order. And Bill was right. Such orders impose undue burdens on train and enginemen. However, during the war when main trains (troops and defense supplies), passengers, local freights, fruit blocks, helper engines, DH equipment, work trains and drags of empties and lowly dead-freights with a mere 100 cars, were tangled up all over the landscape—when there were more trains than sidings—a dispatcher had to take his choice between time-murdering technicalities or relying on the experience and judgment of the crews to get the trains over the road. The dispatcher who issued 64 train orders between midnight and 6:26 a.m.—most of them not much shorter than the example cited—was not exactly relaxing in a Morris chair tickling a blonde’s chin with one hand and nursing a mint julep in the other during his tour of duty.

"I believe it was at the age of 57 that I finally got straight on the problem of jumbling up meets and reversals of rights. It finally seeped through my noggin that with 57 varieties of trains—one for each year—on the road, meets were preferable in some cases; in others it was more sensible to advance an inferior train to a safe spot on right order, enabling the dis-
Double or nothing; or how to multiply by short division. That's McCloud River's Number 6 above, looking like nothing at all. Then—presto!—she's become Lyell-Lawson Logging Co.'s Number 5 at right, and Atkinson Construction Co.'s Number 6, below. Baldwin built the double-end in 1903.

D. S. Richter, 113 Judah, San Francisco

patcher to further advance the train on a time order, without first having to stand on his head to annul a meet.

"Incidentally, the most ancient train order I ever remember seeing was a relic of the Hutchinson & Southern (long since a part of the AT&SF). I do not remember the exact date nor the name of the chap who issued the order although he was the one who showed it to me. It read: "'Run wild Hutchinson to Harper and whistle all curves.'"

* * *

STATEMENT on page 14 of the September '48 issue is a mistake. The DeWitt Clinton cars exhibited at the Chicago Railroad Fair were not the original coaches," writes T. V. Flannery, 81 Robinson St., Albany, N. Y. "A pensioned NYC man now residing in Albany is, I believe, the last survivor of the construction crew who built the replica De-

Witt Clinton train here in 1892. I interviewed him recently and his comments will be interesting to readers of Railroad Magazine, I think.

"Of the original train, the veteran stated: 'It was first used on August 9, 1831, on the Mohawk & Hudson's Albany to Schenectady run. The Mohawk & Hudson was the parent road of the present
New York Central and the first railroad in the Empire State. The original De-Witt Clinton coaches were constructed in Albany at a cost of $310 each by James Gould. His grandson, Ernest Gould, still has a copy of the old contract. The locomotive was built at the West Point Foundry Association, foot of Beach Street, New York City, early in 1831 and shipped to Albany by barge.

"The replica coaches," he told me, "were constructed at the West Albany Car Shops and the replica locomotive at the West Albany Locomotive Shops under William Buchanan. We completed the coaches in 1892 in time for exhibition at the World's Columbian Exposition. At that time, Mr. Buchanan was also constructing the 999 here. The latter's phenomenal performance shortly after leaving the shops impressed Mr. George H. Daniels, general passenger agent, so much that he promptly capitalized on three features—the 999, the replica DeWitt Clinton and Edward Lamson Henry's famous painting, The First Railway Train—at the fair. Since then the replica and the 999 have been the Central's outstanding showpieces."

Mr. Flannery was unable to find records of the cost of construction of the replica train. However, he has the authority of the NYC Car Shops veteran that the expense, which was very high due to numerous changes in plans, was probably charged against Passenger Repairs. Instructions and blueprints were forwarded to Albany from the New York offices in 1892. Only experienced, careful workers from the Car Department Shop were used. The veteran told Flannery: "We were assigned to do the cab work on 999 at the same time. Its ceiling was made of narrow strips of white holly, alternating with mahogany. Our work on the coaches and on the cab of the 999 took three months."

The replica train has been exhibited in 9 different places: (1) World's Columbian Exposition, Chicago, 1892-'93; (2) Universal Exposition, St. Louis, 1904; (3) Pan American Exposition, Buffalo, 1906; (4) Centennial of New York Central System, 1926; (5) Public Display, North Balcony of Grand Central Terminal, New York City, 1930-'31; (6) Century of Progress, Chicago, 1932; (7) World's Fair, New York City, 1939; (8) Museum of Transportation, Fort Dearborn, Mich., 1947; (9) Railroad Fair, Chicago, 1948.

"As a result of such exhibitions," Mr. Flannery says, "this replica has become America's outstanding symbol of railroad antiquity, and many people take it for the original train." In fact, the assertion that it is the original is so widespread and so often repeated that even authorities are liable to the common error. It's a notable

Reading's Atlantic-type, wearing the largest drivers in America, 86 inches in diameter
Railroader’s Christmas card, from facile brush of John Rogers, is one of several full-color, on-the-line scenes produced this year by the American Artists Group, 106 Seventh Ave., New York City 11

fact that the replica closely resembles William H. Brown’s famous silhouette, made the day he was a passenger on the real train’s first trip. E. L. Henry’s painting is likewise a faithful representation. Mr. Henry spent at least 10 years on this one picture, for which he received the sum of $25,000. The painting is now on exhibit at the Albany Institute of History and Art.

*   *   *

NORTHERN NEVADA experiences of B. A. Thomas (July ’48) prompted Ralph E. Woods, 106 Miller Ave., San Jose 12, Calif., to tell us about his own visit to the great open-pit copper mine known as the “Glory Hole.”

“Originally it was a mountain,” he writes, “but after taking the top off, the mine operators have been going ‘round and ‘round for 35 years until now it re-

sembles a huge volcano crater with an interior of lightish yellow flecked with green. I saw the miners working in their little flower gardens and later walking down the street with dinner pails. Their cabins are nicely painted gray and white. Everything about the Kennicott Copper Co. offices and hospital seems to be spic and span.

“I saw some strange-looking locomotives of broad gage being hostlered out of the roundhouse—engines without tenders, carrying their own fuel and water. A train of coaches had been assembled. The workmen got aboard and it headed down grade into the great pit. For some time it was lost to view. Soon I saw it far below, taking a siding to allow a loaded freight to come up.

“There are many levels and tracks which are constantly being changed to move closer to the ore. In several places I saw steam shovels loading. This is mining on a gargantuan scale. I counted
a dozen short locomotives but none of the standard types. The latter were working to and from the smelter at McGill, either hauling loads or returning with empties.

"Afterward, I drove to McGill, passing enroute a northbound freight of about 40 ore cars on the upgrade. You could tell from the way the fireman rolled the smoke that the hoghead was rapping the engine hard. At McGill I saw much smoke emitting from many stacks but no sign of vegetation anywhere. I visited the guard at his office, the walls of which were plastered with circulars of criminals wanted all over the U.S.A. He reminded me of the typical oldtime Western sheriff, with star, boots, gun, and so much other paraphernalia he looked like a gent from Hollywood. However, he was most agreeable. He explained that the smelter was located there because a continuous stream of water flowed out of the mountains, this water being used in the flotation process for reclaiming the gold, silver, copper, and other valuable metals. He pointed to a valley where the flume had carried enough residue to cover six square miles.

"Driving northward, I saw the railroad to the left and many wild horses with long tails and unkempt manes, quite unlike the beautiful wild steeds of fiction and the movies. At a place called Mizpah a number of stockcars stood on a siding. These, I learned, were used for shipping wild horses. I was told that 17 carloads of them had just been moved out. Later, at San Jose, I saw labels indicating that these horses, combined with vegetables, were made into stew and shipped to France. Their ancestors had been left in the desert by Spanish explorers who came to this country as early as 1542. The furthest point they reached was San Jacinto, now the highest point on the Union Pacific between Wells, Nev., and Twin Falls, Idaho."

LAST STOP is the Reader's Choice Coupon (page 145), which guides your editorial crew in selecting material for future issues of Railroad Magazine.

Some readers use the coupon. Others prefer not to clip the magazine; they send home-made coupons, postcards or letters. Regardless of how votes are written, all count the same. Results of balloting on the November issue show as follows:

1. Chattanooga Choo Choo, Monroe
2. Centerville & Southwester, Lucas
3. Light of the Lantern
4. On the Spot
5. Electric Lines
6. Milepost 78, Burlingame
7. Harahan's New Boss, McGuire
8. High Water, Ellis
9. Locomotives of the B&O
10. Locomotive of the Month

Most popular photos: pages 25, 88

Joe Kelly of the Quiz Kids
N.B.C. Sunday Afternoon

There's Nothing Quite Like Alka-Seltzer
When you have a headache, remember:
(1) Alka-Seltzer contains one of the most effective pain-relieving agents.
(2) This agent is protected by alkaline buffers for increased effectiveness.
(3) Alka-Seltzer's fizzing effervescence speeds its pain-relieving action and so helps bring relief fast, pleasant relief.

Next time you have a headache try Alka-Seltzer—for really fast relief!

All drugstores
U.S., Canada

for HEADACHES
ACID INDIGESTION
DISCOMFORT OF COLDS
Hoping for sudden wealth, young Mel Hatch had made a rash and unfortunate investment in a patented fire extinguisher that left him broke, with all his better clothing in pawn. Included was the new blue suit he wore only when on the drift or when calling on one of his girls. Because he now appeared more like a tramp than a skilled trainman, the incident also resulted in unemployment for a long while thereafter—during which time he had to stretch his meals and take what comfort he could from his vision of becoming a rootin' tootin' boomer, first-class.

In extremity he'd been compelled to go braking on the Monte Short Line, which loops and burrows along the higher ledges of the Rocky Mountains and is a very rugged outfit to work for. On his tenth payday, Mel took two days off and the wad he had saved, and came down from the High Divide to Denver, bent upon refurnishing his wardrobe. In those times, the standard habiliments of a railroader on the drift included a blue suit and a thousand-miler, which is a black sateen shirt. Mel intended to journey out into a new and delightful world and he had learned the hard way that if he wasn't all decked out to specifications, no conductor would consider him eligible for the amenities of the high iron. In which case, he either walked or paid cash for a ticket.

Mel hoped to edge into the league of smoke-cured boomers who annually sought the milder climes when winter threatened. Come fall, these drifters quit their jobs in less temperate zones and flocked south.
with the birds, seeking the sun. It was an ambitious project. Those hard-bitten pilgrims had a tight organization, hard to crack.

Between them they could starve a novice by conniving together to keep his name off the runboards; and you had to have a sponsor and a reputation before you were acceptable to that lusty outfit.

Mel had lately been engaged in some gaudy affairs. Right now he had a brass collar’s ears pinned back. But all this had occurred on the little old Monte, up there in the recesses of the continental jawbone and no notoriety had yet come of it. Not a word of his achievements had been circulated among the pilgrims, where it would do him the most good. He had the price of the necessary garments and enough besides for eating money and friendly drinks, but he lacked repute. In Denver he would circulate and try to improve his fame.

His encounter with Hank Wheeler seemed fortunate—at first. He came upon him in the freight yard at Denver.

Hank Wheeler was a rambling boomer trainman from all over the map. A hand-sewed, smoke-cured pilgrim with a very lurid reputation. Just the one to sponsor Mel with the drifters if he could be persuaded to do so. But Hank was cagy. Mel had worked with him on a division in the Blue Mountains in Oregon and again out of Salt Lake City long enough for them to become wayfaring acquaintances but in no sense comrades. In fact, there had been discords. Mel had played an impulsive little prank on the boomer and he had retaliated. Hank, Mel now recalled resentfully, had been involved in the debacle of the patented fire extinguisher. But he’d let that ride if Hank would edge him into the southern drift.

He was somewhat astonished when the veteran boomer whooped and pounded him on the back.

“Sonnyboy,” Hank brayed, “I’m as glad to see you as if I’d stuck a nail in my foot. You’ve sure filled out.”

Hank had a tale to tell, he said; he was sure in a spot. He’d just been fired off the Upee, up there in the bleaker parts of Wyoming, and his luck had since gone from bad to worse. It was almost pathetic.

Mel listened warily. Hank was ingenious in the clutches. He would take your eye teeth if he needed them—or just for the hell of it.

Hank went on to explain that his expulsion from the Upee’s service had been violent. That trainmaster had pawed up the earth. He’d even threatened to prosecute.

“He cussed something scandalous,” Hank expostulated.

Mel murmured shocked amazement.

“But the most unfortunate item in that episode,” Hank lamented, maneuvering deftly for a touch, “was that I’d only worked a week before it occurred. My time-check didn’t more than cover current obligations, such as room rent and a pie card and mebby a few dimes over. I got me rides with freight skippers and all the way down I sought employment. But luck was hiding out on me. None of the dingers I encountered needed a brakeman.”

This was a nagging condition for a veteran boomer, but not unusual. The fiddlefooted often collided with a chain of fell circumstances, had to cajole themselves out of many a weary difficulty. Mel was enjoying Hank’s marked performance, and learning from it. A scheme developed in the back of his mind. He prompted Hank to give further details. How come he appeared so low in spirit and physically broken?

“As a fact,” Hank played his role lugubriously, “I came here lookin’ for an old friend and confederate of mine, who was last heard of in these altitudes. He’d finance me, any amount.” He became plaintive. “The guy wasn’t around, but there was a groundhog who remembered when he was here. He knew another brasspounder who went with a girl that he thought’d had a letter from this guy.”

Railroad Magazine
Hank's gloom suddenly deepened to brooding dispair.

"He hadn't got himself killed, had he?" Mel inquired with cautious sympathy.

"Well, no." Hank pondered. "We looked high and low, but we didn't find this braggard or the girl. Mebby we searched in the wrong places. Come to think of it," he reflected moodily, "that musta been the reason, because as I remember, most of 'em had swinging doors." His grin was fragile and sickly. "Anyways, when I woke up along towards noon today, I had a high fever in my stomach and my tongue felt like burnt leather."

He paused and considered Mel's stub length that had the bounce of hard rubber and his hair as red as a bonfire, and remembered that the kid could be as mulish as a rusty coupling. Meanwhile, Mel studied Hank thoughtfully, and worked on his plan.

Hank was restless and turbulent, a marauding drifter who had discovered while young that if you didn't take what you wanted, you'd likely do without. He'd been around where the going was tough, and he was so hard he glittered. True, at the moment he was somewhat battered. His blue suit didn't have the decisive knife-edge press a boomer likes and his thousand-miler was dingy. But he was coming back fast, and Mel knew he'd have to move in on him before he recovered.

"How come the Upee uncoupled you from that job so quick?" he prodded.

Hank reflected, then declared it was a misinterpretation of the rules as laid down by that unreasonable trainmaster. That dinger'd been fanatical about hoboes riding his trains, and had repeatedly warned his crews to bounce 'em off at sight.

"And then," Mel suggested blandly, "he caught you with a boxcar loaded with tramps from which you'd already collected four-bits per head?"

It seemed like it was the exact reverse of that.

"I found a bunch of bums crowded in a boxcar on my train and in strict compliance with the trainmaster's instructions, I ordered 'em to unload." Hank brooded darkly for a second. "There was a full dozen of 'em and they told me to go throw my hat in the river—and hang on to it. That many, was I to toss 'em off? They'd gang me."

"Sure enough," Mel agreed. "And then this dinger comes along and catches them on your train. After which, he fires you on suspicion," he speculated piously.

"No-o-o," Hank admitted. "He didn't show up at the time, and I just done my duty like he'd been so particular to warn me about. What seemed to enrage him later was my methods. First, I got me a armload of fuses from the caboose. Then I stood outside the boxcar, lit the fuses one right after another and heaved 'em through the door among the vagrants."
"A-a-a-h!" Mel admired. "Very, very competent."

"The bums unloaded at once to avoid them burning fusees, and you'd think the dinger would have been pleased with the very effective way I executed his orders. But not him! You couldn't make him see anything except that the fusees ignited his boxcar and blamed near burnt it down to the trucks. Mister, that man was hostile!"

He slapped a bitter spit at the headend cinders.

"If that ain't like a dinger!" Mel ejaculated.

There was a moment's silence, during which Hank reflected that sympathy was sweet but still Mel wasn't responding the way a good comrade should. "I sure wish," he lamented, "that Eddie Sand had stuck around until I got here."

Mel bent a sharp ear. "Who?" he demanded.
“Eddie Sand. He’s the old friend I’m tryin’ to catch up with—dad blast him! That drifter never stays put.”

Mel stood rigid and didn’t breathe. Eddie Sand’s delirious escapades were almost legend. He ranged from the L&N in Louisiana to the old OWR&N in the Northwest; from the Southern Pacific to the Boston & Maine—a rubber-tired pilgrim who moved about like a shadowy myth.

Mel’s plan crystallized in a brilliant flash. Eddie Sand often teamed up with Hank Wheeler in some preposterous prank. If Mel could tie up with these two, he’d be set in with the veteran drifters for life. He’d take Hank back with him to the Monte and show him how he stood there. Hank wouldn’t let the exact truth spoil a good story, and if his limber tongue got to wagging about Mel’s exploits, it would sure give him a reputation, certified to by an expert. Meanwhile, Eddie Sand would probably show up and make the deal perfect.

With great enthusiasm, Mel began to explain the Monte Short Line. “She cuts a thin spiral along the higher ledges of the Divide, taking in supplies to mining camps and hauling out ore,” he said; and added artfully, “And the trainmaster’d like best to bounce me off a crag. He’d do it, too, except I got a little understanding with the general manager, account of a favor I done him.”

“So?” Hank showed interest. “You got a pull with a brass collar?”

“Somewhat,” Mel conceded modestly.

Switch engines snorted and clanged, smoke from their stacks climbing straight into the still air. A passenger train swept down the main track, rolling south into the land of sunshine. A freight train crawled out of a siding and blasted away into the low sun.

“I come to town to buy me a blue suit,” Mel hinted delicately, “so did I suddenly decide to pull the pin, I’d be equipped to mebby head south for the winter.”

“So-o-o?” Hank admired. “You got that much cash on hand?”

Mel admitted it, “And I’ll tell you what I’ll do,” he offered. “I’m going back to Gloria in the morning. That trainmaster up there on the Monte needs a stinger about your size, and he’ll hire you if he don’t know you’re a friend of mine. I’ll stake you to a pie card till you get a payday.”

Hank rebelled. “With winter comin’ on? Mister, there’s too much wind and weather in them altitudes. Let’s look around here,” he begged, “and see if we can’t hire out to some of these dingers.”

“You ain’t too delicate to stand a little frost bite,” Mel scoffed.

“Yeah, but a boomer workin’ in the tempests!” Hank implored. “I’m on my way to California, just as soon as I wangle grub money. I’ve got to meet some more fellow-confederates down there where the sun gets up every morning.”

Yeah, Mel thought, where the sun gets up every morning! Here, there was a thin edge to the air. Low sunlight filtered through a chill haze and the world was full of frosty, restless echoes. The brown ramparts shouldered into the sky and the high horizon glinted like cold steel. It wouldn’t be long before the blizzards came blaring across the heights, trampling snow into the canyons. Places the boomers talked about, down there along the border—Phoenix, Nogales, Tucumcari. They sounded like drum beats and marching feet.

“Grub,” Mel caught himself up firmly, “is what sustains us. You gotta have grub. I’ll get us a room and then we’ll look up them garments I came to purchase. After which we’ll eat and tour the town.” He eyed Hank sternly. “But no revelry,” he warned. “Just a glance in here and there.”

If he went broke on a jamboree, there’d be no alternative but to work the winter out among the storms.

“That goat-path Monte,” Hank moaned, “where the wild winds cut like a cleaver and snow piles up high as a house! That ain’t no place to endure. The loan of ten bucks, or even five, ought to sus-
tain me till I grab off a place on an easier railroad."

But Mel walked off on that and Hank had to follow. He didn’t struggle while Mel paid the arrears on his keyster, in pawn for last night’s lodging, and took a room for the coming night. He was silent while Mel bought an outfit that would do any pilgrim proud, and silent when they retired to their room so Mel could array himself. But as they came back to the street Hank’s haunted eyes sought a pair of swinging doors on the opposite corner and he wondered out loud if one more little drink wouldn’t make the world look brighter.

Now that he was all decked out in his new clothes, Mel felt inclined to be indulgent. They disappeared through the swinging doors.

It was long past midnight when they emerged, but it seemed to Mel as if they couldn’t have been inside more than a few minutes. The street lights startled him and the sharp air set him back on his heels. A beanery’s windows spashed light on the empty street. They crossed to it as best they could, holding onto each other and shouting directions loudly enough to be heard on the next block. Ham and eggs laced with black coffee took the edge off the evening. They climbed to their room as the clock was striking two.

Mel made a gloomy inventory. "I got just about enough dough left," he reported, "to buy us a slim breakfast."

"A slim one is all I’ll require," Hank burped. He took from his keyster an alarm clock the size of a pony truck wheel; Mel remembered from Salt Lake City that it had a bell as noisy as a Chinese gong. Hank wound it and set the alarm for them to make the early morning freight up the mountain. He placed it on the table between the two beds, where the thing ticked in petulant beats and stared at Mel malevolently.

Mel said sourly, "Don’t that Waterbury keep you awake with all the clatter it makes just countin’ out the seconds?"

"That’s a very companionable chronometer."

"It looks to me like it’s got evil in its heart. Seems it kind of sneers. I’d hate to sleep alone in the room with it."

Hank screwed up his long face in a concentrated effort to recall something out of the recent past. " Seems to me you made a very peculiar dicker in timepieces somewheres along this evening."

Mel clapped his hand to his pocket; then, with a sickly grin, dislodged a watch from his pocket. The heavy silver case with quarter-inch thick crystal was more than twice as large as required by standard regulations. Such a watch hadn’t been in service since the link-and-pin.

"About as handy to carry in your pocket as a shovel," Hank jeered. "Over in Salt Lake, you had a nice twenty-one, sixteen-size gold ticker that set you back eighty bucks. What happened to it?"

"I turned my gold repeater in at the bar," Mel recollected morosely, "after I’d got to the bottom of my roll. Seems like I received this turnip and ten bucks, which we’ve already drunk up, in exchange. It sure is a contraption," he added ruefully.

He put it on the table and crawled into bed.

Sunlight slid through the open window and laid a wide beam across the two beds. The alarm clock flinched as the light glinted on its virulent face. It strangled. It retched as if it were going to be sick. It gave a startled hop and buzzed irritably like a disturbed rattle snake. It gathered itself and suddenly let go a clangor of wild alarm. It jigged toward the edge of the table. One foot caught in a crack; it grimaced and circled furiously, like a man with his wooden leg caught in a knothole. It clamored and stamped.

Mel clawed the covers from him. His bleary gaze dilated and fixed on the clock raging at him from the table. He drew back. Then he snatched the clock and heaved it through the open window.

The timepiece yelled vengefully in flight. With a shattering racket it lit in
the street below where it hissed and buzzed and then subsided into resentful silence.

Hank reared up in bed. His hand snaked out and closed on Mel’s huge watch. One quick motion and he’d flung it through the window after the clock.

“Hey!”

Mel thrust half his length over the window ledge. He hung there tensely, like a pointing setter, watching his timepiece take two bounces and a hop across the street, then trail its chain in an agile leap over the top of the swinging doors on the opposite corner.

He scowled incredulously. “That ticker has been trained to go home when it gets loose!”

An instant later, the saloon doors blew open and a man in white, with the huge silver bun in one hand, charged into the street. His other hand caressed an enlarging discoloration above his right eye. He stared about.

Mel made choking sounds of dismay and relief. The barman looked up. His expression went through all the grades from fury to delight. Carefully he wound up like a pitcher with two on base, and heaved. The chain trailed the zooming watch like an enlarged scorpion. Mel reached up and pulled both down out of the air in a dexterous one-handed catch. He snuggled the timepiece to his ear. He pretended to listen with growing satisfaction to the busy ticking of the mechanism.

“Thanks, buddy,” he called down.

“Now, would you mind tossing up that regulator there in the middle of the road?”

The barman glared. It looked as if he might try another fast one over the middle. Then he grinned.

“Okay, fella,” he agreed. “You can play first base on my ball club.”

The barman made a two-handed toss and Mel leaned out of the window and caught the big clock.

“Just a new front pane,” he reassured Hank. “and mebby a bearing or two tightened up, and she’ll be ready for the next time.”

THE sidings of the Gloria yard come down to the Yellowjacket river, under the shadow of high ridges. The sun gets up late and goes down early, and the brawling of snow water in the rocky channel runs through the racket the little switchers make.

Hank Wheeler came back to the switch shanty to report on his interview with Clinker Ward.

“He first wanted to know was I related by association or blood ties with any redheaded trainmen. The Clinker must certainly have it in for you. I had to say I’d never seen you before he’d hire me.”

Mel sniffed.

Hank elaborated. “He said it was a positive fact that redheaded stingers like you was bad luck and hazardous to property and personnel. He claimed that when they’re killed in disasters, they immediately turn into white mules and come back

---

How to keep AWAKE when you have to!

Why take a chance at the wheel when a NoDoz Awakener snaps you alert safely,* keeps you mentally and physically efficient. Why fall asleep in a movie, or yawn through a bridge game

when you can keep awake safely* with a NoDoz awakener. Since 1933, students, nurses, business people, motorists have found that it is easy, safe and convenient to keep awake with

SEND 10¢ FOR GENEROUS SAMPLE TO DEPT. PF • Harrison Products, Inc., 45 Second Street, San Francisco, California

*The only active ingredient is caffeine — the "alerting" agent of coffee.
to haunt the places they sojourned in before they went over to the other side. He's positive they've already got several of these spooky donks in these parts, and it would break his heart if you joined 'em to add to his discomfort. You sure must have a drag higher up to keep him from layin' his hands on you."

Mel's version of how he'd sneaked into service when Clinker Ward wasn't looking and had remained under the protection of the general manager because he'd prevented a bad smashup—an affair in which the G. M. himself had been involved—was one of the exploits he hoped Hank would appreciate and pass along to the pilgrims. Mel related it with jocular elaborations, adding for good measure the story of Old Jonah, the white mule that strayed about the Silverton yard and was held in superstitious awe by a good many Monte men.

They claimed Jonah was the reincarnation of Jake Smithers, a redheaded old carhand who never went up for promotion because he could neither read nor write and wouldn't learn. Jake had been killed riding a string of runaway cars down the grade above town. He'd been stubborn enough to believe he could bring them under control, and he might have
done it, too, if a foot of flange hadn't broken off one of the wheels on a curve and sent the string and Jake to Glory at the bottom of a ravine.

Jake had been a slow-moving old stinger, with a temper like dynamite, and Monte men said he resembled Jonah, the white mule, in disposition, tone of voice and even in looks. It might be. Jonah never moved out of a drag-foot walk and Mel knew for a fact that he'd kick the livin' daylights out of you for no reason at all.

"Anyhow," he told Hank, "a lot of guys will swear the mule showed up to haunt the Silverton yard the day after the cars took Jake to Kingdom Come, and swear for gospel truth that Jonah is Jake come back, sore as hell, to continue his quarrel with the Clinker.

"Seems they'd been pals, those two, back in youth when they first come to the Monte. Jake was the best brakeman but, of course, with his insistence on illiteracy he remained a carhand, and the Clinker went on up to conductor and then trainmaster. But Jake was top railroader of the two and he knew it and wasn't going to take orders from his old pal. Which the Clinker was just as stubbornly set on making him do. Through the years, their feud sure became lurid. They swear on the Monte that it got so violent at times that it brought on thunder storms and tempests. And Jake, they say, crossed back over from the Great Beyond under the skin of a mule to keep it goin'.

"The thing is, old Clinker half-believes that stuff himself. One evidence of it is, he'll never willingly hire a redheaded car-hand—afraid he might turn into another white mule that'd return to trouble him. That's why he turned me down when I went up for a job. But I hired out to the clerk and then, before the Clinker found it out, I had the G. M. beholden to me. So the Clinker didn't dare give me the boot, see?"

"You've got the best of it up to now," Hank agreed. "But the Clinker is a wise old bird, and the memory of big brass collars for services rendered is brief. The gratitude of the illustrious," he stated profoundly, "ain't dependable and the Clinker is likely to be aware of it."

That this was so became evident that same night. Clinker rode Number 72. The mining camps were stockling reserve supplies and sending out all mined ore, precautions against the chance that a blizzard would close the line for months. The trainmaster was out to supervise operations during the rush. The quick mountain dark had crowded the last of the sunlight from the peaks when the mixed freight, with Engine 710, whistled off. Hank Wheeler opened the switch and climbed into the cab as the train hauled out onto the mainline. Mel Hatch closed the switch when the caboose cleared, and caught the hindend in a dozen swift strides.

The Clinker sat on a cushioned bench in a caboose, a solid lump of a man, hard and weathered like a granite boulder. He gave Mel a grunt that wasn't hospitable.
“We’ve got cars to peel off from the headend all along the line,” he said unpleasantly. “At the first stop, you go forward and ride the engine so you’ll be there to help kick the cars out of the train the second we pause.”

“Yeah,” Mel protested, “but I’m supposed to be the parlor man on this train.”

“We got a new brakeman on the smoky end,” the Clinker stated, “and you’ll have to show him the road. There’s a bunch of ore drags coming out against us tonight, and they’re liable to stick us plenty if we don’t do a fast job of switching at every point.”

“Who’s goin’ to protect the hind end?”

“The conductor and me’ll do the flagging,” Clinker grunted irritably.

Conductor Dodd, so thin and acrid they said he had to ballast himself with rocks in his pocket when the wind blew hard, was hunched over the little desk under a smoky lamp. He signified his disapproval of the Clinker’s arrangements with a whistling snort.

Mel climbed into the cupola, his thoughts seething with the knowledge that Clinker was just kicking mud in his eyes, trying to rawhide him out of service. Out in front, the hard beam of the headlight turned stifly on the curves, feeding along the canyon walls. The bark of the engine’s stack funneled through the gorge and the echoes faded out against the stars. A faint glow sprayed intermittently from the cab as the fireman swung open the firebox door and charged the muzzle-loading locomotive with coal.

The station lights of Carbon winked against the black walls and Mel climbed out on top of the train. Sharp edges of air slid in around his collar and nipped his ears. Winter was quietly moving down from the north.

Saps didn’t come any bigger than he was. He’d rigged it fine to join the boomers and soak up the sun. Then he got to bragging in a bar and tossed away his travel money.

The slack bunched as the train slowed and headed into a siding. Mel hit the ground and walked forward to meet Hank. They studied the drop list under dim lanterns.

“I’ll cut off six,” Mel decided, “and you take ’em out on the main. Hand me two and I’ll ride ’em into the house. You take the other four up the main and shove ’em in on the mine siding—see that switch light?—and spot ’em at the warehouse.”

“Yu-kay,” said Hank.

Mel broke the air hose coupling six cars back and uncoupled. An uneasy thought worked through his mind as he waited for the engineer to respond to his signal. Maybe he should have cautioned Hank to hold onto those four cars with the engine and not kick them into the mine siding. But he’d told him to shove them in and spot them. That meant on anybody’s railroad that he shouldn’t turn them loose.

The engine with the six cars moved out onto the maintrack. Mel crossed over and opened the house track switch. The engine’s stack exploded briefly, then died when Hank cut the two hind cars loose and signaled a stop. The two boxcars came at Mel, mumbling grimly, picking up speed too fast.

He ran along the maintrack to meet them and went up the iron rungs like a squirrel. He set a brake and clubbed it tight. He ran back over the running-board as the cars recoiled through the switch. He set the other brake and twisted it down to the last notch, feeling the grade reach for control of the cars with a savage hand. The grunting brakeshoes stopped the cars at the station platform. Mel went back along the siding and closed the switch.

Lonely lights sprinkled the mining camp. Tired figures moved beyond the dull glow of a saloon window where hard-rock miners relaxed after a day at the hand drills.

Hank’s lantern flashed impatient signals and the engine pulled up, then backed the four cars into the mine siding. Hank was crowding them, showing these mountainers how to do a snappy job of switching. Mel began to wind up inside.
And then Hank’s lantern circled in the “kick” signal, and the stack bellowed. Hank flashed a washout and cut the four cars loose. He climbed leisurely to the top. The whine of the rolling wheels ran up to a thin screech as the abrupt downgrade took hold.

Two car-lengths from the maintrack, the siding dived into a hollow and then leveled off along a line of warehouses. Beyond the mine buildings the rails ended with a bumper of stacked ties. From here the ridge dropped at a sharp angle for a thousand feet. Hank could see none of this in the darkness. He’d be into that thousand-foot drop before he knew it.

Mel bounced. His legs reached and recoiled, but his feet barely dusted the ground. He spraddle-jumped the sidings. He hop-skipped a cinder pile and a rack of new rails. Hank’s lantern stayed stationary by the brake wheel of the hind car.

Mel went over a flatcar in a double bounce. The light of his lantern streaked out like the tail of a comet. His heart was pumping and hammering in his throat, and it took twice as much of this thin air to fill his lungs. He put more drive into his legs to reach the siding at the point where it leveled off in time to intercept the cars.

On the left, outlined against the stars at a break in the ridges, a trestle showed. It spanned a gulch and the ground ahead dropped to the bottom from a high bank. He dug in for a short sprint and then threw himself over the edge into space. Going down he glimpsed something up there trundling along the slippery bridge. It looked like a lone dumpcar, which wasn’t likely, but he couldn’t stop in mid-air to figure it out.

His leap took him halfway down the bank; he skidded to the bottom in soft earth. Leaving his lantern but holding onto his brake club, he clawed up the opposite side. When he rolled out onto the flat beside the siding there wasn’t time for an extra breath before he made his try. The cut of cars was on top of him, tearing by.

Dust swirled into his face as the head-

end whiffed past. He couldn’t see the iron rungs of the headcar’s ladder in the dust and dark; he had to do it blind, and he’d better be precise and exact, or he’d never be in shape to try it again.

He bounced and reached, his right foot feeling for the stirrup step. It was like mounting a cyclone; the momentum tried to swoop him between the cars and then the car picked him up like he was a mail sack on a crane, but he could feel the wrench clear down his spine. His legs drove him up the rungs in a quick scamp- er, and he walked out on top of the careening car.

He spun the brakewheel and slipped the club between the spokes. He bunched and braced, with a toe on the catch; he tied it down good.

The car staggered as the brake shoes grabbed. It bucked and fought wildly against the sudden restraint. Draft gear clashed when he took another twist on the club to get those last two notches.
The speed checked as they took to the level track, but the warehouse was loom-
ing up close.

The end of the trestle, overhanging the siding, whipped up close to his left ear. The thing he’d thought might be a dumpcar was hanging over, right out at the very end, ready to unload. Then the whole thing, whatever it was, fell off and hit on top of the third car behind. It rolled over and grabbed and stood up.

He kept his eye on it while he toedanced back to the second car. Hank Wheeler had come to and was giving the brakes of the last car a good setting up. Mel set the one on the second car and lit out for the third. But the dumpcar that had fallen off the trestle was at the brake- wheel before him. Mel stared, bug-eyed. It wasn’t a car. It was the Clinker! Even in pitch dark it was impossible not to recognize that hunk of granite.

The Clinker put his weight on the brakewheel; the brakeshoes howled, and Mel could hear the grind of sliding wheels. Hank Wheeler’s exultant whoop ricocheted along the ridges. Why, that long-legged pilgrim thought he was having himself a swell joy ride! He didn’t know about that thousand feet of empty space at the other end. The sliding wheels took fast hold on the level track. Mel watched the vague pile of ties come slowly up under the drawhead of the headcar, and then the string shuddered to a stop with nothing on the ground.

The Clinker wasn’t even breathing hard. He’d teetered across that airy, open-faced trestle, dropped onto the rambling boxcar, and tied down a brake with his bare hands tighter than most carhands could do it with a club—and he’d done it all in a hurry. But his voice had the same old grind of gravel in it when he tied into Hank.

“A helluva stinger you turned out to be, turning cars loose on a roller coaster!”

Mel cut in. “It was my fault. I failed to tell him to hold onto ‘em instead of kicking ‘em in.”

“That sounds like you,” the Clinker stated bitterly. “I send you to the smoky end specially to show the new carhand the road and right away you forget to do it.”

They backed the engine onto the train. “Look,” Hank told Mel plaintively, “next time the Clinker starts workin’ me over, you stay out of it. I had one all rigged up for him that’d scorched his whiskers, and then you knocked it down by takin’ the blame. I’m able to kill my own snakes, thanks.”

An ore train boomed down the gorge and blasted by, her marker lights fading in the velvet dark. The bow windows of the station cut yellow oblongs in the empty night. The night operator had an ear to the resonator, copying orders. Conductor Dodd and the Clinker stood beside the telegraph table while the op repeated the last order, wrote a clearance and handed two sets to the conductor.

The engineer came down from his cab to read the orders. The naked flame of his torch leaned far over in a draft of air. Light from the firebox ran across the intent faces. The engineer’s slow voice died and he shuffled the orders aimlessly while he discussed their next moves with the skipper. All of them consulted their watches, checking their reckonings of the time they had against opposing trains. The Clinker caught the considerable bulk of Mel’s watch in the faint glow of the trainman’s lanterns. He leaned over and peered down at it.

“What’ve you got there?” he demanded. “Seems like it’d hamper you just leg-
ing it around.”

Mel declared hotly. “You can operate the sun, moon and stars by this timepiece. She’s as accurate as they come.”

The Clinker stiffened. “You could tell time better by a calendar than by that hun-
d of lead. Has the watch inspector passed it?”

Mel avoided the question. “She’s a regulator,” he insisted, “that won’t vary one second a month.”

“Yeah, but what month? Here, let’s all check our watches and see where we stand.”
In a huddle, they compared their timepieces. There was more variance by minutes than the rules allowed. None of them was in 90 seconds of the others.

Hank Wheeler bleched. "First thing you know," he muttered, "you're on another train's time and two of 'em can't occupy the same stretch of mainiron at one and the same time without messing theirselves up."

"All of you've got to get your watches inspected and regulated," the Clinker ordered. "Now, set them by mine."

Mel bowed his neck. "Not on your life," he balked. "You set 'em by mine. She's right on the money."

Hank differed anxiously. "With all them ore trains we got to meet, we'd better be right. You know what happens when a train pulls out of a station ahead of time, with another one coming in to meet her and expecting her to abide by the timecard. Let's check by the sation clock," he urged.

They moved over to see the big clock through the window, and made another comparison. Mel's watch was within two seconds of the time indicated on the big dial. The Clinker's was fartherest off.

"These ops," the Clinker muttered, "don't pay any attention to the time when it comes over the wire. Likely that clock is farther off than any of us."

"Then let's get the time from the dispatcher." Hank submitted firmly. "I'm riding this gallopin' calliope and I'd like to be sure we don't meet something on one of these elbows you've misnamed curves."

They trailed into the station and the brass pounder flipped his key and sent crisply. "The old regulator is right on it to the second," he reported then.

The Clinker gave Mel a murderous look. "Smart," he said scornfully. "Okay. You ride the engine from here on in, and you keep this new carhand out of trouble. Or else," he added.

The 710's cab was warm against the sharp air and smelled pleasantly of wet coal and hot steam.

Pete let her ramble, keeping an eye on the green dot hung up there in the empty dark. The yellow glow of the station lights drew in till you could see the night operator in the bow window, bent over the telegraph table, his hand on the key. Suddenly his hand slid to the semaphore lever in a swift gesture. He tripped the catch and the lever fell forward. The green light on the mast above turned red, a peremptory signal for Number 72 to stop. Some train out ahead had fallen down and the dispatcher had to make a quick change in his lineup.

Pete's sunken jaws slashed up and down aggressively. He pushed the throttle against the boilerhead and shoved the brake-valve handle forward. He felt cautiously through the seat of his pants for the reaction of that application of air through the length of the train. He knew it wouldn't be normal, and he was set to correct an error, if possible.

It seemed for six seconds, while they all cocked an ear and braced, that they'd made a competent stop. Then a dynamiter in the middle of the train kicked off the train-line pressure and the brakeshoes grabbed and smoked. There was a prolonged clash of draft gear and the cars tried to leapfrog one another. Number 72 came to a resounding stop.

Pete sighed gently and shook his head.

"I got a drawer for sure," he reckoned. "I felt it through my britches. Mbbe more than one."

ANTERNS dropped off the caboose.

Dodd, in a rage, went back to flag and the Clinker came forward along the train like a rolling bounder. He stared up at Pete.

"How many did I get?" Pete inquired benevolently.

"Two!" the Clinker exploded like a busted air hose.

"Think of that," Pete mused.

The night operator lounged out of the station. "I bet myself a buck," he yawned, "that you'd get a pair of lungs when I dropped the board in your face. I told the dispatcher you was right here, but he had a brainstorm."
“You tell him,” the Clinker ordered, “that just because he did, we’ll have to set out two bad orders before we proceed.”

“Ho-kay.” The op pushed himself away from a telegraph pole. “They’s a hay train comin’ up behind you close,” he advised. “You goin’ to let her by you at this point?”

“Yeah,” the Clinker grumbled. “We’ll clear her to go around us.”

They set out the two cars with pulled drawheads and let the hay train go around them. They got another batch of train orders and followed her out.

“What time you got?” Pete asked Mel. Train orders were a trial to Pete. He took out the wad he had collected since leaving terminal and went through them dubiously. “That hay train just went around us,” he said in his thin shout. “She will go to North Slick to meet the next opposing train. Mebby we make the Slick, too, for the same train.”

Mel checked the orders. “You won’t get any farther than Coiloil,” he scoffed, “unless you wind her up more than you have.”

“I bet I make it to Slick,” Pete offered. “Four-bits.”

Thinking of his empty pockets and emptier stomach, Mel agreed. “I’ll go as high as a half-dollar you won’t.”

“You watch me do it,” Pete invited happily.

They tipped over the top of the grade, but Pete didn’t ease the throttle. The 710 chuckled as the cars nudged her from behind. They roared through giddy mule-shoe curves, crowding high walls on one side and breathless empty space on the other. They swooped out of a reverse onto a spidery trestle, with starlight glinting on water that seemed a mile down.

The grades leveled off, and the mile board for Coiloil siding came into the beam of the headlight. Pete asked for the time again. He retired into the deeper recesses of his mind and pondered. He nodded blandly and assured himself that he could make North Slick and get into the clear behind the hay train at about the minute the opposing ore train was due there against him. He gave the 710 another handful of steam to make sure.

“You want to pay me now, Mel?” he beamed.

“Mebby you’ll ditch her, like Hank says,” Mel said, “and then you won’t make it. I’ll hang onto my dough till we get there.”

The hay train should be heading in at North Slick now, which would give her time to pull down to the other end of the siding and let Number 72 in without delay. Pete jounced contentedly on the cushion. They unwound from a long curve into a straightaway. Pete suddenly picked up interest in something ahead. His jaws took up a resolute champ and his claw-like hand went to the throttle.

Coiloil was in sight, and there was considerable activity about that lonely siding. There should have been only two green switch lights to mark the spot. Instead, ominous splashes of red confronted them. Lanterns twinkled all around and, further along, a headlight pointed the other way.

The hay train was in trouble. Her engine had developed leaky flues that had grown worse as the hogger beat her over the grades, trying to get her in at Coiloil out of the way of traffic. But the engine had stalled and a good deal of her hind-end still hung out on the main track.

The sudden emergency didn’t demoralize Pete or affect his technique. He slammed the throttle against the boilerhead and nipped her with a tentative eight pounds of air—on pure conjecture. The best judgment wouldn’t tell him how the cranky brakes would respond, and he was all set to modify his surmise if wrong.

The brakes were reluctant to take hold. Pete reversed her and sanded, his tolerant eye measuring the diminishing distance between his pilot and the hay train’s marker lights. The drivers howled and threw sparks and blistered sand. The cars crowded and jostled impatiently. Pete sizzled more air and the brakes began to take hold. He grabbed the whistle lever.
A pair of lights, red and white, detached themselves from the others and floated toward them, swinging wildly. The hay train's brakeman had been "drawbar flagging", and the whistle had jarred him into frenzied life. It also shattered Hank Wheeler's frozen concentration on impending disaster. He yelled like a scared Ute. He fell into the gangway and went down the ladder. As best he could in dust and dark, he picked a place to land, and unloaded.

Mel knew that the landscape along here was precipitate and jagged; he decided to remain.

The hay train's engine began to bellow like an old bull caught in barbwire. The slack came tearing out, skipping along the train in a growing rumble and crash. When the runout hit the caboose, it seemed to jump three feet off the rail. The hay train began to move.

There was nothing violent about Pete's operations. He seemed like he was in a trance, and rode her as if he eventually expected this galloping evolution to work out. He appeared to be trying to prevail upon the 710 by sorcery. He mumbled incantations.

The hay train's flagman stepped out of their way and swung his lanterns. He yelled. He was likely cussing a blue streak. The payoff was here and now.

Pete had set his jaws. His cheeks puffed out and his lips puckered. He dallied with the brake-valve handle, experimenting with the remaining pressure in the trainline. The hay train's crummy rocking over the points into the siding. But no one was at the switch to close it and let Number 72 go by her down the maintrack. Likely the skipper had wandered up ahead to try to tell the hogger how to fix his locomotive, Mel thought, and then the 710 ducked into the siding.

SHE rooted the hay train's caboose with a wham that bounced clear across the High Divide. She grunted and twisted.

(Continued on page 138)
at the impact, and sat back on her smoking drivers. The hindend of the caboose seemed to hop off the pilot and stagger away for a car-length before it stopped.

Pete’s jaws wagged with satisfaction. “That was pretty close,” he beamed.

Back in the caboose, the Clinker had remarked Pete’s excessive speed and complained about it to Dodd. “What’s he all of a sudden in such a hurry for?” he grumbled. “He’s exceeding speed restrictions.”

“Pete’s absent-minded,” the skipper explained sourly. “His thoughts, such as they are, go wandering off and he just winds her up and lets her ramble.”

“I’ll have to reach him a flock of brownies,” the Clinker muttered, “and see if that won’t improve his train of thought.”

When Pete first applied the brakes, the Clinker reckoned the hoghead was merely slowing to a legitimate speed. But the wild whistle caused both him and the conductor some anxiety. They got up and made for the rear platform. Before they reached the door, Number 72 collided with the hay train and came to an abrupt stand.

Both were knocked off balance. They grabbed each other and went reeling in a dizzy waltz. The Clinker managed Dodd’s light weight so the skipper was flung against the wall first, thus making a cushion for the Clinker when he struck.

“That hogger,” the skipper howled, “has tried to paint me on the walls of this crummy before, and I’ve got in practice so I kind of know how to hit and ricochet. Then you catch me on the first bounce and try to plaster me into the woodwork. And I got no time to recuperate before I have to grab a couple of lanterns, some track guns and fusees and chase back to keep any following trains out of our kitchen door. You’d better bring Mel back here to do the flagging like the book says.”

“I wish that sawed-off imp of hell was in Connecticut. Just one redheaded carhand will jinx your whole railroad,” the Clinker grunted. He went forward.
chewed gently and beamed on him from the gangway of 710.

"Not a drawbar did I get," he repeated. "But I bet you I got some flat wheels. Mobey even drivers."

"Wasn't you taking them curves faster than the speed limit allows you?"

"No-o-o," Pete reflected. "I was just about right. I got it about thirty miles when I checked my watch against the mile posts."

"I clocked you by the telegraph poles," the Clinker snapped, "and you was doing fifty on twenty-five-mile track."

"That," Pete conceded, "is different." He chewed. "Mobey my watch is off. After now, I'll get the time from Mel."

"And there ain't room on this siding for both these trains to clear," the Clinker pointed out bitterly. "We'll have to see-saw the next ore train by us."

He tramped on to the hay train to gather evidence on which to issue more brownies.

A ramshackle figure came limping in out of the night. Handling himself with great care, Hank Wheeler climbed into the cab. When he unloaded in the face of those forebidding red lights, he'd taken a sprawling toboggan down a rocky embankment to the very edge of the precipice. He was black and blue in a number of places and entirely dissatisfied with conditions as they prevailed upon the Monte.

"Look," he invited defiantly, "all bets are off. There won't be any more. Gambling is prohibited till we get to the end of this run. I ain't goin' to have my neck broke over a small wager."

"Yeah," Mel cried with delight, "but that don't prevent Pete from paying up the one he lost. Come on, old-timer, and dig me up a four-bit piece."

Pete was hesitant. He considered profoundly on whether he could abrogate the bet, claiming an act of God. He wasn't sure what such an act consisted of, but it was mentioned on the Monte's shipping receipts and they used it in refusing to pay claims. It might work.
"You let Pete be," Hank intervened querulously. "He can't think of more than one thing at a time, and very little of that. You get his mind off his business and he'll drop us all into one of these nice, deep canyons. Look what he's done to me already!"

"Yeah, but we got to get eating money somehow," Mel pointed out stubbornly. "We haven't et since before we went in that saloon in Denver last night, and right now I'm beginning to feel the pangs of hunger."

"Yeah," Hank jeered back, "but I'd rather have my faculties to eat with, and a delay a meal or two, than to wake up and find myself dead, with beefsteak smothered in onions ready to hand."

"I still don't like to fast," Mel sulked. Hank unjointed himself from the fireman's seatbox and shook a long finger at him.

"You lay off that promoted bakehead," he warned. "We're going to 'tend strictly to railroadin' from here on in to terminal."

Mel glanced at Hank Wheeler, battered and bleeding and morose, and lapsed into moody silence.

The stars made cold diamond points above the rims of peaks. Something popped, like the snap of a finger, and a faint, frosty crackle ran through the crisp air. Mel could feel the bite of it at the end of his nose. Winter was on the move, coming down from Canada—bitter winds and stinging sleet.

Two-three days ago he'd been affluent and the future had looked just right to his specifications. But look at it now! The best he could hope for was more rugged months rollin' em among the crags. Even that was uncertain. He knew blamed well old Clinker was designing a snide account of his actions to take to the G.M. But the immediate problem was grub. And Hank wouldn't even let him collect the four-bits from Pete that'd buy them pie and coffee. Life sure had got itself in a hell of a shape.

(To be concluded)
Troubled with Deafness?

Then you'll be thrilled with the new revolutionary Zenith "75" Radionic Hearing Aid. You can order it by mail without risking a penny. Let a 10-Day Trial* at home, at church, at business, prove it's the finest hearing aid you can buy regardless of price. Saves you over $100.00.

HEAR BETTER or Pay Nothing

Light, compact single unit. Costs less than a cent an hour for battery consumption. Comes ready to wear. Accepted by the Council on Physical Medicine, American Medical Association. Mail coupon below. Let a 10-Day Money Back trial prove that this amazing, new, ready-to-wear hearing aid can bring you the joy and happiness it has brought to thousands of others.

*Trial offer available on direct sales by Zenith Radio Corporation or its subsidiaries.

Look only to your doctor for advice on your ears and hearing.

NEW ZENITH RADIONIC HEARING AID

Makers of the World-Famous Zenith Radios.

GIVE THE GIFT OF BETTER HEARING TO SOME LOVED ONE FOR CHRISTMAS

-- MAIL THIS COUPON TODAY --

Zenith Hearing Aid Division, Dept. PG-19
601 Dickerson Avenue, Chicago 39, Ill.

I enclose check or money order for $75* for one Zenith "75" Hearing Aid. Unless I am completely satisfied and find the Zenith "75" superior to any other hearing aid, I may return it within ten days of receipt and get my money back in full.

*Plus tax of $1.50 if delivery is made in Illinois or Iowa.

Please send details of convenient time payment plans, and free descriptive literature.

Name______________________________

Address________________________________________

City________________ State____________

High School Course at Home Many Finish in 2 Years

Go as rapidly as your time and abilities permit. Course equivalent to resident school work — prepares for college entrance exams. Standard H. B. texts supplied. Diploma, Credit for H. S. subjects already completed. Single subjects if desired. High school education is very important for advancement in business and industry and socially. Don't be handicapped all your life. Be a High School Graduate. Start your training now. Free bulletin on request. No obligation on request.

American School, Dept. H-149, Drexel at 58th St., Chicago 37
SEND NO MONEY. Just mail the coupon for a complete set of 4 Big, Thick Auto Books, 26th Edition. Over 2700 Pages! Whether you are a mechanic or helper, expert or apprentice, auto owner or driver, take immediate advantage of this FREE EXAMINATION OFFER.

MAKE GOOD MONEY NOW HOLD A PERMANENT JOB

America wants its automobiles kept in good repair. Men with "know how" are in demand, at big pay. These books will help you get and hold an important job, or give you a chance to go into business for yourself now or later. Any man whohalf tries to improve himself can learn auto servicing and repairing by using this quick reference method. Use the TIPPY INDEX to find easily understood answers for any auto problem. These wonder books prepared by eleven of America's greatest automobile engineers. Many hundreds of valuable illustrations. Send the coupon TODAY.

Publishers Since 1898

AMERICAN TECHNOLOGICAL SOCIETY, Dept. A131
Grevel Ave., at 56th St., Chicago 37, Ill.

I would like to examine your 4-Volume Set of Auto Books. I will buy the delivery charges only, if I elect to keep them. I will send you $2 and say the balance at the rate of only $3 a month until $24.80 has been paid. Please include cost of service as offered elsewhere.

Name.
Address.
City.
State.

Please attach brief description of your employment, employer's name and address, and name and address of at least one business man as reference. Men in service, also please give home address.

INVENTORS Patent laws encourage the development of inventions. Our firm is registered to practice before the U. S. Patent Office. Write for further information as to patent protection and procedure and "Invention Record" form at once. No obligation.

McMORROW, BERMAN & DAVIDSON
Registered Patent Attorneys
150-Y Victor Building
Washington 1, D. C.

Railroad Magazine

Switch List


M. E. ALEXANDER, Rte. 6, Palestine, Tex., has large list of pressed steel and cast iron railroad equipment.

(R) ROBT. ALEY, 510 E. 89 St., New York City, N. Y., will sell collec. 37 diff. Railroad Magazines, $34.50; 3 diff. Model Craftsman, $34.10, $7.50; or best offer on en. lot. 290 ngs., 400 px, size 116 mostly New England lines, $15.

(D) DONALD K. ANDERSON, 808 Water St., Albe

VERNON L. ARDUFF, Sr., c/o General Foreman's Office, NYC System, 123 W. Polk St., Chicago 5, Ill., has few railroad en. 1943, Trains, Nov. 17, 43, Dec. 14, 43, some railroad, trolley, bus lines for publisher etc.; use collect. 'value' stockers, serially-numbered as used on RBB company mail, and excess value; also wants to hear from anyone having old, recent ones to obtain for his collec.


(W) WALTER BIGGS, 909 Wagner St., New Orleans, La., has pix all rr., in New Orleans and vicinity; also many pi., will sell Trains, motor bus, trolley bus lines. Send stamped env. for list.

G. G. BROWDER, 2141 Balentine Blvd., Norfolk 2, Va., will send free 8x10 pix of longest frt in return for souvenir postal cards of views if mailed separately to him.

STEVIE BUBLINEK, 61 Norfolk St., New York 2, N. Y., sells 10,000 pix, $10 eca., p. c. size eng. pix, $10 eca.; will trade ngs., pix for same or for dom., or foreign postage stamps.

W. L. CHANOVE, Jr., Dobson Ave., Bay Minette, Ala., wants ngs., mags., some decapel- Pacifies of Alabama, Tenn. & Northern Rys.

HARRY CUTTHERELL, Jr., 36 Alexander St., New
erk 6, N. J., wants pix D&H depots along 'wooden axle' branch now abd., Kingman to Sedalia, O.; also emp. mags. issued during Ford regime. Give details, prices in reply. Has size 122 eng. views taken '47 for sale.

O. R. CUMMINGS, 23 Main St., Amesbury, Mass., offers new 7-pg. list New England trolley pix, mostly abd. lines, for stamp, List, sample pix, 10c. West older lines, New Eng. trolley material.


CLYDE H. DUNCAN, Edwin Hotel, Laurel Miss., wants pix of White Pass & Yukon pass, and frt. Write first.

(T) T. M. FLATTLING, Jr., 2970, Ft. Douglas, Utah, has Railroad Magazines '29 to '41; Trains, Model Railroader, Loco Engineer Journal, few NRR ngs., $112, 22 frt for other NRR ngs.; also some PRR pix to trade or sell.

RICHARD FOX, 61535 Dewey Ave., Elyria, O., wants pix any size O scale layout material.

M. P. GANEY, 2624 N. Meridian St., Indianapolis 8, Ind., offers annual railroad passes '01 to '18, 25c ea.; '19 to '30 passes, 15c eca.; sell or trade. Wants annual passes Atch, pari 1890, or any printed items on Indiana and O. to rsrs. prior 1890.

(R) ROBT. J. CHILBERT, 5212-39th Ave., S., Minne
apolis 17, Minn., will buy Railroad Magazine Oct. 31, 32, N. Y. ngs., con't, 1934-35.

R. C. C. GROSS, 308 E. 106 St., N. Y., C., will buy copy of Win. H. Brown's Early Locomotives, good con. Write, state price, etc.

J. C. JAMES, 522-10th Ave., S., Milwaukee 10, Wis., sells 616 pix TFMER&T, C&NW&C, CSL, Twin City Lines, others. Send stamp for list 50c prints.

C. S. BERRY IZY, Ailen Maymore, 4 Galatsi (Romaniac), is interested in ry. books, air, navy, other technicals but only last editions: unable to exh. as his are reviews in

Don't buy a Diamond Ring before seeing our Catalog!

By specializing in diamonds from estates, banks and unredeemed pledges, we are able to offer a large collection of fine diamonds at a substantial savings. Every diamond is sold with an iron clad money back guarantee. We will gladly send you the diamond you select for your personal examination, before buying, and without obligation. Every diamond has been reset in brand new mountings of the latest design. Send for our Free Illustrated Catalog, or write for a counter display of diamond values from $10 to $10,000. References: Your own bank or any mercantile agency.

BERMAN'S COLLATERAL LOAN BANK, DEPT PF
636-38 W. Baltimore St., Baltimore 1, Md.
LOW FACTORY PRICES
on the Sensational NEW 1949
MIDWEST RADIOS
With Exclusive FLASH-O-MATIC Volume and Band
Indication, TELEVISION Audio Switch-Over, and
NEW COLOR-RAY Tuning—plus No-Drift FM.

Featuring
THIS POWERFUL SERIES
16 AM-FM CHASSIS

SYMPHONY GRAND
AM-FM RADIO-PHONOGRAPH
A magnificent musical instrument and a master-
piece of cabinet design. Offers world-ranging radio
reception and newest automatic Internmix Record
Changing Phonograph. Uses powerful Series 16
AM-FM Radio Chassis. Giant 14½" Panasonic
Speaker; Tri-Magnadine Coil System; Built-In
Loop Antenna. Other luxurious console and table
model cabinets with Series 16, 12 & 8 Radio Chassis.

SEND FOR FREE CATALOG

Free Book
MOUNT BIRDS, ANIMALS, FISH
Yes FREE. Explains Taxidermy. Tells how to learn at
home by mail to mount birds, animals, insects, etc. FUN
skins and fur. Great for MEN and BOYS. Pulls. Also
earn money in spare time. WRITE TODAY—NOW—
For FREE BOOK. Mail 100 game pictures. State A.G.
N.H.School of Taxidermy, Dept 4253, Omaha, Neb.

How to Make Money with Simple Cartoons
FREE
A book everyone who likes to draw
should have. It is
free, no obligation.
Simply address

How to break and train horses. Write today for this book
FREE, together with special offer of a
course in Animal Breeding. If you are
interested in Gaiting and Riding the saddle
horse, check here ( ) Do it today—now.

SEND FOR THIS FREE!

Free Book
MAIL Today

BEERY SCHOOL OF HORSEMANSHIP
Dept. 841
Pleasant Hill, Ohio

Railroad Camera Club

RAILROAD CAMERA CLUB is open
to all who collect railroad or street-
car pictures or other railroadiana such
as timetables, passes, train orders, trol-
ley transfers, magazines, books, etc.
There are no fees, no dues.

Membership card and pin are given
free to anyone sending us the latest
Reader’s Choice Coupon and a self-ad-
dressed stamped envelope. If you don’t
want to clip page 139 make your own
coupon. Address Railroad Magazine,
205 E. 42nd Street, New York City 17.
Tell us what you want or what you
offer; otherwise your name will not be
printed here.

foreign languages only; offers unused postage stamps of
Romania and Europe in compl. sets.

W. G. JAMIESON, c/o 17 Railway St., Wirknam,
Newcastle, N. S. W., Australia, wants to exchange pix Aus-
tralian eng. for those of Am. engs.

(*) KENNETH C. JENKINS, 2600 88th Ave.,
Oakland 5, Calif., sells pix, $1 for 10. Diff. sizes; specify
steam or elec. No list.

(*) LOUIS A. JOZIK, 3103 Orchard Ave., McKees-
port, Pa., will buy size 120, 116 or larger pix of inter-
urban cars. Eastern, Midwestern, Detroit United
Railways; also Penn. Ohio System, Youngstown and
vicinity interurbans; Northern Ohio Traction & Light
Company interurbans.

BOB KAIN, 28 Whittton Rd, Hamilton, Ont., Canada,
sells and trades CPR and TH&B pix and negs. List,
sample, $5.

(*) JIM KEYS, R.F.D. 1, Box 1145, Renton, Wash.,
wants streetcar pix; also 'sub's and el trains, inside and
outside views.

DAVID KURTSTIN, 935 15th St., S. E., Washington
D. C., offers National Geographic, 30¢ ea. plus post.;
Sept.-Dec. ‘47; Jan., Feb., May, June ‘48; MoP, MoK, 1C,
MoHo mags.; Trans., N&W guide City maps; wants
your post cards; list 1½. Complete list for stamp.
E. J. LAMBERT, 14 Downe St., New Plymouth,
New Zealand, wishes to corres. with rr. fan in Butte,
Mont. Will exchange, eng. eng. shots New Zealand rrs.
4-8-4, 4-8-2, 4-6-2, etc.

JOE LAU, 3104 Brightwood Ave., Baltimore 7, Md.,
wants Balto. Transit Co. streak and scrapping shots and
negs. Also the address of Charles G. Clarke.

W. A. LIVINGSTON, 204 Madison Ave., Endicott,
N. Y., wants info. on Erie Western RR.; will pay for
clear pix of empl.; structures. Write first.

RBP. A. LORD, 101 Richmond St., Painesville, O.,
wants pix, clippings of covered bridges, esp. rr. covered
bridges; will trade 8x10 pix first rr. bridge C&P RR
at Painesville, 0, showing portion of highway covered
bridge in foreground; now the NYC and the highway
being U. S. Route 20.

WILLIAM F. LOTT, 23 Weir St., Taunton, Mass.,
has old tis. to sell or swap.

(*) FRED MATTHEWS, Jr., 652 Boulevard Way,
Oakland 19, Calif., wants good, sharp negs., size 2½ of
each North Amer. native lives.

(R) JOHN H. MILLER, 502 Courtland Ave., Mari-
, O., has many CH&K frt. way bills, mens 1888, ’89
’91; 4 items, 25c and stamp. Also some Columbus &
Toledo and C&CC&Q waybills, 5c ea. Wants May 34.
May '42 "Railroad Magazines in good cond.

(R) WILLIAM J. MILLER, 15219 Region Ave., Alten
Park, Mich., will sell Railroad Magazines ’43 to ’47 inc.
$18 Bd.; Trans., Eastern and Midwestern albums incl.
e. ppd.; Of. Guides June ’39, Dec. ’40, July ’43, Sept
’45, Dec. ’46, 96c ea. ppd.; has electric collec. incl. Lake
Shore Elec.; pix, news, entire lot for disposal, many
rare items, no June. $75 ppd.

(R) FRANCIS X. MURPHY, 1100 Palisade Ave.,
Union City, N. J., will sell Railroad Magazines ’38 thru
1939; Apr.-July ‘41; 43 mags. in good cond.; make
offer.

CURTISS NELSON, 1968 Pinehurst Ave., St. Paul 5,
Minn., wants latest eng. tis., Milw. (River Div.); also

midwest radio & television corp. please send
print
Dept. 221, 909 Broadway, Cincinnati 2, Ohio
Please send me your new FREE 1949 Catalog.
IDEL XMAS GIFT
Why not send your husband, father, brother or son a year's subscription to "FUR-FISH-GAME"? He'll get all the latest news of genuine spottings with this interesting monthly magazine. It is chock full of fascinating stories and articles with actual photographs on HUNTING, FISHING, FARMING, and TRAPPING. Many of its writers are national authorities on these subjects and each subscription is only $1.50 on the newsstands or $2.00 a year. Save by sending for SPECIAL
CHRISTMAS OFFER — 9 Months $1.00
One year subscription $1.50
FUR-FISH-GAME, 405 Standard Bldg., Columbus 15, Ohio
Enclosed is $1.50 for 1 year's subscription on 9 months for, 30 cents each.
Check with postal card, cash, check or money order acceptable.
Print subscriber's name in space below. If a gift, tell us your name also and we'll send a Xmas card for you.

NAME

ADDRESS

SUIT TOURS AS A BONUS
AND BIG MONEY IN SPARE TIME, TOO
We want you to wear this fine made-to-measure suit
Make it yours by sending a few orders & earn $10 CAMPAIGN
PROFITABLE IN SPARE TIME. You will build up orders with scores of rich, quality fabrics, tailored in exquisite designs. Write today for complete information & samples.
FREE SAMPLES
For quick action tell us about yourself.
J. C. FIELD & SON, INC.
Reliable man with car wanted at once to call on farmers. Wonderful opportunity. $15 to $20 a day. No experience or capital required. Permanent position. Write today.
McNEss COMPANY
Freeport, Illinois

MODEL RAILROADERS
Send 50c for 80 page 1949 catalog of Walther's Model Railroad Equipment. Available in two volumes. State whether O or HO gauge is desired.
WM. K. WALTHERS, INC.
243 E. Erie St., Milwaukee 2, Wisconsin

"TINY POWER"
Miniature Live Steam Locomotives and Cars
Steam tractors, portable engines, threshing engines, single and double stationary steam engines, steam donkey engines and winches, upright, horizontal boilers, READY-TO-RUN. Also castings and prints available for some items. NOT toys but working models. Illustrated catalog and data sheets for .35 (coin). 4 large glossy photos, data sheets etc. of our big 16" gauge Atlantic or Pacific and cars for amusement park work with above catalog for $2.00.

Chas. V. Arnold, Philomath, Oregon
23 years experience in steam models

50 years of railroading with the SP
by ERNEST L. KING, as told to Robert E. Mahaffay

From brass pounder to brass hat—he has lived the history of the Southern Pacific. A book packed with the excitement of its birth, its early San Francisco fire and the great Imperial Valley flood, and rich anecdotes of half-a-century of trailblazing. $5.00.

At bookstores, or postpaid from
Doubleday & Co., Dept. R1, Garden City, N.Y.

Rock Island, Bur., C&NW, Sante Line Divs. operating into St Paul.

ROBT. PHILLIPS, 863 E. 28th St., Brooklyn 10, N. Y., has any size CRRNJ, Rdg., B&O, DL&W, NYC, West Shore, LIRR and Erie pix; subway trls., latest tets, Southern Central & Tenn. West.

(*) P. R. RAMSBY, RR. 2, Ligonier, Ind., has loose leaf photo album containing 20 perf. 8x10 DBL WT. offprints, 2 pix x 3 pix publishable inserts in 2 different articles, frontpiece giving short history and dates of abd of Ind. RR. Div. history of ea. car. Photos date from '06 to '35. Notebook, like above, on Ohio Elec. systems, 20, 8x10 pix and 6 pix to '10 and up. 3 pix of D&H.

J. T. RICHARDS, 1324 Perkemien Ave., Reading, Pa., will sell U. S., English rr. books, tets, incl. steam, elec. items. Send card for list; many old, rare items. Interesting, but broken ti. collect.

(*) HARVEY ROE, 68 Lake Ave, Tarrytown, N. Y., will sell 8x10 pix abd. elec. trolley lines of Tarrytown and Ossining, N. Y.; has size 616 pix Peekskill, N. Y.

FRANK A. SAARNI, 2245 Curtis St., Berkeley 2, Calif., will buy or trade local builders plates.

J. SAMUEL, Box 606, Chicago 1, Ill., will trade Ill. Central tr. ords. for other rds. ords. or railroadiana.

(*) RONALD A. SCHOENBERG, 7742 W. Columbus Ave., Chicago 31, Ill., has CTA transfers to trade for other.

(*) O. D. SCOTT, 9411 Alverstone, Los Angeles, Calif., wants tokens, annual passes, any elec. line operating or abstracts.

J. SHAFER, 700 Cottage, Waterloo, Ia., wants old steam eng., thresher catalogs, old automobile farm machinary catalogs, old post cards, watch fobs, medals.

(*) DON L. HIRSCHBACH, 521 Hawthorne Ave., Yonkers 5, N. Y., trades transfers and tks.


RANDOLPH TARDY, 133 S 19th St., West Helena, Ark., wants to buy SR&G TEP, pix 8x10, TEP, pix size 616, 127 for sale. List, sample pix, 10c. E. O. TEFS, Jr., 15 West Shore Drive, Hazardville, Conn., wants pix, negs., blueprints, plans, anything concerning Ches. &幽州.

L. T. TOLMBERLIN, 1755-16th Ave., Oakland 6 Calif., wants to buy bus negs. of cities under 30,000 pop., free of copyright for use in book.

(*) ROBT. VAN BUSKIRK, 120 Chestnut Ave., Jersey City 6, N. J., sells elec. pix, size 116, 10c ea., for $4; list, sample pix, 10c; wants western negs.; New Jersey negs, prints please.

NEIL WOODS, Swanton, Md., is collecting tr. ords., clearances from all North Am. rrs.; would appreciate receiving same.

(*) JOE ZUCKER, 5485 Ellis Ave., Chicago 15, Ill., would like to correlate, with electric railfans.

Model Trading Post

ERIC BRAMSTEDT, 313 Milton Rd., Rye, N. Y., will sell unused Lionel eng., 1634 with tender. $10.

JOE H. BRUNER, East Marion, N. Y., will sell, collect, printing and developing outfit; write first.

ALEX DARRAGH, 1815 Bergan St., South Bend 16, Ind., will sell or trade 8 gage material; AF 4-6-2 and tender, 3 ft. cars, catalog, 12 sec., 2 rail curved sec., 2 rail str. track; pr. manual switches, no transformer. Has smoke, 'choo-choo', new Dec., '47, excell. cond.; will ship exp, approval to highest bidder topping $35. Interchangeable in HO or TT.

JOHN GROSS, 197 Van Buren St., Brooklyn 21, N. Y., will sell 20 locos, many brand new pass. and ftr. cars, all std. gauge; Ives, Lionel, AF, many rare models from '29; all items perf. orig. running cond.

W. E. HOFFMAN, 326 E. 8th Ave, Baltimore, Md., will sell V4 in scale ftr. cars, accessories, good cond. E. F. HEMMLES, 330 Pennsylvania, Mont, will sell 30 pr. HO, K&W couplers, good cond., $.

LEON KREGER, 2006 Jarvis, Chicago 45, Ill., will sell or swap large list of Maerklin, other foreign O gage locos, cars, catalog, very rare; wants Maerklin O gage locos, large 8-wheel cars, also Hornby Princess Elizabeth loco.

ALVIN LAUFFER, Laraway Rd. 1, Elwood, Ill., will sell TT gage esp., Lionel A unit set, pabco, gondola, caboose, flat car, stock care, R. H. switch, track kit, 21 ft. rails, $35, perf. cond.

A. LEDERER, 11 Bryn Ave, Amityville, N. Y., has

Railroad Magazine
Reader's Choice Coupon

Stories, features and departments I like best in the January issue are:

1. ...........................................
2. ...........................................
3. ...........................................
4. ...........................................
5. ...........................................
6. ...........................................

Best photo is on page

Name ...........................................
Occupation ...................................
Address ........................................

Is stamped envelope enclosed for Camera Club pin and membership card?....... Railroad Magazine, 205 E. 42nd St., New York City 17.

Lionel 153, 154 signals, 2651, 2757X, 2652, 2620 cars; wants Lionel 2440 n d Knuckle coupler frt.

JERRY McINTREY, 1318 Genesee Bldg., Buffalo 2, N. Y., will sell or swap O-gage tracks and scale equipmt., excell cond.; history avail. on request.

WILLIAM J. MILLER, 5219 Regina Ave, Allen Park, Mich., will sell O-gage Lake Shore elec., 164 wood comb. with motor ready to run, 2-rail, lots of detail (pox on request), $37 p. d., or will trade for good detailed HO gage Grand Trunk Western gas elec. car or Diesel switcher, 2-rail oper.

(R) R. C. MORRISON, 1100 Ave. G, (Lipscomb), Bessemer, Ala., has HO model equipmt.; Model Railroad, nags.; back issues Railroad Magazine. Wants firearms, prefers antique cap and ball or flintlock; or your offer.

T. J. PELLETIER, R. 1, Potlatch, Idaho, wants 2, 815 Lionel tank car; 1, 603 Lionel Pullmans; 1, 604 Lionel observation car; also 2 Lionel dump cars to fit the above cars; also wants AF, 1, 3207 gondola and 2 dump cars to fit the above cars.

CHARLES E. REARDON, Jr., 414 E. 67 Place, Chicago 31 II., will sell Miller 8-gage two motor power truck in orig. box, brand new. Retail price $22.50; will sell for $18.50.

BEN SMITH, 265 Tompkins Ave., Brooklyn 16, N. Y., will sell O-gage Lionel 726, 2-8-4, scale loco, wri-le tender, Lionel scale caboose 717; 2 scale Lionel box cars 714, perf. cond., $60. Has many other tr. items, incl. Lionel Hudsons for sale tiplite, (R) D. A. SUDERMAN, 125 W. 8 St., Newton, Kan., has collector's bargain. First $25 buys two HO boxcar kit; 50 Railroad Magazines, 13 Trains, 5 Model Railroad. $25 ATSF. unf. thr., 1 SP unf. thr., 10 Union. Snp. unf. thr., mse. LA Ry., trsf., passes, etc.

J. FRED TAYLOR, 110 E. Chilhowee Ave., Johnson City, Tenn., will sell one Varney doxside with compl. valve gear.

ROBT. VAN BUSKIRK, 120 Chestnut Ave., Jersey City 6, N. J., will sell O-gage tiplite truck; 46 secs. Lionel O.S. curve, 10c a sec.; 40 sec. Lionel O.S. curve (no pins) 5c a sec.; Ives and AF, 5c sec.; 1 Lionel 020x9 crossing, $1; Lionel 654 oil, $1.25; Lionel 20T tender, $1.25; 14 secs. Lionel std. curved, 12c ea. sec.; 21 std. trucks, 60c pr.

CALVIN WATSON, Central St., Topsfield, Mass., will sell AF O gage equipmt.: 4-6-4 Hudson, 62 secs. truck, pr. switches; also Lionel O gage equipmt.: pr. switches, 45 crossovers; 8 cars, 90. J. C. models, AF.

W. PERRY WILLIAMSON, 1061 E. Market St., Apt. 9, East Akron, O., has guitar, some books. O gage accessories to trade for pre-war O, 027 cars, pass. frt., 027 trk. Wants old AF 9/4 in. frt. cars, from '33 to '40; also old tin stations, bridges, signals, streetlights, coal, oil, tenders, esp. Vanderbilt type.

Copyright 1936 Biltrite Rubber Co.

FOREVER FIRST WITH FIRST QUALITY

TINY RADIO!
Red plastic case. No tubes, batteries or electric "plug-ins" needed! Guaranteed to receive local stations. Only $2.99 (c. c.) cash postpaid or send only $1.50 and pay $1.49 C.O.D. Complete ready to play on easy connection. With Personal phone. Order your Tiny Radio NOW-TODAY!

MIDWAY SALES CO., DEPT. TFP-1, KEARNEY, NEBR.

GET INTO DIESEL-AUTO MECHANICS MASTER ALL PHASES

SHOP METHOD HOME TRAINING
by an Established Resident School prepared for YOU FOR MANY GOOD JOBS!
Get COMPLETE Training Diesel - Automotive Industry needs trained men, to install, maintain and repair all types Diesel and Automotive engines—AND allied equipment.
Now, National Schools offers you practical, proved home study training covering ALL phases, Basic instruction and specialization in field of your choice. All-embracing instruction. Valuable, large engine manual—TOOLS and EQUIPMENT included. Earn while you learn. INVESTIGATE—get full information. You Receive Tools and Equipment as Part of Your Course.

NATIONAL SCHOOLS
Los Angeles 37, Calif. EST. 1905

FIND OUT NOW...MAIL COUPON TODAY

National Schools, Dept. PFGD-1
4000 South Figueroa Street
Los Angeles 37, California

Mail me FREE, the book, YOUR FUTURE IN DIESEL, together with the Sample Lesson. I understand I may keep and use the information with no obligation.

Name..................................Age..........................
Address ..................................

City....................................Zone....................State......

-Check here if Veteran of World War II

D

145
Flagstops

NEW PUBLICATIONS. Railroads since the war have been acting on the principle that to manage a profitable transportation business they must do more than sell tickets. They've got to sell themselves. New equipment, speeder runs and heavy advertising are part of the program; telling the story of their trials, struggles for existence and improvements, and their successes is a necessary factor. To this end the B&O has been prepared, slanted to the employee and to the passenger. All of them aim at friendlier relations between the railroad and its public.

Working on the Central is exactly what it sets out to be: a guidebook for New York Central employees. It introduces the new man to his job; to the men in the shops, the offices, the yards where it all comes one member of a team; to the future he may expect... promise of advancement, security, vacations and pensions; and while the treatment is necessarily bulky, the booklet is very readable, an integral part of the whole. There's enough historic material included to give the employee a quick picture of the New York Central's early history and the extent of its operations today. Having aroused his interest, it encourages further reading on the subject and should prepare the way for better-informed employees, who will in turn sell their railroad.

The Chesapeake & Ohio's latest handouts are entertainment for the young. George Washington's Railroad: His Dream Realized is a comic-strip history of the C&O's predecessor, one of which claimed the fastest boat service in 1890. Courtesy of the C&O, also, comes a 12-page Chesse Coloring Book and box of crayons which a child is to take home or get busy on while still on the road. The Crayon is a pleasant way to get the boys and girls who are members of the train crew, and the C&O's Cleveland office at Terminal Tower, Cleveland 1, 0., offers to send out either book or some other request. Parents may be glad to know that C&O guarantees no damage to youngsters who apply the crayons to their mouths, instead of to Chesse's pages.

MOST RECENT feature in the series, Kentucky's Abandoned Railroads, is the 33-mile "Route of Old Henry." Written by Elmer G. Sulzer, this article combines history with the anecdotes of Engineer Johnnie Gunther, who shared the right-hand side of the cab and his throttle with a snake; of the first run on the Lancaster-to-Port Sill, when the absence of Rule G added to the festivities; of Henry Lammax, the engineer who gave the acid its affectionate title. In the 1890s the distilleries at Silver Creek provided traffic; and for a time this L&N branch was the scene of some time under the Kentucky Central flag—carried full trains on Richmond-Stanford and Cincinnati-Stanford runs. As in the case of many shortlines, it was the gasoline age that caused the abandonment of the 24-mile Lancaster-to-Port Sill branch in December, 1933.

Route of Old Henry is the eighth railroad history to appear in the Kentucky Engineer, edited and published by the Central of Kentucky Engineers, P.O. Box 439, Lexington 29, Ky. Printed on coated stock with photographs by J. Winston Coleman, Jr., the article is available to readers at 50c a copy. Two other issues, never before offered for public sale, are Nos. 6 and 7; the former covers the Versailles to Georgetown trackage and the Southwestern; the latter, the Kentucky South Atlantic and the Red River Valley. Address Kentucky Engineer for copies.

PARIS. French National Railroads. 610 Fifth Avenue, New York City 20, announces the opening in Paris of the Inter-allied Railroad Club. Its object is to facilitate contacted between French railway officers and officials of friendly foreign railroad administrations, and to provide a pleasant, congenial meeting place. Temporarily, it is at 11 Rue de Milan, the club has a bar-smoke-room and a restaurant.

MODELERS. The B&O has a new set of drawings available to builders on request: accurate figures for the buildings of a F-3 Electric-Motive Diesel. Included are full instructions for the painting, striping and lettering of the B&O units. For copies of the sheets, write: Lawrence W. Sagle, Public Relations Representative, Baltimore & Ohio, Baltimore 1, Md.

Sutherland and Lorch, 240 Broadway, Newburgh, N.Y., has 8x10 woodblock reproductions of old Empire State Express and Coyote Special, suitable for framing at $2.50 apiece.
YOUR FIRST MOVE AT THE FIRST SIGN OF CANCER

The way to win against cancer is to discover it early—don't be afraid to learn the truth. Your doctor may give you the good news your fears are groundless. Or that a relatively simple course of treatment, in the light of new medical discoveries, is producing wonderful results in similar cases. But whatever you're told, the sooner you act, the better the news will be.

Always be on the lookout for cancer's danger signals. Watch for them in yourself, in your friends and in members of your family.

Remember—you can't diagnose cancer yourself, but you can suspect it. Be on the lookout. Check up on yourself from time to time.

Cancer's Danger Signals

1. Any sore that does not heal, particularly about the tongue, mouth or lips.
2. A painless lump or thickening, especially in the breast, lip or tongue.
3. Progressive change in the color or size of a wart, mole or birthmark.
4. Persistent indigestion.
5. Persistent hoarseness, unexplained cough, or difficulty in swallowing.
6. Bloody discharge from the nipple or irregular bleeding from any of the natural body openings.
7. Any change in the normal bowel habits.

Mail coupon for free booklet that tells the facts about cancer.

American Cancer Society
47 Beaver St., New York 4, N. Y.

Please send me free the booklet containing vital information about cancer.

Name
Address
City State
When safety's a must, it's PRESTONE Anti-Freeze

SAFETY'S A MUST with Fire Chief Ivan Curry, of Osseo, Wisconsin. "In my job a freeze-up can be fatal. It pays to have 'Prestone' anti-freeze—the best anti-freeze you can buy!"

SAFETY'S A MUST with Ambulance Driver David Landew, of Muhlenberg Hospital, Plainfield, N.J., who says, "I put one shot of 'Prestone' anti-freeze in my radiator every fall and I'm safe from freeze-ups!"

SAFETY'S A MUST with Police Captain Emerson Payne, of Jeffersonville, Indiana. "No matter how quickly the weather changes, 'Prestone' anti-freeze keeps my car free from freeze-ups."

In your car too! "Prestone" anti-freeze is America's Number One brand. Year after year, more motorists depend on it than on all other brands of all-winter anti-freezes combined. There is nothing else like it!

GUARANTEED! Ask your dealer to show you the guarantee. It's your assurance of all-winter safety.

$3.50 PER GAL.

PRESTONE Anti-Freeze ONE SHOT LASTS ALL WINTER!

NATIONAL CARBON COMPANY, INC.
30 East 42nd Street, New York 17, N.Y.

The registered trade-marks "Prestone" and "Eveready" distinguish products of National Carbon Company, Inc.