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Now Make Sold were that the lefting ac-quainted with Receiver Servicing," to show you how practical it is to train for Radio at home in suare time. It's a valuable lesson. Study it-keep it-use it-without obligation! And with this Lesson I'll send my 64-page illustrated book, "Win Rich Rewards in Radio." It describes many fascinating jobs Radio offers, explains how N.R.L. trains you at home for good pay in Radio!

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a ween LAIRA IN Spare lime The moment you enroll for my Course I start sending you EXTRA MONEY JOB SHEETS that sharp make \$5, \$10 a week EXTRA money fixing Radios, while still learning. I send you SIX big kits of real Radio parts. You LEARN Radio fundamentals from my lessons—PRACTICE what you learn by build-ing typical circuits like those illustrated on this parc—PROVE what you learn by interesting tests on the circuits you build.

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You build this SUPERHETERO-DYNE CIRCUIT containing a pre-selector oscillator-tor oscillator-delector-a.v.c. stage and avido stage land avido stage land avido stage and avido stage and avido stage deletor-a.v.c. stage and avido stage land avido stage deletor-and stage land avido stage land avido stage listant statuons. Get the thrill of learning at home evenings. tests



Building this A. M. SIGNAL GEN-ERATOR will give yon valuable exper-ience. Provides amplitude modulal-ed signals for test and experimental purposes.

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RAILROAD

Originally Railroad Man's Magazine, founded 1906

November, 1943 Vol. 34, No. 6 25 Cents

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(The exciting experience of Margaret Bridges, of the Lon-

don Auxiliary Ambulance service, during one of London's heaviest raids. Pretty, attractive 30-year-old Miss Bridges is part English, part American. She volunteered for the ambulance service, reporting for duty just three days before war was declared.) • We had about 40 ambulances and other cars stored in a building with a great glass roof – a virtual greenhouse – when Jerry's bombers arrived. When they began finding our section of London we started getting the cars out...

"Naturally, the transparent roof taboo'd ordinary lights. Yet we hadn't a moment to lose; with every sickening crash we expected the roof to splinter into a million heavy daggers. I got out my flashlight. In about ten minutes I had guided all the cars to safety...



3 "I was working alone in my office when the roof finally did cave in. Only my flashlight could have helped me find a way through that deadly, glittering sea of broken glass...You begin to see why ambulance drivers must always carry flashlights with fresh batteries!"

Your dealer may have no "Eveready" flashlight batteries. If so, please don't blame himalmost the entire supply is currently going to the armed forces and those war industries with the highest priority ratings.

Send for "You and the War," official O.C.D. guidebook to all vitally important war posts available to civilians. This free booklet tells exactly what there is to do and how to do it. Write National Carbon Company, Dept. DT 30 E. 42nd St., New York 17, N. Y.



How Well Do You Know the Book?

PETER JOSSERAND, Western Pacific dispatcher at Sacramento, Calif., gives you another chance to test your knowledge of the operating rules.

Who Was Right?

WHEN the dispatcher went on duty, he found that Extra 252 west held an order which read in part: ORDER No. 71: Extra 252 West...meet No. 62 at E.

The district extended westward from A to H. This portion of the order had been issued to keep Extra 252 West moving against an overdue schedule until such time as a train might be called out of H to run on the schedule, the reason therefor being that the dispatchers were forbidden to issue short-right-of-track orders.

Upon looking the situation over and conferring with the yardmaster at H, it looked as if Extra 252 West should make H for the next eastward train. However, because of other movements contained in Order 71, the DS could not annul it and give Extra 252 West right over No. 62 into H; so he put out Order 72: No. 62 meet Extra 252 West at H instead of E.

Later, after Extra 252 West pulled out a drawbar at a meeting point and was delayed getting the bad-order car chained up behind the caboose, it became necessary to move an eastward train called at H to G for them, the DS issuing the following:

Order No. 73: Eng 250 display signals and run as First 62 H to A.

Order No. 74: Extra 252 West meet First 62 at G instead of H.

On arrival at G, and after having met First 62, the conductor on Extra 252 West called the dispatcher on the phone. "Where is Second 62?" he asked.

"They're not called yet," said DS.

"Well, we'll have to have something on them to get to the yard." "You have a meet with them at the yard. What more do you want?"

"We don't have anything on them," the conductor replied. "You changed the meet from H to G."

"You had a meet with No. 62 at H, which means that you had a meet with all sections of No. 62 at H," the DS explained, "and only the meet with First 62 was superseded; so you still have a meet with Second 62 at H."

There was a pause, then the conductor said: "The hogger won't go unless you give him right over Second 62 into H."

"Far as I'm concerned," the dispatcher exploded, "he can sit there until the wheels rust off that Mallet. I'll put it up to the chief. If he says give you the order I'll do it; otherwise, you don't get anything more."

Having heard the details of the issue, the chief said: "The engineer is exactly right and he should have right over Second 62."

"How the hell do you figure that?" the dispatcher asked. "He had a meet with all sections of No. 62 at H. I only superseded the meet with First 62, so he still has a meet with Second 62 at H."

"Well, give him the order," the chief said. "No use delaying the train there. We'll thresh out the matter later."

So the dispatcher put out Order No. 75: Extra 252 West has right over Second 62 G to H.

"Now you have a meet with Second 62," the dispatcher told the conductor. "and you have right over Second 62. If that blockhead running the engine won't go on that, come back and I'll annul Second 62 for him. The chief says I have to get him moving; otherwise, he could have stayed there until he died of old age, far as I'm concerned."

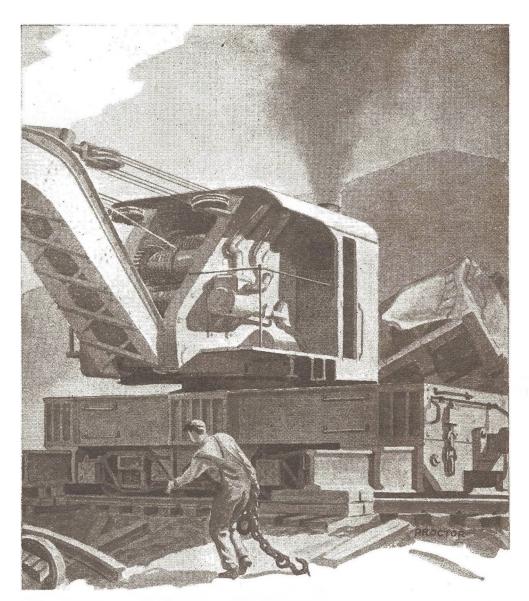
Who do you think was right? Did the engineer actually need the right-of-track order? (Answer on page 63.)





Big Hook

It's the Least Used Piece of Equipment in the Yard —and Sometimes the Most Vital

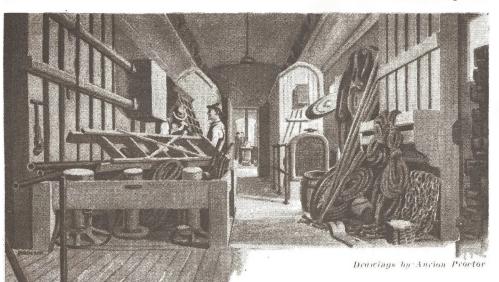


I T'S NINE P. M. and fog is kneedeep, down in the eastbound classification yard. Squealing boxcars top the hump at a steady, six-per-minute gait; their wet flanks stained a sickly yellow by the sodium lamps atop the big retarder tower. In cuts of twos and threes and fours they teeter onto the sharp descending grade, rock through the pincher beams, and glide away to distant couplings in the mist.

Out-bound traffic, this, clearing the ladders as fast as the mountain hogs can wheel it down river. No bottlenecks. Everything clicking like a roller-bearinged club car. And then—

Rising above the normal din of the busy terminal—the whoosh of the humping goat, thin whine of headlight generators, and clatter of compacting draft-gear—comes the most dreaded sound in all railroading: four harsh blasts of the back-shop

Railroad Magazine



Crew Car

whistle. Lantern signals freeze in mid-air, an engine exhaust breaks sharply, and high on the hill behind

the brown stone wall that bounds the right of way long shafts of light mark half a hundred open doorways. All Railroad Avenue knows that there has been a wreck out on the main.

In that moment of uncertainty and dread, when the family of every train and engineman fears that tomorrow will bring no callboy with his book to sign, attention is suddenly focused on one unit in the yard. **Big Hook**

LEFT: Interior of Erie tool Idler Caboose car. Note air compressor for pneumatic equipment **BELOW:** Consist of a Hudson Division wrecker. Lifting slings are carried on sides of the truck car Truck Car 150 Ton Crane stant action. Tool Car

Officially it's listed as the wrecking crane. But railroad men for more than sixty years have dubbed it simply and descriptively "the big hook." With its idler or boom-car, its flats, and its antiquated coaches housing tools, crew quarters, mess room and kitchen, it constitutes one of the least used pieces of equipment in the terminal, and at the same time the most vital. Troop train, limited and manifest-all take siding for this ponderous giant when a terse "W-K" crackles over the wires.

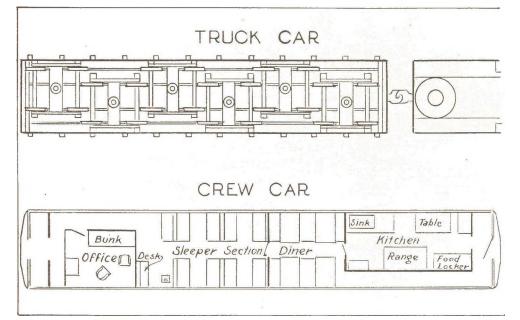
Officials will tell you that on a busy main, as much as a thousand dollars a minute may be lost when tracks are blocked a matter of three hours or more. Small wonder then, that no one begrudges the coal that keeps steam up in the big hook night and day, or the wages of the crane operator in constant attendance, or the stock of provisions, both canned and perishable, stowed in the lockers and

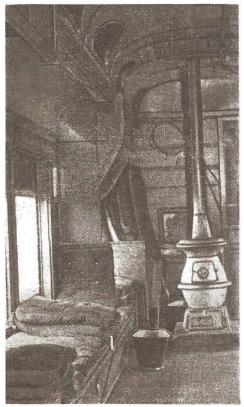
icebox of an attending cook car. Some division points go further, maintaining two complete wrecking trains on adjacent sidings-one facing each vard-limit board and poised for in-

ET'S climb down a steep flight of iron stairs leading to one of our largest passenger yards and have a look at a wrecking outfit at rest. Painted the deep red used to identify work equipment of this line, crew cars, flats, and idler bear three-digit numbers prefixed by an "X". If your evesight is good, you can spot the initials of the road as well.

But up on the rivet-blistered flanks of the black crane cab, where your sense of ornamentation tells you there's plenty of room for a herald, you'll see no traces of the lettering artist's skill. There's a point welltaken here. Wrecks are bad advertisements, no matter how swiftly they're cleaned up, and today more and more systems are veering away from using their cranes as traveling billboards.

The old railroad man will have no trouble in identifying the rear car of the wrecking train. Forty years ago it was a swank diner assigned to blue ribbon jobs in New York-Chicago



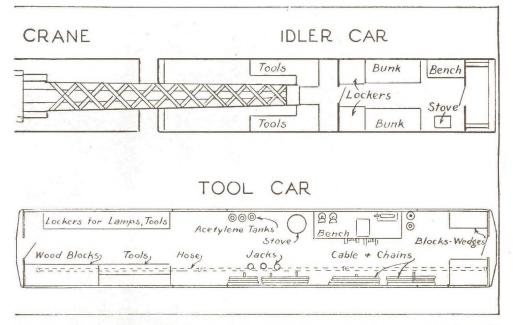


BALTIMORE & OHIO bunk cars are comfortable if not gaudy. When the spill is a bad one, crews work and sleep in shifts

service. Arched windows with insets of marbleized glass and a blind vestibule testify to that. Now, however, the fine interior woodwork is buried beneath innumerable layers of gravgreen paint. A compact little office occupies an area comparable to that of a drawing-room at the forward end of the car. Here the wrecking boss may spend an occasional moment of privacy. More likely, the division superintendent will retire there to bite his nails to the wrists during those anxious hours when he is tempted to can the whole crew and lay a switchback over a neighboring mountain as the quickest way to resume traffic.

He might conceivably do that, but if he has the sense of a Gibraltar jackass he will never try to tell the wrecking boss his business. For the grizzled veteran in charge of this outfit is conceded to be an expert in his field. He is an old hand, steeled if not callous to spectacles of unbelievable tragedy and human suffering; a man upon whose nimble wit, skill and en-

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durance human life and the saving of innumerable thousands of dollars may depend.

Old Cap White, retired Southern wrecking boss who is credited with having cleared more comfield meets and derailments than any other living man, summed it up cryptically a few years back, when a reporter asked him how he went about his job.

"Hell," he said, "I couldn't tell

you. Never saw two wrecks I could treat alike."

Maybe that's stretching it a point. Certainly there are accepted methods of wrecking procedure, the chief of which is that all other considerations yield to the saving of life and limb.

No such clear cut ruling, however, holds in weighing the value of rolling stock and shipments against a quickly opened main. Equipment may be

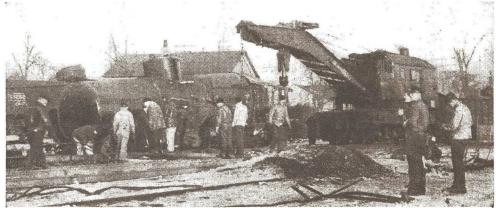
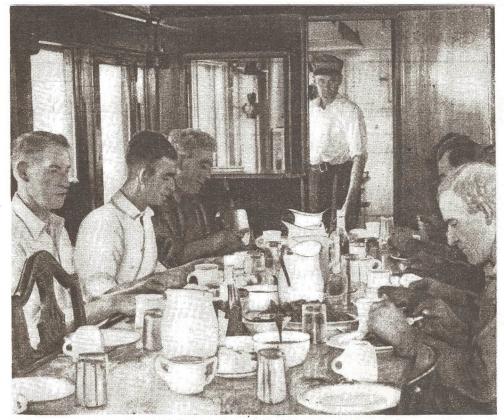


Photo by Bob Nicholls, 387 College Ave., Glen Pilyn, 111.

HEY! I hat's no way to handle gasoline. Here are a couple of tank-loads Easterners never got to use. C&NW ties sopped up the precious fluid at Winfield, Ill.



TIME for chow: Wrecking crews are compensated for their hours of service and take a certain pride in their ability to go without sleep. But the beefing would be long and loud if food was not of the best

ruthlessly burned or sent avalanching down a mountainside when relief routes are inadequate to handle backlogging traffic. Recently a wrecking boss topped such destructive procedure when he ordered a dozen hoppers loaded with bulk cement pitched into a wayside lagoon. Months after a wreck, careful balancing of cost sheets may not confirm snap judgment of this sort, in which event the axe will fall. But it's one of the risks a man who runs the clean-up job must take.

A DJACENT to the office are the quarters in which crew members sleep. Resembling conventional Pullman sections, bunks are so arranged that they may be folded up or converted into seats when not in use. Old timers may scoff at their linen sheets and woolen blankets, recalling days when pine planks, nailed along the flanks of a battered boxcar, were considered an adequate mattress. To the weary men who struggled with an endless succession of wrecks caused by a bad roadway, unreliable signalling systems and overworked engine and train crews, the coarse boards may have suggested some degree of comfort. Working with hooks that were far too small for the job at hand, they might be on their feet for sixty hours at a stretch.



Photos Courtesy B&O Magazine

ORDERLINESS—a virtue in any shop—is a prime requirement aboard the wrecking-train's tool car, where lives may depend upon minutes saved

Yet even they are willing to admit that the wooden benches had one drawback. For no matter how exhausted the crew became, there was no sleeping on such bunks when the wrecking outfit was in motion.

Common sense, not altruism, has led the railroads to improve upon the furnishing of modern bunk cars. Men on tough assignments work on two shifts, today, with rest and plenty of good food to keep them physically fit and mentally alert.

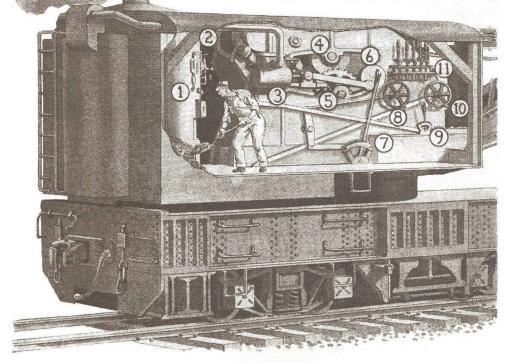
Anyone around the yard will tell you that the best Java you can find comes from the big agate coffee-pot atop the stove in what was once this diner's galley. Before rationing, too, the meals served up by the versatile yard worker who doubles as cook when the wrecker is on the road were good enough to bring the superintendent sniffing around at meal time. Even now the crew has no cause for complaint, though they're up against it when it comes to couponed canned goods.

Behind the old diner is the converted baggage job which serves as a tool car. In it are kept the chains and cables, the jacks and bars, and countless tools and accessories needed for disconnecting or reassembling cars and locomotives. "Bottles" of oxygen and acetylene line the walls, ready to feed the intense flame of the cutting torch. In bins are packed the hardwood blocks of various sizes that will prop equipment raised by hook and jack.

There is almost always a crying need for trucks after a collision or derailment, to haul away those car bodies which can be rebuilt. The units they replace have taken a major part of the shock, wheels, axles, and frames being shattered and fractured, and oil boxes filled with dirt and ballast. Hence the familiar flator gondola-load of replacements, stoutly blocked and ready for service.

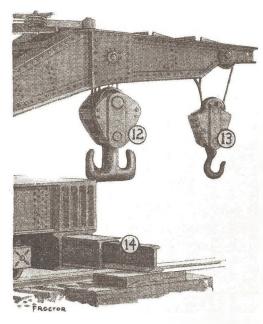
Some systems, too, include as a standard unit of wrecking equipment a flatcar-load of track replacement parts—rails of all the weights used on the division, from seventy-five to a hundred ties, plates and splice bars and kegs of spikes. These will be of service in restoring the roadway, or, if the wreck has been a bad one, in building a shoo-fly or temporary track around the obstacle. Other lines send along a construction outfit.

T IS the Big Hook itself. however, which is the focal point of interest in this consist. Like a sluggish dinosaur with long protruding neck, it squats upon its massive undercarriage, the fire on its grates forever smoldering a sullen red. Not until you have examined it closely will you appreciate the nicety of design which permits so powerful, complex and rangy a machine to meet the restricted clearance of tunnels and bridges. Fiction writers to the contrary, it should be added that the big hook seldom makes a record run, today. Its unwieldy boom and necessarily high center of gravity are discouragements to speed. Too often in the past a suddenly outflung crane arm has caused destruction greater than the erash to which the book was racing.





BELOW: Operating parts of Erie 150-ton crane.
1, Boiler; 2, Jib Boom; 3, Engine Cylinder; 4, Main Hoist; 5, Propeller; 6, Eccentric; 7, Reverse Lever; 8, Hand Brake for Auxiliary Block; 9, Double Slew; 10, Hand Brake for Main Block; 11, Clutch Controls; 12, Main Block; 13, Auxiliary Block; 14, Outrigger.



The hundred-and-fifty-ton job we are looking at now is a product of years of experimentation. Prior to 1900 most hooks were built in division shops, incorporating the choice whims of the master mechanic. Small and inadequate, they had a capacity of around thirty-five tons and were a natural outgrowth of the fixed radius crane found on many an oldtime freight station platform-a simple device rotating on a pivot and having a rigid boom. A single man applying his strength to the geared crank of such a mechanism could raise five thousand pounds one foot per minute. The same multiplication of force had tremendous possibilities when applied to a stationary steam engine. but it was years before the various elements were finally arranged for maximum stability, protection of the operator, and refinement of control.

This hook of ours is nothing more than an unusually heavy flatcar having a large ring fitted in its deck on which revolve the boom and the machinery used to motivate it. Offsetting the great weight which levers

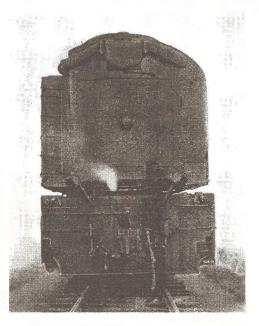
Railroad Magazine

the crane forward when it is under load, the boiler, along with coal bunker and water tank, is set to serve as a counter-weight. Not infrequently cast-iron ballast is added as well.

The boiler proper is of the vertical type, carrying an operating pressure of around a hundred and fifty pounds to the square inch. Internally fired, it has a small circular ashpan at its base, with provision for cleaning through a chute in the rear of the cab. A ton of coal is binned to one side of this heating unit. On the other flank is a water reservoir holding approximately five hundred gallons.

Steam is piped to a throttle directly above the operator, thence down to the slide valves of twelve-by-twelve inch cylinders. Valve motion is of the conventional Stephenson type.

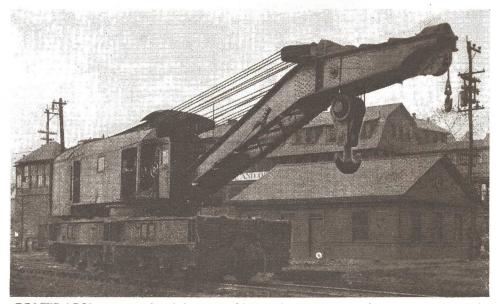
All motions for the giant are taken from a stout horizontal spindle which turns at a speed of approximately two hundred and fifty revolutions per minute. Carefully machined gears of exceptional size and toughness engage their counterparts on this shaft through an intricate series of levers, performing such duties as raising and lowering the boom and the main and auxiliary hoists, slewing the crane



REAR view of big hook on the B&O shows massive outrigger apron



OPEN switch threw a Lehigh Valley coal train into a string of empties at Lehighton, Pa., in 1934. The wrecker eased into position on track the overturned freight should have taken



CONTRARY to general opinion, wrecking trains are operated at restricted speed, to prevent destructive lashing of the crane boom

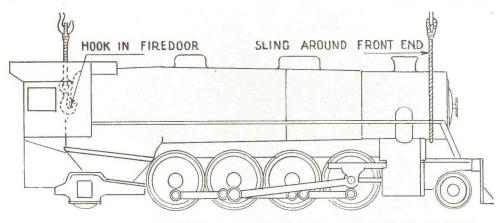
upon its center, and moving the undercarriage slowly along the track. The levers, for their parts, are controlled by air. In every respect, emphasis in design is upon precision movement rather than speed, for the slightest slip may result in further accident and delay.

The crane operator who, like the wrecking boss, is in constant attendance of the train, is generally his own fireman. There are several good reasons for this; among them space limitations in the big hook's cab and the relatively simple job of keeping up pressure in a machine with such ample boiler capacity and small output of steam.

It is interesting to note that while a locomotive, with its rapid rate of evaporation, requires forced draft, the big hook gets along nicely under normal combustion. True, there's a small blower in the stack to build up pressure quickly at starting, but the cylinder exhaust is piped directly to the atmosphere.

NYONE who has ever watched a wreck being cleaned up can hardly fail to recall the concern of the crew over two conditions. The first of these was the radius of the boom; the second, the security of the crane's blocking. At each corner of the supporting car, as well as on either of its flanks at a point midway between the trucks, is a pocket from which telescopic "I" beam can be drawn. Extended well beyond the outer ends of the ties, these outriggers create a broad pedestal for the machine when they are properly blocked, preventing the hook from rolling over when hoisting cables are drawn taut. In principle, only those on the side facing the object to be lifted need be used. Let a load slip or a cable snap. however, and the sudden recoil may pitch the whole unit backward and into the ditch.

Not so long ago one of our large eastern carriers ordered a crane of impressive proportions from an independent builder. Intended to protect

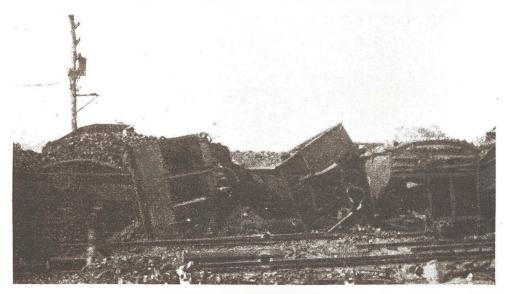


LIFTING A LOCOMOTIVE WITH TWO CRANES

underground terminal trackage, where column clearances precluded the use of a revolving cab, it had a boom of 150-ton capacity at either end. Naturally, too, electric power had to be substituted for steam. For some unexplained reason, the heavy batteries used to feed the motors were placed near the roof of the cab, making for a more-than-usually high center of gravity. Outriggers were, of course, applied in the conventional manner, but due to the network of third rails and afore-mentioned column clearance, their blocking presented a difficult problem.

While paint was still fresh on the behemoth, she was called one day to pick up a juice jack which had jumped a switch in the throat of the yard. The crane operator consulted his table of lifting weights—decided that he could handle this job without outriggers. Instead, the crew used rail clamps, small grips which were attached to the ends of the wrecker and employed on lighter lifts.

Everything went fine until the big

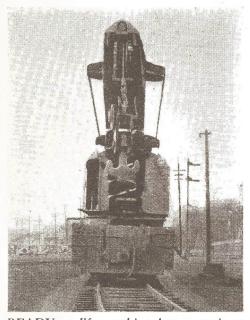


THIRTY-ONE carloads of headache for a B&O wrecking

Big Hook

motor had been rolled up to a fortydegree angle. Then, with a screech of slipping dogs, the hook arched gracefully up on one side and toppled heavily onto her charge. Now that the terminal was blocked for fair, it occurred to somebody that those batteries would make better ballast if they were anchored to the floor. The change was eventually made and the road has experienced no further trouble with its double-ended hook.

S FOR the radius of the boom, the crane operator watches this like a hawk. Anyone familiar with the law of the lever will understand why. When the load to be hoisted is heavy. the boom is always kept nearly perpendicular, or at its shortest radius. The man at the controls knows precisely how much weight can be handled by the main and auxiliary hook with full or partial outrigging at every degree of boom inclination. He has only to look at an arrow at the base of the crane arm to determine the radius of the arm and check this reading against the object being



READY to lift anything but a receivership. A steam turbine generates electricity for searchlight on the left side of the cab

handled. At least one road, the NYC, gives him a chart listing weights of all classes of motive power and cars as a further aid to calculation. On a 150-ton crane with all outriggers set, the maximum lifting capacity is ob-



boss. Broken axle of a foreign road gondola caused it

Railroad Magazine

tained seventeen feet from the center pin. Dropping the boom to thirtyfoot radius reduces the lift to fifty tons. Take away the outriggers, however, and the crane can handle only twenty-three and one-half tons at seventeen feet.

A word more is in order before we leave the wrecking train. It is the policy of many roads to couple a conventional caboose behind the hook when it starts its journey over the main. The flat carrying trucks in this case trails the crane, forming an idler car to protect the lowered boom.

A number of systems, however, have evolved a special piece of equipment which eliminates the crummy, or more correctly speaking, half of it. Officially known as the idler car, it is a truncated caboose with an open deck just long enough to receive the boom. Tool bins are ranged along its flanks and there's room for the skipper and flagman in the stubby sheltered section. Not much to look at, as it cants on its dubious springing in the yard, it becomes the crack solarium car of them all when the marker lamps are hung.

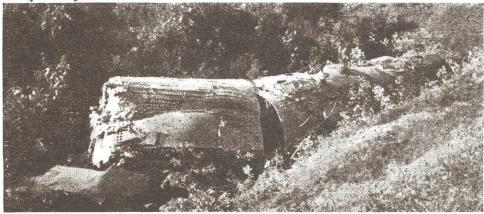
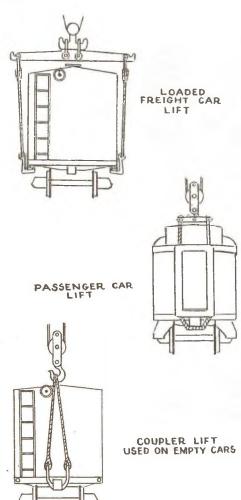
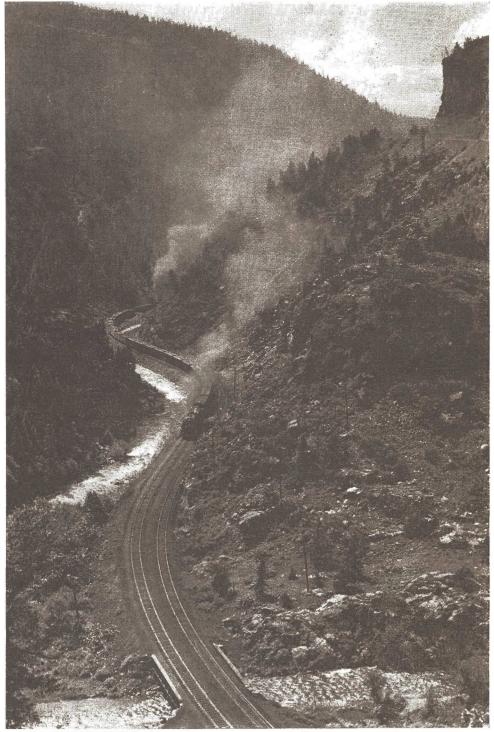


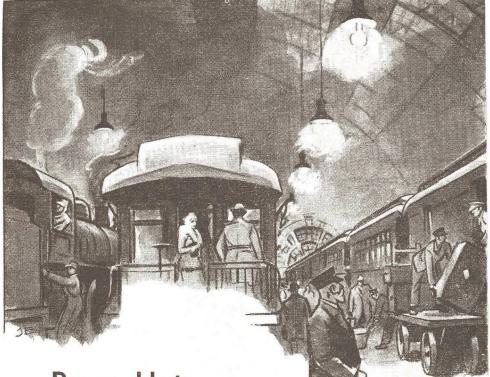
Photo by Ted Gay, 156 Van Buren Ave., Teaneck, N. J

TOO FAR for the big hook to reach. Huge boiler of the Delaware & Hudson's articulated 1510 landed 250 feet from the track when crownsheet let go near Cobleskill, N. Y., in 1941





DOUBLE-HEADING Eagle River canyon on the Denver & Rio Grande Western. In view of the millions of train miles rolled up under all operating conditions, wrecks on American trackage are unbelievably few



Brass Hat

Bob Nevins Summed up the C&W's Troubles as Small Engines and Large Stuffed Shirts

T HE booming exhausts from engines that labored to move the heavy freight trains out of Clayton yards, straining to get a roll on them for the run across the snow-covered Iowa prairies, were strangely muffled this cold March morning in 1901. The air over the division-point town, so often filled with the musical note of chime whistles, now echoed little more than the beat of driving rain.

Rivulets coursed along East Street, past Jim Moran's home and sodden front yard, heaped, like the other lawns, with gray mounds of snow. Jim was a locomotive engineer on the Chicago & Western. Tall and slim-waisted he was, with a slight sag to his broad shoulders. Today his blue eyes bore an impatient look; his black hair was mussed from weaving fingers through it. Jim was waiting for someone. Now and then, thinking he heard footsteps, the engineer would leave his Morris chair near the parlor stove and peer between the starched lace window curtains. All he could see was the wet, deserted thoroughfare. Then he'd sigh, go back to the chair, and pick up his newspaper again.

Rain fell in torrents. Trim-looking houses that lined both sides of the residential street appeared gloomy and lifeless. At length a

carriage halted before number 32. A stocky man of medium height alighted quickly, pushed open the front gate and bounded up the porch steps. Jim met him at the door.

CHICEGO & WEST

"Gosh, Nev, you don't know how glad I am to see you!"

"What a helluva day!" The visitor slanted his derby at such an angle that water trickled down its brim onto the porch.

By JOHN JOHNS

Conductor, New York Central Railroad

The man was bob Nevins, Jim's conductor—a right handsome fellow, the engineer told himself. Nevins was clean-shaven and wore his smartly-tailored clothes with the air of a business executive rather than a trainman. His penetrating gray eyes, set in strong, rugged features, heightened this impression.

"Come on in!" Jim placed a hand on his friend's arm and drew him into the house. "Say, you look like a brass hat!"

The newcomer forced a grin. "Thanks, Jim, but I don't feel like one. Is the Missus around?"

"Mamie's upstairs with my moth-

er. Take off your coat and make yourself at home."

Nevins followed him into the parlor and sat down. "I can't stay long. I'm leaving for Chicago on Number 22. Just wanted to give you the bad news—"

"Go ahead," said Jim nervously.

"I guess you know, we're all out of service—on account of that accident we had yesterday."

"Who told you?"

"Well, I figured it would be something of the kind, so I got up early this morning and hustled down to the Super's office. Mitchell was in an ugly mood. He banged on his desk and announced his decision."

Jim blanched somewhat but said nothing. Nevins went on:

"When I left Mitchell I moved fast. I caught Pinky, the callboy, in front of the Commercial House, just as he was coming over here. I was sure you didn't want Mamie to know—not yet awhile, anyhow—so I promised Pinky that I'd tell you. And here I am."

After a brief pause, Jim commented: "Mamie will get wind of it soon enough. You know how news travels in this town."

"Luckily it's raining. The weather will keep her indoors. Maybe by tonight everything will be settled."

Jim brightened. "You think so?"

"Listen, pal, here's the setup. The General Manager in Chicago has Mitchell almost crazy, phoning him every hour or so, demanding more details about the job we did yesterday."

THE "JOB" he referred to began when the fast freight in charge of Engineer Moran and Conductor Nevins followed a nine-car local peddler into the clear at Birdtown for Number 41, and Nevins conceived a plan whereby his train could get around the local. Once around the peddler, the hotshot could follow Number 41 right into Clayton without a stop.

While they were waiting for the express to arrive, Nevins had suggested to Elmer Banks, conductor of the local, that he order his train off the passing siding and back it into Hart's Mill siding, an industrial spur. Nevins had assured the other conductor that with care they could squeeze the local into clear, and Elmer had agreed. But as they backed in, with Nevins riding the caboose, Elmer was fearful lest they were on 41's time and he swung his engineer a fast *back-up* signal.

Seeing that the cars were moving too rapidly, Nevins leaped off the caboose and frantically signalled Elmer, who was standing at the main-line switch. Although the brakes snapped into emergency, the train skidded into the big wooden gate which was lowered across the end of the track where it entered the mill. Both the caboose and the gate were splintered into kindling wood. And the engine, a ten-wheeler, was on the ground! The speed had been too fast for her to take the switch.

It was for this accident that the members of the crews involved had just been pulled out of service. And now, seated in Jim's flower-wallpapered parlor as rain pelted the windows, Nevins summarized the mishap of the day before.

"The westbound main was blocked for seven hours," he continued, "and the Hart Mill Company has set up a howl about the gate. General Manager Mayo has ordered Mitchell to have the investigation tomorrow morning at ten. He said it looks as

Brass Hat

if a couple of us may lose our jobs. I explained it was all my fault—I had engineered the move. But Mitchell won't listen. He blames our friend Elmer. Says that no man is fit to be a conductor if he lets his train be taken over by me or anyone else."

"Poor Elmer!" the engineer groaned. "He was only doing us a favor. Why pick on him—"

"The management is out to get me." Nevins spoke sharply. "They want to fire me; and to make it appear on the level they plan to discharge some of my friends at the same time, so it won't look as if I were singled out as the goat."

"This road would be a damn sight better off if a few of the brass hats were canned."

"You've got something there, Jim. Just wait. I have an ace up my sleeve. One of these days—"

"By the way, what's happened to Roger Thorndike, who's supposed to take over Mitchell's job?"

"Oh, that guy?" Nevins gave a hard laugh. "You remember our little party about ten days ago at the Mansion House bar, when we were celebrating the birth of Elmer's baby—and how Thorndike butted in? He resented a few frank remarks I made about the C&W."

The engineer nodded.

"Well, it seems he hustled back to Chicago that very night and turned us in to the G.M., on the grounds of Rule G. I figure that Thorndike was back of Mayo sending for our service records. And now, on top of it all, along comes this mess at Birdtown."

"I guess it means our jobs. But maybe the committeemen can do something?"

Nevins shook his head. "No, I don't think so. I'm local committeeman for the O.R.C. and I can't do anything even for myself. The Brotherhoods are not yet strong enough to help us. How can they fight for our jobs when they can't improve our working conditions?"

"You said you had an ace up your sleeve," Jim reminded him with a faint rally of hope.

"Yes, but ordinarily I would hate to use it. You see, the Chicago & Western is controlled by a banking syndicate, Wilder, Thorndike & Wilder. The head of this outfit is Fremont Thorndike, brother of the man who is trying to cause trouble for us. But here's where the joker comes in. Fremont is an old friend of mine. We used to be room-mates at college. Ever since his firm took over the C&W he's been asking me to visit him. Well, I have just decided to accept."

The engineer smiled. "You mean you can pull a few strings to save our jobs?"

"More than that." Nevins spoke enigmatically. "Much more, if Fremont wants to see me for the reason I think he does."

Jim's curiosity was aroused, but his friend would not explain further.

"I must be going now," he announced suddenly. "You sit tight. Don't breathe a word to anybody, except that you might tell Elmer I've gone to Chi—you don't know why."

THE SCENE shifts to Chicago at two o'clock the following day. Nevins has just left the station, his spirits expanding in the warm glow of a bright afternoon sun.

Enroute to the offices of Wilder. Thorndike & Wilder on Jackson Boulevard, he stopped to buy a flower for his button-hole. Then, adjusting his derby to the proper angle. he slipped on his new gloves and entered the pink marble lobby of the building which housed the banking syndicate. While waiting for the elevator, he noted his reflection in a mirror and was satisfied.

The suite of Wilder, Thorndike & Wilder was sumptuous in a manner which recalled the Gilded Age. But Conductor Nevins, no stranger to luxury, was quite at ease. Ushered into the inner sanctum of Fremont Thorndike, past a reception clerk and a confidential secretary, he nonchalantly crossed the Turkishcarpeted room. The head of the firm. seated at a broad desk, was waiting for him.

Fremont, well groomed and slightly tinged with gray about the temples, had all the aspects of a man whom life has treated kindly. He wore glasses, a short-clipped mustache and small patches of sideburns. He rose to his feet quickly, his hand extended.

"Bob Drexel!" he exclaimed. "Take off your coat and sit down."

The conductor shook hands warmly. "This is like old times. But I don't use the name Drexel any more. The old man disowned me when I went railroading and—well, it's Bob Nevins now."

"So I understand. I believe you said you picked the name off a tombstone in some Ohio cemetery. You boomers are all alike, working under a flag."

"Nobody could call you a rolling stone—you haven't done too badly." Nevins glanced around the office. letting his eyes rest on a figure of the Chinese god of luck.

Fremont grinned apologetically. "I'm not superstitious, Bob, but I wouldn't part with that piece of jade for a block of stock in Jim Hill's Great Northern. It's brought me luck all the way up the ladder."

While Nevins was quietly examining the work of art, the big banker began delving into memories of their past.

The conductor nodded.

"She fell for you from the first," Fremont went on, a bit wistfully. "I was in your room the day your father stormed in after you'd announced your engagement. He raised plenty of hell that day. Threatened to disinherit you. I nearly choked to keep back a laugh when you answered him from the Bible: 'As St. Paul said, 'None of these things move me.' I'll never forget it. You had a lot of spunk in those days, Bob and you still have," the banker smiled, "judging from what my brother tells me."

"What did he say?"

"Oh, nothing that changes my opinion of you. Roger's ideas and mine never did coincide." Fremont eyed him shrewdly. "I take it that the break with your father was more because of his attitude toward Annie than because he didn't approve of your railroading?"

"That's right, Fremont."

"Did you marry her, Bob?"

"No," was the reply. "She died."

"Oh, I'm sorry." The syndicate head changed the subject. "Remember when we were in Yale, how we planned to go into business together —and then you dropped out of the picture. I know now why it was. If you hadn't gone railroading, you might be occupying an office across the hall right now."

Nevins shrugged. "I'm satisfied with things the way they are."

"I can't imagine you a freight conductor."

"Surprised, eh? But you didn't surprise me. You've done all the things expected of a Thorndike. With this god of luck"—Nevins picked up the jade again—"and your own sound judgment, you seem to have reached quite a nice position in the business world."

FREMONT managed to smile. "Just like Bob Drexel of college days, outspoken as ever! Which reminds me: Roger did say you made a few caustic remarks about the C&W."

"I don't deny it, but they were strictly off the record. Tell your dear brother to mind his own business."

"No, I'm serious," the banker per-

sisted. "You said the C&W was being mismanaged and I want to know why you think so."

"Listen, Fremont, you have highsalaried stuffed shirts to answer that question."

"But I want you to tell me."

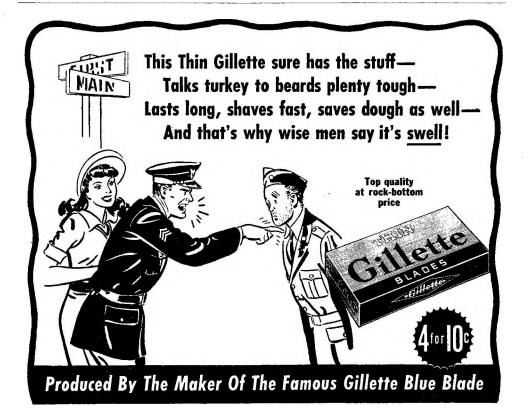
"I'm only a wage slave."

"Nonsense." Fremont protested. "Let us presume you are my adviser—"

Nevins leaned back in his chair and laughed. "My, you certainly are anxious for information! Something is wrong with the C&W."

"Yes, I know, but I can't put my finger on it. That's why I'm asking you."

Nevins then explained in detail what he thought was wrong. He began with the inadequacy of motive power, the disrepair of the roadbed,



the unnecessary delay to freight. Competing roads got the business, he pointed out, because shippers were disgusted with C&W service. Then he tore into the inefficiency of operating officials, from president to division superintendent.

Fremont listened intently, injecting a question now and then. There was no doubt in the conductor's mind about the impression he was making. Nevins talked freely. He had long wanted an audience for the grievances rankling in his mind; and now that he was being listened to, he took full advantage of the situation. His criticism was designed, he said, first to yank out the weeds and then plant good grain in their stead.

"Your remedies call for a radical departure from our present policies," Fremont said at length. "However, I am inclined to believe in you. There is logic in what you say. I confess also that I am somewhat bewildered."

"So is the whole C&W system."

"This is all rather sudden, Bob. 1 want to give it some thought. Check up here and there. Tell you what I'll do. You stay here in Chicago a few days while I go into the matter. I'm not giving any promises, mind you, but I'd like to get to the bottom of several points you brought up and I wish you'd stick around."

THE CHICAGO Division buzzed with rumors. A notice on the bulletin board stated that Robert Nevins, freight conductor, had been granted an indefinite leave of absence. The *leave* was not unusual, but the *indefinite* was.

In yard offices and in bunk rooms the C&W men talked. Each offered an opinion on the subject, and, without knowing the key to the mystery, was quite ready to argue against his neighbor's version of it. From Chicago to River Rapids, crews meeting one another would ask: "Have you got any dope on Nevins?"

There was nothing new to report on the unexpected absence of the O.R.C grievance man, except that, three days after going to Chicago, Nevins had returned to Clayton unheralded, had resigned as griever, had packed his clothes, and had climbed into the smoking-car of a train bound for the Windy City. Two weeks passed and Clayton was still guessing.

Meanwhile, trains were running as usual. Jim Moran, called for an extra, backed his Mogul, the 1229, onto his train. Bart Sanford, the head brakeman, coupled up the air. Conductor Banks came out of the General Yardmaster's office, strode across the tracks and climbed into the cab.

"Still on the job, Elmer?" Jim greeted the skipper cordially, for they had been close friends since early boyhood.

Elmer reached into his pocket for a package of Bull Durham. "Sure, I told you I was going to take Nevin's vacancy. I'm the senior man on the conductor's extra list out of here," he added proudly.

"I'll miss Nevins," the engineer commented. "He's a great: railroader."

The conductor stopped pouring tobacco into the cigarette paper held in his left hand and looked sharply at Jim.

"Why, I thought you'd be glad to have me work with you." His tone betrayed disappointment. "I'd been counting on this for years—"

"Hell an' high water." Fireman Hansen cut in, slamming shut the

Brass Hat

firebox door and easing off the blower. "Can't you tell when a man is only kidding? Only yesterday Jim was telling me how you two were pals. He said that when you both were kids you wanted to become a conductor while his ambition was to run an engine. Said it was hard to believe now you were actually his conductor."

The runner turned to Elmer with a grin. "He's right! Just because I miss Nevins doesn't mean I'm not glad to get you. There's no one else I'd rather have. But I still say I miss Nevins. He's a smart fellow, Nevins is. Has an answer for everything." Jim stepped down from his platform and slapped his friend on the back. "Why aren't we getting out of town? Let me give you a tip: every time Nevins popped into the cab he had a mouthful of news."

Elmer smiled. "Oh, about the train? We have thirty-five loads, eleven hundred and ninety tons. There's one car the G.Y.M is trying to get some dope on. A mixup in the billings."

The engineer glanced out the gangway. A dozen yard and road men filled the length of the long bench outside the yard office. He jerked a thumb in their direction.

"While we're waiting let's go over and hear what the stovepipe committee has to say."

ELMER nodded, and trailed over to join the gathering. The day was warm and sunny. A gentle spring breeze swept in off the prairies. The main topic of conversation was the puzzling activities of Conductor Nevins.

"—and what is he doin' in Chicago?" Zeke Carter, an engineer, twirled the ends of his red handlebar mustache. "I've been on this pike twenty years an' I never seen a man pull anything like it. Nevins is no boomer—"

"That's right," a yard brakeman broke in. "He was running freight when I come to work here. That's all of seven or eight years—"

"He came here as a boomer," corrected Tim Fletcher, a road conductor. "I remember the day he hired out."

Carter snorted. "Yeah, he might've been a boomer, but he soon changed over to home guard. He knew he had a good job here and planned to end his days on the Chicago Division. He told me so himself. Some damned funny business must've happened for him to pull out like he did."

"Mebbe some gal got on his tail," a lanky fireman offered. "Nevins is a queer duck. ('hews the rag a lot, but never about himself."

Carter's eyes sparkled. "Say, you have something there. I'll bet some female caught up with him and he had to beat it—"

"Wait a minute!" The fireman waved a hand. "That's out. If it was on account of a skirt, the company would never give him an indefinite leave of absence. Naw, he's mixed up in the railroad some way."

Fletcher, tall and angular, tamped the tobacco in his corncob pipe and drawled: "Seems to me you boys are pretty much interested in Bob Nevins. Reckon you're too busy poking your nose into other people's business to tend to your own. Mebbe that's the reason why you're still pulling freight when you oughta be on passenger."

The red-mustached engineer growled: "That ain't got nothin' to do with what we're talkin' about. You're just as curious about Nevins as the rest of us, only you won't own up to it."

Jim nudged Elmer. The pair were seated at the end of the rough wooden bench, but could see and hear everything.

"I reckon if I was curious I'd have asked Nevins to his face what he was agoin' to do with the bag the day he went away," Fletcher hurled back. "I'd have asked him where he was off to, the second time he come back. But I minded my own affairs."

Rourke, a burly, flannel-mouthed brakeman, grunted: "Who thought he'd be leaving us?"

"It's his own business," Carter declared, "but he sure lit out fast. He was committeeman for the O.R.C. He dumped everythin'. Yeh, even that. Hopkins took the job."

Elmer leaped to his feet, eyes blazing. "Nevins did not dump the O.R.C.! He only resigned as griever. The general chairman advised him to do it because he'd be away, and— Well, he couldn't handle the work."

Carter fixed his gaze on Elmer. "Say, that reminds me. You oughta be able to tell us somethin' about Nevins. He was a pal of your'u, wasn't he? Moran and you was pretty thick with him. You fellows got in a jam on account of that mixup down to Birdtown. The day you were pulled out of service Nevins made his first trip to Chi. Did he go on account of you fellows?"

"None of your business!" Elmer retorted, sitting down. "Besides we've got to get along. Come on, Jim."

THE TWO friends went back to their train. Jim suddenly remembered that a letter had come to him from Nevins and he had stuffed it into his coat pocket until he could find time to read it. But before he could get past the first line, Hauson interrupted with, "Look!"

The engineer glanced around. A clerk had just tacked a new notice onto the bulletin board and a crowd of railroaders were gathered around it, laughing, shouting and slapping one another on the back. Jim snatched up his gloves and bolted down the gangway, with the fireman on his heels. Bart and Nate Flood, the General Yardmaster, strolled out of the office. The engineer strode over to Elmer and grabbed him by the arm.

"Say, what's going on?" he demanded.

"A notice just arrived. Thorndike is not going to be our Superintendent!"

Elmer pounded Jim on the shoulders. "That's great!" he cried. "Mitchell is no prize package, but he's better than Thorndike any day in the week."

Jim was puzzled. "I wonder who threw the switch under him?"

"You can search me," said Elmer. "A guy whose brother controls the whole system—"

Just then Bart approached, waving a slip of paper. "Well, how about getting out of town? I've got the bill."

"Sure," Elmer assented. "I'll see you at Round Robbin, Jim."

The engineer retraced his steps to the engine. He had an idea. He'd discuss it with his conductor when they pulled into the Round Robbin siding. He climbed into the cab, released the brakes and whistled off.

Hansen swung open the firebox door. He looked up at Jim and said: "Gosh, am I glad to get out of here! Too much going on for me."

The runner nodded, bunched the

A SESSION of the stovepipe committee was discussing Nevins

slack in the train. Drawbars clanked and groaned as the Mogul surged ahead. Bart caught the grab-irons of the moving engine and pulled himself into the cab. He eased onto the forward portion of the fireman's seatbox. Leaning out the window, he looked for the signal operated by the tower that would give them permission to go out on the main.

"Clear on the bug!" he called.

Jim repeated the signal and widened on the throttle. As they were booming through Clayton, Bart cupped his hands to his mouth and yelled above the barking exhaust:

"We should make Round Robbin for Number 4. Say, this is April fifth. I wonder why that notice about Thorndike was held back till now?"

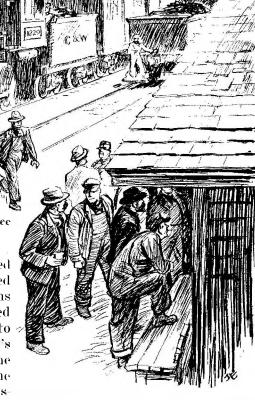
Hansen slammed shut the firebox door and waited, with shovel in his hands, for the engineer's answer.

"Maybe," said Jim, "they couldn't make up their minds."

The brakeman grinned. "Yeh, and I bet Nevins had a lot to do with it. When you stop to dope things out, it was good that Elmer got us in that jam at Birdtown. Otherwise, Nev would not have started pulling wires in Chicago."

REMINDED again of Nevins's letter, Jim dug it out of his pocket and read it, with several interruptions, as his engine thundered over the road. After telling about his first visit to Fremont Thorndike in the big city, Nevins went on :

Maybe you have been wondering what happened to those charges which General Manager Mayo and Supt. Mitchell had trumped up against us as a result of the



Birdtown accident. Well, here is a laugh. Fremont asked me what I thought of Mayo as G.M. I won't violate the confidence by telling you what I replied; but I will say that if I were ambitious for myself, what a chance there would be here with Fremont! He can make or unmake a Super or even a G.M. as easily as I can swing a lantern.

I came here to see Fremont because I knew he was the only man who could over-rule Mayo, and Fremont made a deal with me. He said that if I would remain in Chicago for a while we might come to an understanding. And then, as proof of his good faith, he reached for the phone in my presence and told the G.M. to cancel the Birdtown investigation. I guess Mayo was surprised. He sure had it coming to him.

You can show this letter to Elmer and the boys of both crews, but keep it from the rest. It doesn't concern them. I know they'll be tryin' to figure how you fellows returned to work so soon.

Well, Jim, Fremont was decent enough to get us out of the jam. I owe it to him to remain in Chicago, stick around and answer his questions for another week or two.

Take care of yourself and remember me to Mamie. Best regards to all—NEV.

P.S.—I bet the stovepipe committee has everything doped out, eh?

Jim looked up from his letter, glanced out the window, and called the signal across the cab to the brakeman, "Green!"

"Green!" Bart repeated. "We're going in at Round Robbin. I guess Number 4 is on time."

The freight took the siding and reached the east end just as the passenger train roared by. The towerman let Jim right out. Elmer had no chance to come ahead.

"Golly, he's letting us go!" Jim cried. "What's the first drop?"

Bart dug in his pocket and brought

forth a slip of paper. He consulted the paper, a list of the stops where they would leave cars enroute.

"Desmond is our first drop," he replied. He pulled out his watch and thumbed it. "We have a swell chance to go there for Number 28."

T WAS three o'clock when the extra approached the distant signal operated from the west tower at Desmond.

"Clear!" Bart called.

Jim turned to the brakeman. "Say, something's wrong. That signal should be green to slow us down for the siding switch. Now we're lined up to go right down the main—"

"Maybe Twenty-eight is off the advertised," said Hansen.

Bart shook his head. "Even so, we have cars to leave here, and at Raven and Sumner. Twenty-eight will get a plugging, because we'll have to hold the main at those two burgs while we leave cars. We'll have to go all the way to Star Lake before we'll be able to get into clear."

"The dispatcher knows about the drops, doesn't he?" Jim asked.

"Sure," was the answer. "I heard Elmer tell him at Clayton."

Jim shrugged. "I guess he knows what he's doing."

The extra passed the distant signal, rolled around the long sweeping curve. A clump of trees hid the home signal tower.

Jim reached for the whistle rope and sent four long blasts echoing across the quiet countryside. It was for the towerman's benefit, telling him that Jim was aware he was almost on the time of Number 28; also that he wanted to be sidetracked, unless the dispatcher had other plans.

Now the freight had rounded the

Brass Hat

curve. Ahead stood the tower and the home signal.

"He's got it clear for us," Jim declared, eyes fixed on the signal, a thousand feet distant.

He closed the throttle and let the train coast toward the coal chute. He was still a few hundred feet west of the tower when suddenly the towerman dashed down the stairs and took up a position alongside the track. His right hand was high in the air, holding onto something.

"Hey, the guy's got a message for us." Bart exclaimed, darting to Jim's side of the cab. In a flash he was through the gangway, and down on the steps.

Pinching on a little air, Jim watched Bart measure the space between himself and the towerman. The engine rumbled by the upstretched arm. Bart snatched the piece of paper, re-entered the cab and climbed up beside Jim. He held the message in his two hands and read aloud:

Chicago, April 5, 1901. C&E extra 1229.

Leave all drops at Desmond. Run as second Number Four, Desmond to West Chicago. Number Twenty-eight is fifteen minutes late.

M.M., Supt.

"Where's the train orders making me Second Four?" Jim asked.

Bart turned over the yellow message paper. "Here, they're pinned on this." He detached the sheets of blue-green tissues and handed them to the engineer. The first order was for Number 4 and the extra.

Chicago, April 5, 1901. Form 19 - Order No. 45 C&E No. 4, Engine 1575. C&E Extra 1229, East. Number Four, engine 1575, will display signals for section Desmond to West Chicago.

M.M., Supt.

The second order was for Jim's train and conferred right upon him as follows:

Chicago, April 5, 1901. Form 19 Order No. 46

Run as second Number Four, Desmond to West Chicago.

M.M., Supt.

Jim looked up. "Well, what do you make of it, Bart?"

"Ask me something easy."

Fireman Hansen piped up. "Maybe there's a mistake. Maybe—"

"No, there's no mistake," Jim granted. "Someone in Chicago wants us to get in. There's a rush car in our train and some shipper is hollering for it."

"Sure, that's the answer," Bart agreed. "When Elmer comes ahead we'll look through the bills."

JIM stopped the engine under the coal chute. While Hansen was taking fuel and water, he shook down the fire. Bart hastened toward the rear, consulting his drop list as he passed the cars. Jim finished with the fire and climbed up to his seatbox. Glancing back, he saw the conductor and head brakeman in conference. When Hansen vaulted over the coal boards into the cab, Jim whistled that he was ready to move. Elmer signaled him to pull down to the hand thrown crossover.

The dispatcher knew they were going to leave cars at Desmond. Jim was wondering why he had not been put in on the siding. Yard tracks connected with the siding. Now, as they moved to the crossover, he saw the reason. A freight stood there. The dispatcher was running him around it. Elmer and Bart lined the switches. Jim backed the cut of twenty cars over the crossover, and then took a switch that routed the cars in on a yard track.

While Bart was getting the pin on the coupler, Elmer hurried up the steps into the cab. "What do you make of that order?" he began. "I looked over the bills and found nothing very important."

"There's a good reason for dropping those cars here," Jim surmised, "or they wouldn't have us do it. We'll save at least ten hours by getting rid of them."

Elmer thumbed his bills. "We'll have fifteen wagons leaving here. You'll have ten air cars together on the head end. And—"

"Better beat it back to the crummy," Jim advised, easing his Mogul against the few cars that remained of his train. "I'm rolling right after the old girl." He pulled out his watch. "I'm on Twenty-eight's time now."

Elmer paused in the gangway. "Yeh, but she's running fifteen minutes late."

Jim whistled in the flagman. "I know, and I'm keeping out of her way. I'm going to West Chi for her."

Bart started up the cab steps. He watched Elmer sprint. "Gee whiz, look at him gallop!"

"I told Elmer to hurry back to the caboose," the engineer laughed. "He doesn't want to be left. It's the first time he's run Number Four."

Jim caught the flagman's highball and answered with two short blasts. And then, true to his promise, he wheeled his train at a fast clip that balmy April afternoon. The mileposts flew by so rapidly that, as a boomer would say, they looked like a picket fence.

It was five-twenty when Jim Moran switched off the main line at West Chicago. He coasted down the eastbound yard freight running track. On and on he drifted. Each switch-tender's shanty highballed him along. There were no delays. The engineer missed the usual interruptions. *Something's up*, he decided.

"Fatty" Bagley was not on duty: but Mac Avoy, the day General Yardmaster, was there. Mac was almost his equal in slowing a freight's progress through the yards. Bagley, the old master himself, was just entering the G.Y.M.'s office for his customary tour when Jim stopped his Mogul opposite the frame building. The waddler halted and glared at the short train. Then, no doubt prompted by curiosity, he bellowed: "What you got there?"

Jim grinned at him. "An extra."

"An extra?" Bagley echoed, his black derby almost bouncing off his head. "What the hell's the idea of comin' down here this time of day and blockin' everything? Who let you down?"

"Mac Avoy, I reckon," Jim clipped.

"Oh, yeah! Well, I'll find out who is runnin' this yard—"

"Pipe down !" Mac Avoy snapped, appearing in the doorway and brushing aside the corpulent Bagley. "Hey, Moran! Come in here! I've got some orders and a message for you."

J^{IM} descended from his cab. Mac placed an arm around the runner's square shoulders in a friendly manner and guided him into the office. Bagley, his oversize pants flapping in the evening breeze, blinked and gazed with open-mouthed amazement.

Mac led his visitor through the gate in the wooden counter, halted at his desk in a far corner of the room, and motioned for Jim to take his chair. Then he pulled out a wooden slab from the desk and casually flung a leg over it.

"Listen," he announced, "there's orders for your crew to deadhead back to Clayton on the first passenger train. I'll sign the time-slips. You'll be paid full mileage. Pretty soft, eh?"

Jim frowned. "What about me?" Mac Avoy leaned closer to the engineer. "You're going to deadhead, too, but not with them." He paused, glancing up to make sure no one was within earshot. "Nevins wants you to phone him. He's waiting for you right this minute."

"Nevins wants me to phone him?" Jim repeated in bewilderment.

"Yep. He's had the wires hot for

the last hour. Said for you to be sure and do it before you took your engine to the house."

Mac pushed his desk telephone toward Jim. When the engineer hesitated, mutely pleading for an explanation, the yard official said: "Oh, I forgot. Here's the number he gave. It's the Palmer House, suite 37."

Jim picked up the phone. Mac placed before him a slip of paper on which was written the number and smiled indulgently.

"Nevins is in right, isn't he? He's somebody, now. Living at the Palmer House! But he's the same old Nevins at heart. Always remembers his friends. By the way, when you talk to him, kind of mention how I handled you this trip. I highballed you right in, didn't I? Tell him how I obeyed his orders and you weren't delayed a minute."

Nodding absently, his head buzzing, Jim gave central the number. The Palmer House answered and connected him with Nevins's suite.



"Hell-o, Nev-"

"Jim? Well, by golly, it's good to hear your voice again! I've been waiting for you."

Jim wrinkled his brow. "I can't hear so well. My engine's just outside the office. She's popping off."

"Can you hear me now?"

The safety valve on the engine closed, shutting off the flow of escaping steam.

"Yeh," said Jim, "I can."

At that moment Elmer entered the office, flipped a handful of bills onto the counter, and stared at the engineer. Mac motioned him to remain silent.

Nevins's voice again came over the wire. "That's fine! Say, Jim, that was an excellent run you made. You weren't delayed any place, were you?"

"No, I whistled right in as if I was pulling a stock train," Jim replied truthfully. "Mac Avoy had everything lined up for me. This has me a little dizzy. What's going on, anyway?"

Mac Avoy patted Jim on the back and smiled his appreciation. He then crossed the room to Elmer.

"Listen, Jim, I must see you tonight," Nevins went on. "It's urgent."

"Sure, Nev, be glad to."

"I know Elmer is with you now, but you come alone this time. We'll eat in the Palmer House."

"Okay, but not the Palmer House. Remember, I've just stepped off an engine."

"Make it the passenger station then—in the men's waiting-room."

"Right!" The engineer hung up, reached in the jumper pocket of his overalls for the time-slip and strode over to Mac Avoy and Elmer. He was in a hurry to get away. "I hear we're deadheading," said the conductor. "What's going on?"

Jim pushed through the gate. "I don't know myself, except that Nevins wants to see me in Chicago right away. Maybe that has something to do with it. So long, pal! I gotta rush."

Before the skipper had a chance to question him further, Jim darted out of the office and up into his engine cab. He instructed Bart to uncouple him from the train. Then he ran the engine to the house and walked over to the crew-room to wash up. While he was hurriedly removing the grime from his person, Fireman Hansen entered and said:

"Gosh, you're in a helluva hurry!"

Jim glanced up from the basin, his face white with soap suds. "Sure thing," he spluttered. "I'm meeting Nevins. Don't know what it's about. See you later !"

AT THE STATION shortly afterward. Jim made his way to the waiting-room and found his old conductor, Bob Nevins, leisurely pacing the floor. Their greetings were brief but cordial. Nevins steered his friend to a congenial-looking restaurant less than two blocks from the depot. The two men found seats in a rather secluded corner, where the lights were low and the surroundings cozy, and gave their orders to a waiter. Then Nevins broached the subject that was on his mind.

"I'm a bit puzzled, Jim, and need some advice. I am going to talk fast, so you can deadhead back to Clayton on Number One. That will allow us about three hours."

"Tell me this: You were behind today's move, weren't you? I mean about backing off the drops at Desmond and running as Second Four?"

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Nevins smiled. "I certainly was. I had to get you here for a confab. Remember my letter. Well, Fremont wants an answer in the morning, so I thought I'd talk it over with you first."

"What happened to Roger Thorndike? I saw the notice posted today, saying that he will *not* be our new division Superintendent."

The waiter began serving the meal then, and the two men turned their attention to it. A moment later Nevins went on:

"Roger went to his brother with a cock and bull story about our little party that night at the Mansion House bar, but it only boomeranged against him. Evidently Fremont decided Roger was not the type he wanted to run the Chicago Division. I believe he's now in the Auditor's office."

Jim nodded.

"We both know," the conductor said earnestly, "there's something wrong with the C&W management. Fremont is trying to get at the bottom of this, while his brother prefers to stay in the same old rut. I guess Fremont was impressed by my remarks. Remember, on that last trip he left word with Mac Avoy that I phone him? He wanted to chin with me. I wasn't sure then that I'd go to see him, but events shaped up differently. We ran into that jam at Birdtown. It was my idea about getting Elmer to make the move that got us pulled out of service. As a result of that I came to Chicago."

Jim ate in silence. Then: "Why is Fremont in such a receptive mood for your ideas?"

"Because," Nevins stated dramatically, "the C&W is on the edge of bankruptcy. Something must be done, and done quickly." "Is it that bad?"

"Yes." The conductor took a sip of coffee. "I can't go into financial matters in this short time, but I will say that Fremont acquired control of the road for a song. He figured that stocks would bounce up as soon as he took over, but they didn't. Just what's behind it all, is anybody's guess. Fremont seems to think that certain officials of the road are being subsidized by a rival banking concern to send us on the rocks!"

THE ENGINEER had started to butter a slice of bread, but laid down the knife and calmly snorted: "Sounds silly to me!"

"And me, too," Nevins continued. "I cannot believe that Mayo and the rest are engaged in sabotage. What they're really doing is ruining this pike through sheer ignorance of railroad operation."

"But suppose the C&W goes bankrupt?"

"Right now, Fremont is using his own money to meet the deficit. He might get tired of doing so, or his cash and credit might become exhausted. Maybe creditors will foreclose and have a receiver appointed to run the road. In that event, the receiver would be given a certain length of time to make the road pay. If he should fail to do so, the whole property would be thrown on the auction block and sold to the highest bidder."

Nevins turned to his plate again.

"Jim," he said abruptly, "a number of other big systems would like to own the C&W. Maybe it would be for the best if they did, or maybe it wouldn't. If, for instance, Jay Gould were still living and got hold of this pike he would probably strip it to the bone, make it a second-rater to end competition. On the other hand, an Eastern trunk line that has no other Chicago connection might build up the C&W and go after business. You wouldn't know one way or the other until it was too late."

"If things go badly with the C&W," Jim muttered, "a lot of us would lose their jobs."

"Don't be so glum," Nevins smiled. "There's still time to save it. Listen! Ed Harriman took the Union Pacific when it was falling apart, and you know the great job he's done. Why, in a few years the Union Pacific will be one of the greatest roads in the country. Fremont can do a lot for the C&W if he wants to. That's why he got in touch with me and that's why you and I are here tonight. Tell me, what do you think of General Manager Mayo?"

Jim pondered a moment. "I don't like him personally, but that has nothing to do with it. Mayo is definitely not the man for that job. His short-sighted policy in using obsolete motive power on the C&W is, in itself, enough to condemn him, not to mention—"

"Right!" the conductor interrupted. "Mayo just doesn't know how to operate a railroad. And the other big officials are in the same boat, including President Wharton. Especially Wharton. I am going to recommend that most of them go."

The engineer gasped.

"I mean it, Jim. Take Wharton. Wharton is now in Europe on the Riviera. What the hell is he doing there, when our road is in such a mess? I'll tell you. Wharton is only a figurehead. He is not aware of conditions here because they've been kept from him and he hasn't sense enough to know where to look. Why, that nitwit is playing around in France and letting his General Manager operate the road as it was fifteen years ago, long before the big strike in 1894! The strike didn't teach him a thing."

Nevins speared a morsel of steak, held it aloft on his fork, and went on :

"As for motive power, what do we have? A lot of junk! It can't move what business is left. And if you want my opinion, it's because the Master Mechanic hasn't even tried to call Mayo's bluff, hasn't told him what's the matter with our engines. He's afraid of his job. Every callboy and mudhop knows that. The Moguls are all shot. We need bigger engines."

NEVINS beamed expansively. "You get the drift of things?" His companion nodded. For a few minutes they continued eating in silence. The conductor spoke again.

"Fremont has called a meeting of the Board of Directors for tomorrow afternoon. He aims to go over the whole situation with me in the morning. That's why I sent for you tonight. I wanted you to help crystallize my ideas before I make a final report."

"How does Fremont feel about the big brass collars?"

"The same as you and I do. He's going to ask for the resignation of Wharton and most of the others, and then propose certain drastic remedies."

"What, for instance?"

Nevins' reply was prompt. "We need about fifty Atlantic-type engines for passenger service. The tenwheelers now handling passenger trains could be repaired and used for freight."

"Now, that's a real idea!" Jim cried enthusiastically. "Those old gals would make good freight-haulers, but aren't their drivers too high?"

"They are, but that can be taken care of. Cut down the wheels from seventy-two inches to sixty-four and they'll have greatly improved tractive force. If the C&W had money enough the ideal engine for freight would be the Consolidation type. Fremont wants fifteen hundred tons hauled in freight, and the ten-wheelers could do it nicely."

Jim responded: "You're dead right, Nev! The ten-wheelers, with their drivers cut down, could haul forty loads apiece and roll 'em. Then, instead of crawling over the division from one siding to another and taking thirty hours to do it, we could run between Clayton and Chi in ten hours or less. Look how I wheeled 'em today because I had a train the Mogul could handle!"

The conductor was thoughtful.

"It sounds all right to me, Jim, but suppose that after the powers that be see how easily a ten-wheeler handles forty loads, they add ten or fifteen more cars? I remember when our Moguls first came to the C&W. They were built to pull twenty-five loads, a thousand tons; and at first they turned in a great performance, but soon—"

"I know just what you're going to say," the engineer broke in. "When the Moguls were delivered link-andpin couplers were still being used. Then the automatic coupler was installed, and longer and heavier trains were made possible. But, Nev, the automatic coupler has its limit, too. They'll stand just so much drawbar pull, and a train will break in two just like it did with the link and pin."

Nevins carelessly pushed his plate

aside and beckoned to the waiter.

"I talked with a couple of master car builders over in the Pullman plant," he told Jim, "and they say that automatic couplers will stand only fifteen hundred—or, at the most, two thousand—tons. That's drawbar pull. In other words, freight trains probably will never be any longer than fifty cars."

"I see," Jim said. "If we ever get the Consolidation engines, designed for freight service, fifty loads will be their limit?"

"That's right! They can build engines as big as they want and as powerful as they want, and it won't matter. The drawbar-pull limit would stop them."

Jim lapsed into silence and conscientiously drained the last inch of coffee, now cold, from his cup. He did not believe in wasting food.

Nevins said: "We will correct a long existing evil. The men who run trains must have the proper equipment to work with. The idea of consuming thirty hours running freight from Clayton to Chicago! I hope to be back on the road soon myself and I want to cover the division in less than twelve hours. I know it can be done—with big engines!"

JIM MORAN looked at his watch. "Well, if I'm going to catch Number One—"

His companion took the hint and escorted him back to the station. They arrived just as the train announcer was bawling: "The *Continental Limited!* Fast train for Desmond, Clayton, River Rapids and the West! Now ready on Track Eight!"

Nevins and Jim passed through the iron-grilled gate and walked slowly down the platform. The big glassenclosed trainshed was filled with engine smoke. Electric arc lamps, suspended by cables from the roof, sputtered and appeared intent on flickering out. They cast purple pools of light on the cars, painting the faces of workers and passengers a weird gray.

As Jim and Nevins ambled toward the smoking-car, they passed the conductor of Number One. Thev nodded recognition and continued their conversation, while the skipper went on taking the car numbers of his train. Nevins glanced up to the Baggage and express head end. trucks were backed against the baggage-car, loading it. Ahead of the car was the engine. A shaft of firelight escaped from the half-opened firebox door. Phil McQuade, the runner, a flaming torch in his hand, was down on the platform puttering around the sleek passenger racer.

"McQuade spends more time on the ground than he does in the cab," Nevins observed, chuckling. "He takes good care of his baby."

Jim sniffed. "I suppose you think I don't take good care of mine?"

"Sure, I know," Nevins grinned. "If it weren't for the care you boys give your engines the C&W wouldn't have any motive power left. I wonder how McQuade will like the new Atlantics? They're going to have eighty-inch drivers and should lop off at least thirty minutes on the running time between here and Clayton."

"They've cut off only an hour during the last twenty years," Jim pointed out. "I was looking over an old timetable for 1882."

Jim bade his friend a hasty goodbye and swung aboard the *Continental* just as she began to pull out of the smoke-grimed trainshed. Mc-Quade was guiding the ten-wheeler across the maze of yard tracks, sprinkled with signal lights that gleamed red, white and green like jewels in a crown. Nevins stopped at the end of the platform. Jim, standing on the car steps, leaned out to catch his parting words:

"I'll be back in a week or so—"

The rest was drowned by the barking exhaust of the engine as Mc-Quade widened on the throttle. The *Continental* picked up speed and moved on into the noisy, fearsome, railroad night. Jim entered the smoker and occupied a vacant seat. A tall, thin conductor, dressed in the usual blue broadcloth, with swallowtail coat and gold braid, began lifting tickets. When he came by he said:

"Howdy, Moran! How's your friend Nevins making out? I hear he's got himself a big job."

Jim smiled apathetically. "Nevins is all right. He's going back into train service in a week or so."

The passenger conductor raised an eyebrow. "Not going to run freight again, is he?"

"Reckon so," said Jim. "I used to pull him. I guess he misses the old crew. We had good times together."

The conductor gave a quizzical look, shrugged and continued up the aisle. Jim lit his pipe and settled back in the seat for the long ride to his home town of Clayton. His thoughts wandered dreamily. He smiled, thinking how surprised his wife would be to see him back so soon. And what would she say when he broke the latest news to her? Mamie had always liked Bob Nevins. She had remarked more than once that he was "different."

A WEEK passed. Two weeks, and still no Nevins. April was torn from the calendar. And then the

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postman handed Jim an envelope postmarked New Orleans, La. Recognizing the familiar bold strokes of penmanship, he ripped it open eagerly and read:

Dear Jim:

Sorry, old pal, had to change my plans. There's something I want to tell you, but I don't know how. The written word is cold and flat and cannot describe the struggle I've had with myself. I'm a trainmaster! You will note that I'm in New Orleans. This town is headquarters for the Gulf Division of CNO&P, another of the Wilder, Thorndike & Wilder roads. Fremont talked me into the job because the experience would better equip me to be his adviser. I protested that I already knew railroading. I had been a boomer and had worked on a score of roads.

"True enough," Fremont agreed. "But this time you will be an official on the inside looking out. The CNO&P is the best operated and most profitable of our lines. I want to know how it's run. You have some excellent ideas. A few weeks on the Gulf Division may inspire you with more."

I argued with Fremont that he was getting me into the business deeper and deeper. I reminded him of the understanding we had, that I wanted no part of the role he was thrusting upon me. I wanted to return to Clayton, to my job as conductor.

Fremont said: "Time may change your viewpoint. However. I think you will agree on the importance of this mission to New Orleans. Who else could I send? I can't go myself. Even if I could, I would be a failure, because I lack the practical knowledge of railroad operation."

Maybe it was a false sense of duty to Fremont. Maybe he talked me into it. Anyway, I agreed to go, vowing it would be my last.

Well, at the end of two weeks. I discovered that CNO&P was a well-managed road. From the President down, it followed a policy of encouraging the em-

Don't Blame Your Dealer

IF your copy of *Railroad Magazine* arrives late, remember that wartime freight is often delayed. Magazines are not given priority. We print on time, but cannot guarantee prompt deliveries "for the duration."

ployes to consider themselves as members of a large family. The 1100-mile pike prospered because it had no competition. While it was a tight monopoly, the management did not take undue advantage of it. Service to passengers and shippers was excellent.

I met Jasper Cato, Superintendent of the Gulf Division, and am impressed with his ability. Cato had hired on the CNO &P as a student telegrapher, worked in stations, yard offices and then became a copier in the New Orleans train dispatcher's office. From there he became a telegrapher in the General Manager's office. A good worker, he was rewarded a job as trainmaster. Well, now he's boss of the Gulf Division. Boy! There's some difference between Cato and Mitchell.

Mayo goes June 1st. President Wharton has been notified and cabled his resignation from Monte Carlo. Fremont himself is going to act as President for a while, and Ed Harriman is loaning him a man for operating V.P.

The first lot of Atlantics should arrive about August 15th. Fremont paid for them out of his own pocket. I talk with him every day on the phone. We're going to see some real changes.

Don't tell anyone about this letter. If the boys ask about me, say you don't know: you haven't heard. I'm counting the days until I get home. When you're pulling the latch on the fastest train on the C&W I would like to be with you lifting transportation. Yes, I'm coming home.

As ever, your old pal. NEV.

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SWENSON said: "The General Manager doesn't want any speed limits broken"

FREMONT THORNDIKE became President of the C&W. On June first, General Manager Mayo tendered his resignation. On the same day the Operating Vice President that E. H. Harriman had loaned the C&W took office. All that month there was a wild scramble to fill vacant official jobs.

The "stovepipe committee" was in

continuous session speculating on the various appointments. A conductor turned from the bulletin board in the Chicago General Yardmaster's office and asked Bagley:

"Say, where'd this new General Manager come from? This fellow Cato?"

Bagley shook his head. "I ain't sure, but I think he worked on a road down South."

Summer waxed and waned. Then September rolled in, and with it came the first dozen new Atlantic type locomotives. These, as had been agreed upon, were large, heavy engines with eighty-inch drivingwheels. For the better part of a month they were broken in on freight trains and local passenger runs. Then they were divided up between the four divisions of the Chicago & Western, three engines being assigned to each. Phil McQuade, pulling Number One, the Continental

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Limited, was given the 2000, while Bill Everett, the engineer working opposite him on the same run, fell heir to the 2002.

The following month another dozen Atlantics arrived, were broken in and assigned to the engineers running the important trains. As fast as the more modern locomotives could be delivered and placed in passenger service, the ten-wheelers were shopped and converted into freighthaulers.

Mild September was succeeded by a chilly autumn. Early in November, timed with the first few snow flurries, a batch of ten-wheelers rolled out of the shop. Jim, preparing his Mogul to haul an extra, caught his first glimpse of the converted 1506 in a stall of the Clayton roundhouse. He was staring at it when Old Nully, the night roundhouse foreman, strolled over to him and started a conversation in a quavering voice.

"Some engine, eh?"

"Sure is," Jim agreed. "You'd think she was brand new."

Nully peered over his spectacles. "Yep, and just as good as new, too. Reckon you'll be kissin' your old teapot good-bye in another couple months."

"I hope they keep these engines in better condition than they did the Moguls," Jim declared. "Why—"

"There ain't gonna be no more doctorin' engine work reports," Nully interrupted with a high falsetto. "If an engine needs fixin', she's gonna be fixed and no foolin'."

"It's about time! We engineers tried to cover up the motive power. Remember the night I came in here with the 1226 falling apart?"

Nully edged closer to Jim. "Things are changed. Let me warn you now. If you find anything wrong with your engine, better tell us or you'll be out of a job."

Jim stared, unbelievingly. "You mean you want the truth? What about the Master Mechanic? And—"

"I just posted a notice on the board," the ancient fellow went on. "It's from the Superintendent of Motive Power. He says that on orders from the General Manager, all runners will be held responsible for the condition of their engines. Effective November 15th, engineers will make out work slips in duplicate—in fact, more than duplicate, because one copy stays in the roundhouse, a second copy goes to the Superintendent of Motive Power, a third to the G.M., and the engineer keeps the fourth copy, signed by me or the Swede."

"Well!" Jim exclaimed.

The night roundhouse foreman nodded. "No more passin" the buck. If you come in off a trip an' your engine is all right, you make out the reports just the same. Another funny thing, the company is gonna pay you a half hour for it. Somethin' new, called terminal overtime."

ON THE EIGHTH of December, 1901, another letter from Nevins was delivered to Jim, postmarked Kansas City. This letter was brief and stated merely that his friend was sending on to Clayton a turkey and a lot of other stuff for Christmas, and asking Mamie to "set a place at the table for me, for I am inviting myself to the festive board."

Four days later Jim was marked up on the passenger extra list until after the holidays. His second day on the list Pinky called him for Number 20 to Chicago. It was a new and thrilling sensation for Jim to register at the Clayton roundhouse for a passenger run. "No," came the reply.

"You want to be mighty careful with 'em," Swenson warned. "Just touch the throttle and you got 'em moving. Understand? And watch your speed! They're high-wheelers and fool you. Before you realize it you're going like hell."

Jim grinned. "Thanks for the advice—"

"I have orders to tell all you fellows the same thing. The General Manager doesn't want any speed limits broken."

Jim found the 2032 and climbed into the cab. His first impression of its size was that he could place his little Mogul across the deck. He mounted the platform to his seat and was looking out the window when "Bud" Lang, the regular fireman, pulled himself into the cab. Jim greeted him.

"Gosh, these are great engines!"

"Sure thing! You want to be careful with them. They're different from anything we've ever had before. They get away from you—"

Jim grinned. "So I was told. I met Swenson."

A half-hour later Jim had the 2032 back off on the short spur at the east end of Clayton depot platform, to await the arrival of Number 20.

Jim leaned back in his seat and threw his feet up on the airbrake stanchion. He took out his pipe, filled and lit it. He watched Lang build up his fire, mentally contrasting him and his work with that of other firemen he had known.

Lang slammed shut the firebox, stuck his shovel in the coal, and mopped his face. Jim, puffing on his pipe and anticipating the thrill of pulling the latch on the new engine, suddenly remembered that he did not know the return movement of the run. Removing the pipe from his mouth, he asked: "Bud, what's the rest of this run?"

"We come out of Chicago with Twenty-three. Take a look at your timetable and you'll see that we haven't much time in the big town. We're there just long enough to grab a bite to eat and get the engine ready."

Jim dug out his timetable and idly thumbed the pages. "Old Twentythree, eh?"

He placed his finger on a page and read the column of type, the schedule of Number 23.

"Say, this is funny. I see here where Twenty-three leaves Chi at three-thirty, Why, that's the time she used to pull into Clayton. Yep. three-thirty in the afternoon. An engineer by the name of Cramer, Joe Cramer, ran her for years. I can see him now, with his long, black, handle-bar mustache, chewing on a stogie. He was some man! All of us boys used to be down at the depot not this one-the old wooden station they tore down five years ago. Anyway, we used to wait for Joe and his little brass-trimmed engine. We thought he was the greatest man in the world."

"That was before my time," Lang broke in. "But I remember the old wooden station. Musta been built back in the—"

"It was built when the road was built," Jim explained. "This red brick station looks big now, but it will be—"

"Here comes Twenty!" Lang cried.

E NGINES were changed and Number 20 left town on time. Jim quickly realized the truth of the advice given him by Swenson. The 2032 walked away with the eight-car train. After he got her rolling, he hooked her up a little off center and left the throttle out only a few notches. The exhaust was a purr. Suddenly it occured to him that the telegraph poles were passing close to one another.

Lang called from across the cab: "Hey, Jim, you better ease off a bit. She's got away from you."

Jim reached for the throttle, pushed it in a notch or so.

"I clocked you on that last mile," Lang went on, grinning. "Milepost 136 to 135 in fifty seconds."

Jim was amazed. "I'd swear I wasn't making over fifty miles an hour. By golly, these engines sure can run!"

Without further incident Number 20 pulled into Chicago on time. Jim, a piece of waste in hand, descended to the platform to go over the engine. At that instant a train from the East pulled in on the adjacent track. Only the platform between separated them. While Jim continued inspecting his 2032, passengers from both trains passed him and poured through the iron-grilled train gate.

A tall and rather handsome man, with gray handle-bar mustache, chewing on a long black stogie and wearing a fur-collared overcoat, stopped and looked sharply at Jim. Suddenly Jim straightened up and turned toward the trailer box. The man's face lit up and he darted over to Jim. He made a grab at the engineer's shoulder and whirled him around.

"Jim Moran! Why you old son of gun!" he cried. Jim stared at him blankly a moment, and then brightened. "Joe Cramer! Well, I'll be—"

"Boy, you haven't changed a bit! I'd have recognized you—"

"Gee, Joe, I was just thinking about you this morning," Jim went on excitedly. "I was telling the fireboy. I see you still are chewing the same kind of cigars."

"That's right, and I see you've got an engine."

"Yeh, I'm an engineer."

Cramer extended his hand. "Put it here, Jim. Congratulations!"

The two old friends babbled away, until at length Cramer said: "I'll be here a few days. I'm a Master Mechanic for the BB&B at Boston, Mass. Most of the Master Mechanics in the country are meeting here in Chi—sort of a convention."

"When does it start?"

"The first meeting is tomorrow at noon."

Jim chuckled. "Say, why don't you come out and visit Clayton? Kinda look things over. A lot of changes. Mamie would sure be glad to see you again."

"Maybe 1 will," Cramer agreed "What time do you leave?"

"Say, that reminds me. I go back with Twenty-three, the old *Denver Express.*"

"My train," Cramer sighed.

"Yeh, it would be like old times" again," Jim added eagerly.

"I'll be here," Cramer promised.

AT THREE-TEN that afternoon Jim backed the 2032 against the baggage car of the *Denver Express*. Car inspectors coupled the hoses, and then inspected the train. Jim descended from the cab and looked up the platform toward the train gate for the sight of Cramer. When the passengers poured down the platform, Jim spotted his old friend.

Cramer, wearing his fur-collared coat and black derby, carried a bag. He strode up to Jim and admired the Atlantic type engine.

"She's a beauty," he began. "Quite different from the little brasstrimmed gals. How does she handle?"

"Great! She's like a racehorse."

There was an awkward pause. Jim caught his friend staring at the 2032.

"Say, Joe, how'd you like to ride the cab with me? It's your old run, you know."

Cramer's face lit up. "Now you're talking, boy. Nothing would please me more. Wait until I get rid of this coat."

Jim watched Cramer run back to the port on the first Pullman, saw him remove the coat and hat, and hand them to the porter with a tip. Cramer then dashed ahead. He stopped at the cab steps, opened his small bag, and pulled out a suit of overalls, gloves and a cap.

"Gosh, Joe, you look just like you were years ago, even to the cigar." Jim could scarcely believe his eyes. "You sure seem like an engineer!"

A big grin across his face, Cramer climbed into the cab. Jim followed him. Cramer hesitated, then plopped down on the fireman's seatbox. Jim sat down on his side of the cab, placed his gloves on the airbrake handle, and filled his pipe.

"Has the division changed much?" ('ramer asked.

"No. except there's a new coal chute at East Desmond and a new bridge at Star Lake."

Cramer shook his head. "I didn't mean it that way. I mean't have the signals been changed, or things like that?" "Everything is just the same. Only we use automatic blocks now—"

"I used to know every inch of this division. You couldn't fool me even in a fog. I bet I haven't forgotten it."

Jim looked at him questioningly. "Are you, by any chance, hinting that you'd like to take her for a while?"

"Oh, no!" Cramer put up both hands. "I was just—well, thinking back. This was my home, once."

On the dot of three-thirty Jim answered the conductor's highball by two blasts from the engine whistle. His train glided out of the station and wormed across the maze of yard tracks.

"Same old station yard." Cramer called across the cab.

As they were passing West Chicago, Jim had a good wheel on the train.

"You made a nice start," Cramer complimented him. "You know how to handle an engine, all right."

Open country, gray winter sky. Snow-covered fields. Miles slipping under the whirling drivers. Jim glanced across the cab, caught Cramer watching him with hungry eyes.

"Joe," he ventured, "how'd you like to handle her now?"

Cramer leaped to his feet. "Well, if you insist—"

"Yeh, come on."

Jim eased out of the seat, Cramer quickly took his place. He rubbed his hands and grasped the throttle.

J1M crossed the cab and climbed in ahead of Lang. He watched Cramer out of the corners of his eyes, observing the gratified expression, the little wrinkles that formed when Cramer was intensely happy. Cra-

Brass Hat

mer stuck a long, black stogie in his mouth, lowered his head to light it. He was beaming.

"Boy, this is the life!" He puffed on the cigar. "Magnificent engines! 1 wonder how fast they can run?"

"We don't know," Jim replied. "and don't you try to find out!"

Cramer peered ahead. Dusk had now settled and lights gleamed in the little towns. His left hand eased on the throttle, he pinched on a little air.

"Coming into West Canton. You still knock her down a little on the curve, don't you?" the old-timer called loudly across the cab.

"That's right! Do everything just as you did it seven years ago. I'll tell you when you're wrong. Joe, you have a great memory! You're wheeling this flier as though you hadn't been off it a day."

That pleased Cramer. He grinned at Jim and patted the side of the boiler. "Good old gal! Good old Twenty-three!"

The *Denver Express* zoomed through West Canton, flashed by the way station. Cramer kicked off the air.

"He's quite a runner," Lang leaned forward and spoke into Jim's ear. "He's running rings around Elliot, the regular engineer on this job." Lang nudged Jim, had him turn and look at the watch he held in his hand. "We're a minute to the good! Elliot is always two minutes off the card going through West Canton."

"I told you Cramer was good!" Jim chuckled. "Most of what I know I learned from him."

Cramer swung the train into Desmond and eased to a cushion stop. He spotted the engine directly under the water plug. He was three minutes ahead of schedule. Lang nudged Jim again. "Look! He ain't an inch out of the way!"

[•] "Sure, I expected it," Jim returned gaily. "I never knew Joe to miscalculate on a plug."

Lang went back on the tank to take water. Jim felt the urge to resume his place at the throttle, but Cramer was so exuberant that he could not bring himself to ask for it. Cramer was looking down from the cab window, waiting the signal to leave town. Now it was snowing. White fleecy flakes floated down like goose feathers.

With the crash of metal striking metal, Lang slammed shut the manhole cover. Then he climbed over the coal gate and into the cab, peered into the open firebox, turned down the blower. He rolled a cigarette and slipped up on the seatbox behind Jim.

"Are you letting him take it into Clayton?" he inquired, nodding in the direction of Cramer.

Jim shrugged his shoulders. "What can I do? You see how happy he is."

A lantern twirled a highball. Cramer was on his feet notching back the throttle. The 2032 started, tugged at her burden, and then struggled forward, gathering speed with each revolution of the drivers.

"Holy smoke!" Lang exclaimed. "Did you see that? He took no slack."

"Sure, he had it bunched when he stopped," Jim said. "That's an old trick of his."

The Atlantic barked and then the exhaust settled down to a purr. Cramer again had a wheel on the train and now was out in the open country. He remembered road crossings, stations, signal towers. At regular intervals his hand left the throttle, grasping the knotted whistle rope to send mournful notes echoing across the snow-covered prairie.

FOUR minutes ahead of time the Denver Express glided into Clayton. While car inspectors uncoupled the engine, Cramer left his seat, crossed to Jom and queried. "How'd I do?"

"You did a swell job, Joe!"

After the trip, Jim took Cramer home with him, to the neat two-story cottage on East Street. The former engineer looked around wonderingly. That section of Clayton had been built up since he had given up his run. Mamie was glad to see him once more—the man who had been her husband's boyhood idol—and soon had a tasty meal spread out for the three of them on a new red-and-white checkered tablecloth.

When they had finished eating and while Mamie was washing the dishes, the two men pulled up their chairs beside the parlor stove. Cramer stuck the inevitable stogie in his mouth, bit off the tip and plunged into reminiscences. They reviewed the changes that had taken place in and around Clayton. Then the subject drifted to a mutual friend.

"What is Nevins doing in Kansas ('ity?" Kramer wanted to know.

"You've got me there, Joe. I figure he's working for President Thorndike in one way or another."

Cramer absently rolled the stogie between his fingers. "So big power was his idea, eh? You have to admit the new Atlantics are a damn sight better than the old ten-wheelers. That engine almost ran away with Twenty-three today! It was a pleasure to run the train."

"That was what Nevins argued," said Jim. "The engines we had were too small. You should see the tenwheelers with their cut-down drivers! Why, they pull thirty loads right now, winter tonnage. In the summertime they'll walk away with forty."

Cramer nodded. "The C&W has gone from one extreme to the other. Now the engines are powerful and can pull longer trains. There's the joker. How long do you suppose this railroad will overlook that fact? If you can pull forty loads, why not fifty? If the Atlantics can handle eight or nine passenger cars and wheel 'em, someone will get the idea of putting ten, eleven cars on them. Maybe a dozen."

"Oh, no! Nevins has that all figured out. The drawbars won't stand the additional strain."

"Don't you believe it, boy! Nevins has shown the railroads a way to make more money and they're going to improve on his idea. It won't happen tomorrow, or next month. But the ball has started rolling. Every pike in the country is watching this experiment. I heard about it back in Boston. If the move is successful, the BB&B will order two hundred new big engines."

"But the drawbars—"

"That won't stop 'em," Cramer argued. "They'll find a way to strengthen 'em, maybe build 'em on an entirely new idea. Listen, boy, the all-steel car is just around the corner. It will be heavy and as strong as a battleship. Mark well what I'm telling you. Some day pulling a lung on a freight or passenger train will be as rare as a four-leaf clover."

THE BOX from Kansas City containing the turkey and fixings arrived for the Christmas dinner. But Nevins himself did not show up at Clayton. He sent a telegram wishing them all a Merry Christmas and expressing his regrets. He did not mention the small but important item that his division was snowed under; no trains were moving, and he had to remain on the job.

Thus the months came and went. The holidays passed. More snow. fierce icy gales, sub-zero weather. January seemed endless and so did February. In March the ice slowly melted under the warm rays of an early spring sun. Before you knew it, the season's first robin had made his appearance in a front yard on East Street. April was mild and benign. The whole division point bustled with new life.

Jim Moran and his conductor. Elmer Banks, pulled into Clayton on an extra. A brief shower had sprinkled the ground, the tin and tarcovered roofs and the church spires. Grass had begun to shoot up along the right-of-way even in dingy railroad vards. The two friends were in a buoyant mood. A converted tenwheeler had highballed them from Chicago to the home town in eleven hours. That was fast time.

Jim ambled over to the bulletin board at the yard office, Elmer tag-

Do recurring attacks of Bronchial Asthma make you choke, strangle and gasp for breath? Are you bothered so bad some nights that you can't sleep? Do you cough

so had some nights that you can't sleep? Do you cough and cough trying to raise thick strangling mucus, and strain so hard you fear rupture? Are some attacks so bad you feel weak, unable to work? Are you afraid of colds, exposure and certain foods? No matter how long you have suffered or what you have tried, we believe there is good news and pallia-tive hope for you in a splendid medicine which was originally a doctor's preacription but that is now avail-able to sufferers at all drug stores under the name of Mendaco. Mendaco usually works very raridly because it con

Mendaco usually works very rapidly because it con-

ging behind. The engineer glanced at it casually and then with riveted attention.

"Gosh!" he cried. "Look at this!" Elmer accelerated his pace and both men gaped at the posted notice.

Chicago, April 22, 1902. Effective May 1st, 1902, Robert Nevins becomes Superintendent of the Chicago Division.

JASPER CATO, General Manager.

Jim read aloud the few words. His mind reacted slowly. For a moment he could think of nothing else to say. But a broad smile had spread over Elmer's face and Elmer prompted eagerly: "Gee, Jim, can you believe it?"

The runner wet his lips, cleared his throat. "I guess we have to. There it is."

"I wonder if he's changed much?"

Jim stroked his chin thoughtfully. "I don't know. I never thought of Nev as being a brass hat. He—well, it always seemed he didn't want any part of them."

The yardmaster glanced up from his battered old desk and smirked. "He wanted it, all right. He was just kidding you fellows."

Asthma Mucus Loosene tains ingredients intended to help nature loosen thick While You Sleep strangling excess mucus. And you know from your own experience if you can just raise that strangling phlegm you can sleep well, breathe deeply of God's fresh air and not feel like there was an iron band around your chest crushing out your very life. Say Thousands of Sufferers

Guaranteed Trial Offer

Mendaco is not a dope, smoke, injection or spray, but is in pleasant, tasteless tablets. Formula on every package. In fact Mendaco has proved such a great paliative success for thousands suffering recurring choking, strangling symptoms of Bronchial Asthma that an iron clad guarantee insures an immediate refund of your money on return of empty package unless you are completely satisfied. Under this money back guarantee you have everything to gain and nothing to



51

lose, so ask your druggist for Mendace today and put it to the test. Only 60c.

Light of the Lantern

Running-Gear Failures

W ITH the single exception of boiler explosions, the most dreaded engine failure is one which affects the driving or running gear at speed. It is obvious that few pieces of machinery are subjected to the terrific strain placed upon such members when a tonnage train is on the roll. Unlike the moving parts of most machinery, those of a locomotive have little or no protection from the elements. Blistering summer heat or biting winter blasts find them accepting the punishment expected in routine operation.

In view of the conditions just outlined, the performance of today's motive power under the stress of war is little short of spectacular. Today we have thirty-four percent less locomotives than in 1918; yet the total gross ton miles are far in excess of figures for corresponding periods in that year. Of course, the unit tractive effort has been greatly increased and we may find two locomotives on certain runs doing the work which would have been assigned to eight engines in World War 1.

But boosted tractive effort and horsepower alone cannot effect such wonders. Availability, too, must be boosted, if terminals and rights-of-way are to be kept clear. That means fewer idle hours in the engine-house, less time for servicing and repairs. Vigilance in the inspection of axles, wheels, rods, and reciprocating parts, however, can in no way be slighted.

Every railroad has, in its files, the record of a side- or main-rod letting go at high speed. No two accidents are exactly



alike. Sometimes the broken parts will revolve and clear away the compressors or running boards as though they were made of paper. Or a portion of the rod may dig into the roadbed, or strike a tie, lifting one side of the engine and causing a derailment. These members have been known

to drive back through the sheets surrounding the firebox, releasing steam with explosive fury. During such moments, the engineer usually wipes the gage in an effort to make a quick stop. Passengers may be thrown into the aisle, freight tossed about and damaged, or wheels flattened. Always equipment is in for costly repairs.

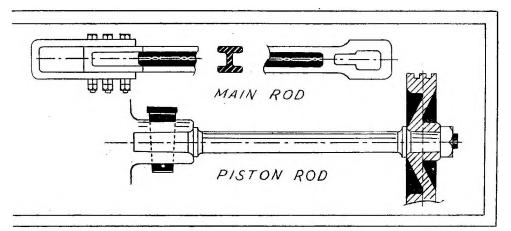
EXPERIENCE has taught motive powler officials a great deal about steel. They know, for example, that like the human body, it wears out with use and age. When allowed to stand idle over long periods of time it oxidizes or rusts away. In service, the molecular structure is either pounded tight by compression or stretched in tension until it finally grows weak from fatigue. This process of deterioration is slow and unless the part is repaired or replaced, final disruption occurs.

Now visualize reciprocating parts of a locomotive in action. At one moment every bit of fibre is in compression—the next, under sudden tension. With seventy-fiveinch driving wheels there are two hundred and sixty-eight revolutions for every mile of travel. That means an equal number of breaking-down of molecular structure in steel, and its revitalization through annealing or heating. We are aware, however, that when metal fails, it does not do so immediately over a given area, but in gradual steps. The fracture commences at a very small point and slowly progresses with use. This is fortunate, for it enables flaws to be found before total disruption.

Another characteristic which has been noted is that every metallic part has a breakage zone. Shopmen know just where to look for each failure. Main-rods and side-rods almost invariably fracture in that area adjacent to the pins. Axles show a tendency to crack close to the inside edge of their fit with the wheel centers. Crankpins also give way along the joining line of pressed fits.

Curiously, too, in a certain series of engines, the failure of a given part after a particular number of travel miles will be duplicated on every other engine in that group operating under like conditions. This knowledge prevents many failures.

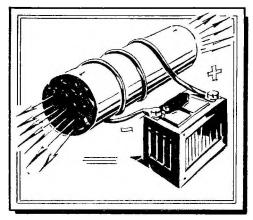
No less important than strength is design. Tool marks or tiny dents caused by poor handling must always be eliminated.



STRESSES imparted to running gear are distributed smoothly through curvature at areas of juncture. Note flaring spoke ends designed to withstand contracting force of cooling tire, as well as road shocks; machining of axle and crank pins, main rod and piston rods

reverses in rod stresses. Under such conditions, fatigue is rapid. Rods and axles are now machined so that all sharp edges are removed. As is shown in our first line drawing, fillets are invari-

Much remains to be learned about the



HIGH amperage current, passed through insulated coil, converts bar of iron into a powerful electro-magnet

ably placed where pressed fits are to be made, or where diameters vary.

EXCLUDING improper construction and flaws developed at the mills or caused by careless handling, the main reason for rod failure is excessive pounding at the bearings. Federal laws state explicitly: Cracked or defective main- or side-rods shall not be continued in service; autogenous welding of broken or cracked main- or side-rods is not permitted; bearings and bushings shall so fit the rods as to be in a safe and suitable condition for service; straps shall fit and be securely bolted to the rods; and the total amount of side motion on the crank-pin shall not exceed one inch.

In addition, it is required that for locomotives used in road service, the bore of main-rod bearings must not exceed pin diameters by more than three thirty-seconds of an inch at the front or back end, nor the total lost motion be in excess of five thirty-seconds of an inch. Side-rod bearing bores are not permitted a tolerance of more than five thirty-seconds of an inch on the main pin, nor three-sixteenth of an inch on other pins.

With the above stipulations, rapid fatiguing of parts is greatly reduced. Enginemen are expected to report pounding, and it is the duty of the foreman in charge to check lost motion. If lawful limits are exceeded, new bushings are, of course, applied. Generally, rod collars are removed at quarterly inspections for accurate gaging of this play.

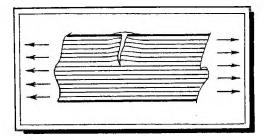
Despite all precautions, however, failures still occur. In bygone days the machinist with the keenest eyes was generally given the inspection job. Well-illuminated pits were subsequently developed and in some cases magnifying glasses were used. One large railroad system actually hired one of Bob Ripley's "oddities" as an inspector. Known as the man with the magnifying eyes, be turned his phenomenal vision to important and profitable work.

But there weren't enough freaks to go around, and in any event something more accurate was required.

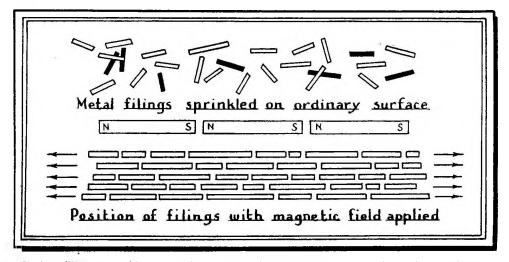
A widely used method of detecting flaws was the kerosene and whitewash treatment. Here, a unit to be tested was thoroughly cleaned in kerosene, wiped dry, and painted with a thin coat of whitewash. In the event of a crack, the thin oil soaked into the rupture, coming to the surface again when the part was tapped with a soft hammer. This left a plain outline under the whiting.

UNFORTUNATELY, such treatment did not reveal flaws underneath the surface or where great compression sealed the crack. Such detection had to await *Magnaflux*, a remarkable method of testing engine parts that is almost fool-proof.

The principle employed is simple and easily understood. *Magnaflux* apparatus, as found in practically every roundhouse and major shop today, is an inconspicuous electrical unit built onto a small truck



MAGNETIC flow is disturbed by the slightest imperfection



IRON filings sprinkled over the metal to be tested assume regular pole-to-pole pattern when it is magnetized

which can be trundled about by one man and plugged into an electric light circuit at any conventional outlet. All the device does is to convert 110-volt current into around 30 volts, at the same time boosting the amperage to the neighborhood of 3000. The part to be tested is then cleaned and the cable carrying this high amperage is then wound around it several times. Next, the engine part is springled with Magnaflux powder, which is the whole secret of the system.

If you have studied physics, you know that all iron and steel is magnetic, and that if a bar of any size is hung at its center of gravity, one end will be attracted to the north pole. Thus we say that each piece has a north and a south pole.

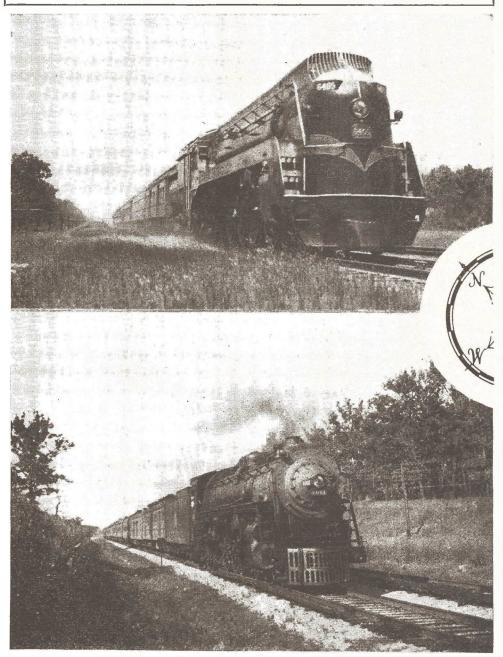
Now, if a big bar is broken into two pieces, each fragment becomes an individual magnet with its own corresponding north and south poles and the same conditions continues, regardless of how many times we halve the segments. In itself the magnetism is very weak but it can be intensified by spiraling an insulated wire around the metal and sending electricity through the windings. An iron or steel bar so treated becomes strongly magnetic, with the power to attract smaller pieces of the same kind of material.

Magnaflux powder, then, is nothing more than fine iron shavings ground to pass through a 100-mesh sieve, and having each particle covered with talc to separate it from its fellows. When this mass of filings is sprinkled on the engine part to be tested, it lies in a jumbled fashion as one of our sketches shows. But send the high amperage charge through the cable encircling the large piece of metal and that member becomes a powerful electro-magnet. The shavings, acting in a perfectly logical manner, now leap into orderly position, each south pole being attracted by the north pole of the adjacent filing.

If there is no break in the magnetic flow, the small particles form with perfect symmetry. But let there be a flaw, however slight, and some of the magnetic flux is crowded outside the surface. Tiny Magnaflux chips, then, will crowd together at this point, outlining the crack so clearly that its size, depth, and relative importance can be clearly determined. Seams invisible to the naked eye and even surface cracks of .0002-inch depth are unmistakably brought out. Thus Magnaflux is about the most efficient and practical flaw detector system in use today.

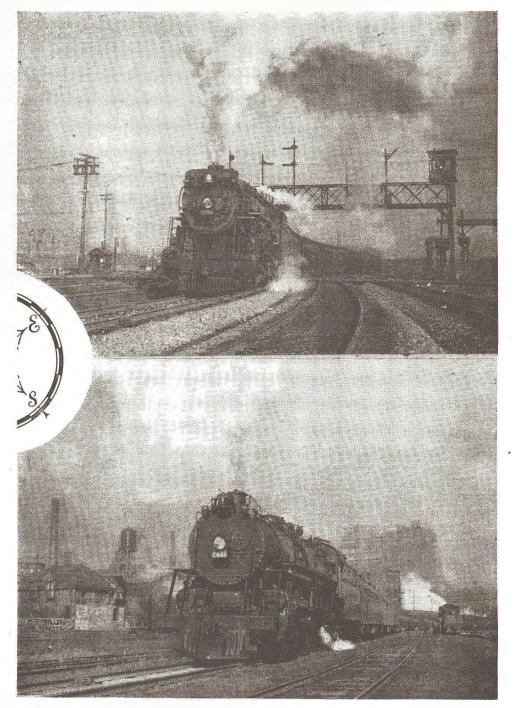
Out of Chicago

Photos by Vernon Seaver, 223 S. Wabash, Chicago



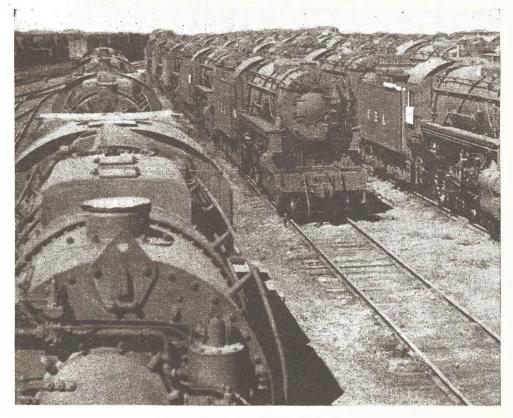
9:40 A. M. sees the Grand Trunk's Maple Leaf ease out of Dearborn St. Station for Montreal. Here's the 6405 wheeling her toward Griffith, Ind.

9:40 A. M. is leaving time, too, for Rock Island's Los Angeles-bound Golden State Limited. Well clear of her LaSalle St. Terminal, the cadence of the 4061's exhaust quickens and Oak Forest falls behind



9:05 A. M. Square-tailed interlocking semaphores protect the Erie Midlander's Dearborn St. departure. Super-Pacific 2936 will take her as far as Hornell, N. Y.

10:15 A. M. and Illinois Central's 2448 takes slack out of the Creole at Central Station, on the first leg of her journey to New Orleans



The Information Booth

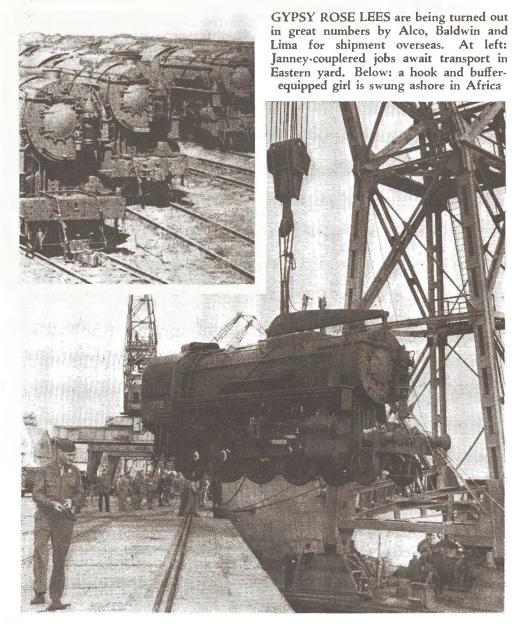
EACH month the Lantern department includes, in addition to a technical article on some ramification of railroading, answers to rail questions of general interest, submitted by readers. We do not send replies by mail.

I

WHAT is the difference between the Army Transportation Corps and the Military Railway Service, and how can I, as a locomotive engineer, obtain official information regarding transfer to Army railroad service in a zone of military combat?

The Army Transportation Corps is a reorganization of the Army Transportation Service which was formed as a part of the Services of Supply (now Army Service Forces) a year ago last March. It controls the movement of troops and military freight throughout the United States, regulates the flow of men and supplies—including Lend-Lease goods to its ports of embarkation, moves them overseas, and provides the transportation units and equipment for overseas operation. It does not, however, deal with transportation by air.

The Military Railway Service conducts railway operations, including shop work, for the Army, in zones of military combat. Construction is performed by other special engineering corps. We would suggest that you, as a locomotive engineer seeking service overseas, communicate with Major Richard B. Baldwin, Assistant, Rail Division. Office of the Chief of Transportation, War Department, Washington, D.C., requesting further data on the Military Railway Service and stating your experience and address. A brief history of the MRS appeared in our February, '43, issue.

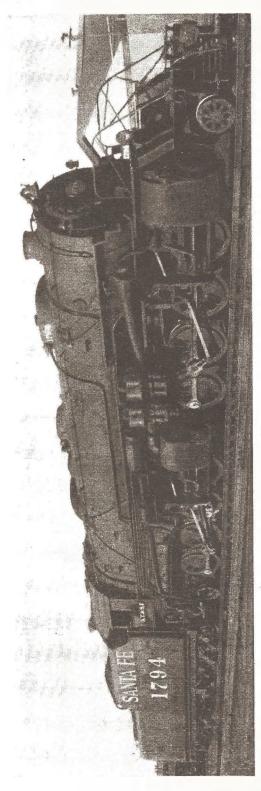


2

WHAT is the percentage of stokerfired locomotives in the United States. what are the types employed and their capacity, and how many manufacturers turn out this locomotive adjunct?

There are approximately 40,000 coalburning steam locomotives in the States today, of which about 13,000—or around 30 percent—are stoker-fired.

Successful locomotive stokers are all of the "overfeed" or "spreader" type, wherein the fuel is applied from above. Attempts made to install underfeed mechanisms of the chain grate variety, such as are used in dwellings and small industrial plants, have thus far been unsuccessful due to the limited combustion



Railroad Magazine

LEFT: Norfolk & Western is finding plenty of customers for its older "Malleys" nowadays. Among them are the Pennsy, the Rio Grande and the Santa Fe. Nos. 2014, 2029, 2035 and 2042 recently became the latter road's 1794-1797 series

area of engine fireboxes. Overfeed mechanisms may be subdivided into conventional rear-end stokers, which project fuel into the firebox from the boiler back head, and the recently developed frontend delivery type, which carries coal under the grates and jets it back from a point beneath the back flue sheet.

The capacity of the modern stoker may range from 10,000 pounds per hour to a guaranteed 45,000 pounds per hour on one road where lignite is used. Average for a moderately heavy road freight engine is 18,000 pounds per hour. Four American railway supply companies turn out stokers, but more than 95 percent of these mechanisms are the product of one company.

3

RECENTLY I read that the Baldwin Locomotive Works was building twenty-two simple articulated 2-8-8-4s having identical specifications. Twenty of these, I understand, will go to the Baltimore & Ohio. To whom are the others assigned?

To the copper ore-carrying Bingham & Garfield, a twenty-mile road operating to the south and west of Salt Lake City, Utah.

4

SOME time ago I saw Pennsylvania's No. 3806 pass through my home town with her side-rods down. Apparently she had been sideswiped as her left flank was badly damaged. Can you jurnish particulars?

PRR Pacific 3806, a K-4s type built by Juniata in 1923, was the engine involved in the recent wreck at Minson, N.J., which resulted in the death of twelve passengers and two train service em-



TELEGRAPH poles hung like kite frames from their wires when excessive speed on a sharp curve caused this wreck at Minson, N. J. (See Item 4)

ployes. The engine and seven of its fifteen cars left trackage of the Atlantic Division on a sharp curve near that point, enroute from Atlantic City to New York.

5

WHAT type of air-conditioning apparatus is used by the New Haven? Some of these cars appear to have ice hatches.

The New Haven employs two systems of car cooling. Two hundred and ninetynine of its coaches and diners have mechanical air conditioning units in which motors circulate a refrigerant called Freon, much after the fashion of an electric icebox. Another one hundred and thirtyone cars are ice-cooled, with a daily average of 3600 pounds required to keep them comfortable in summer weather.

6

WIIEN did the Pennsylvania stop naming its engines?

Around 1857 a system of numbering was adopted by this road, names being removed thereafter as fast as practicable.

7

IST roads amalgamated to form the present-day New York Central route between New York City and Buffalo.

1. Mohawk & Hudson Railroad. Chartered in 1826, it was opened for traffic between Albany and Schenectady in 1831. In 1847 its properties were absorbed by the Albany & Schenectady Railroad Co., which eliminated inclined planes, permitting orthodox operation.

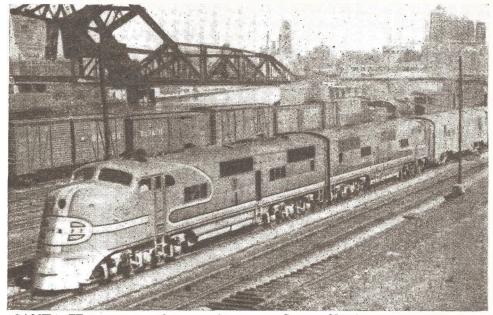
2. Utica & Schenectady Railroad. Chartered in 1833, construction between terminals, 78 miles, was completed three years later.

3. Auburn & Syracuse Railroad. Chartered in 1834, its 26 miles of track were not ready for business until 1843.

4. Syracuse & Utica Railroad. Opened for business in 1839, three years after chartering.

5. Syracuse & Rochester Railroad. Incorporated in 1848.

6. Buffalo & Rochester Railroad. Formed in 1850 from the Tonawanda and the Attica & Buffalo railroads, which had been chartered in 1832 and 1836.



SANTA FE motors 4 and 2 ease the ten-car Super Chief out of her Dearborn Street wigwam

7. Hudson River Railroad. Incorporated in 1846 to close the link between New York City and East Albany (144 miles), it was completed in 1851.

8

\mathbf{F}^{URNISH} data on the Cairo, Truman & Southern.

This road was incorporated on February 7th, 1912, in Arkansas; its 13.86 miles of road running between Weona and Weona Jct., Ark., with 2.22 miles of second track. Twelve years ago the Cotton Belt attempted to acquire these properties but the ICC dismissed its application and assigned the CT&S to the Rock Island. The larger portion of the road was abandoned the following year and the remainder on August 2nd, 1940.

9

HOW much coal was burned per mile by engines of the 1860s on trains of average length?

That reminds us of the old saw "how long is a piece of string?" The answer would obviously depend on five factors: 1. efficiency of locomotive: 2, the weight of train; 3, the speed of train: 4, the gradient; and 5, the quality of coal.

Best available figures are probably those published in *Locomotive Engineering and* the Mechanism of Railways, written by Zehah Colburn and published in 1871. It states that on the Pennsylvania Central (now PRR) Ten-Wheelers and American type engines averaging twenty-five miles per hour including stops, consumed between 52 and 70 pounds of coal per passenger train mile. Freight haulers with six coupled drivers, weighing 31 tons and hauling forty-eight 16¹/₂-ton cars, eastbound, consumed 100 pounds of coal per train mile.

10

 \mathbf{D}^{EFINE} the terms house track, ladder track, team track, fan track and rip track.

A house track is a track which runs along side of, or enters a freight house, and is used for cars receiving or delivering freight at the "house."

A ladder track is a track connecting, successively, the body tracks of a yard.

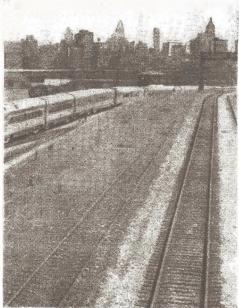


Photo by Pvt. Frank Smarz, Zeigler, 111.

A team track is a track on which freight is transferred directly between cars and highway vehicles.

A fan track is a ladder track from which body tracks diverge to both right and left A rip track is a track used to store locomotives and rolling stock scheduled for repairs or scrapping.

The Dispatcher Was Right

PETER JOSSERAND, Western Pacific dispatcher at Sacramento, Calif., sends in this solution to his train-order problem printed on page 6:

The engineer on Extra 252 West did not need the right-of-track order. He already held a meet with Second 62 at H, the same as if Order No. 72 had read: "First and Second 62 meet Extra 252 West at H instead of E," for when a train is named by its schedule number alone, all sections are included.

Superseding the meet with First 62 in no way affected the meet with Second 62. Holding the meet with Second 62 at H, he already had right over Second 62 G to H, since when a meet is established between opposing trains, right is thus conferred upon the inferior train to run to the meeting point against the superior train.

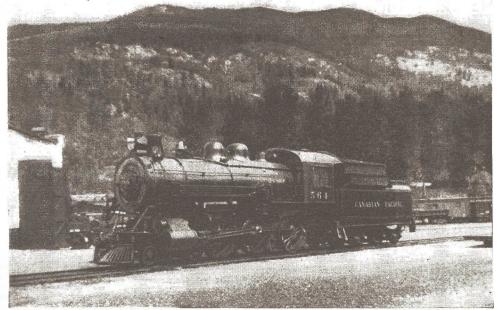
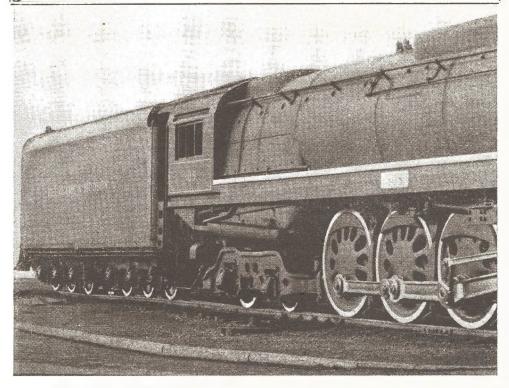


Photo by W. Gibson Kennedy, 1586 Pine Ave., Trail B. C., Canada

MOUNTAIN terminal. Just in from a run, Canadian Pacific ten-wheeler 564 cools her tires on a Revelstoke, B. C., engine track



Delaware & Hudson K-62

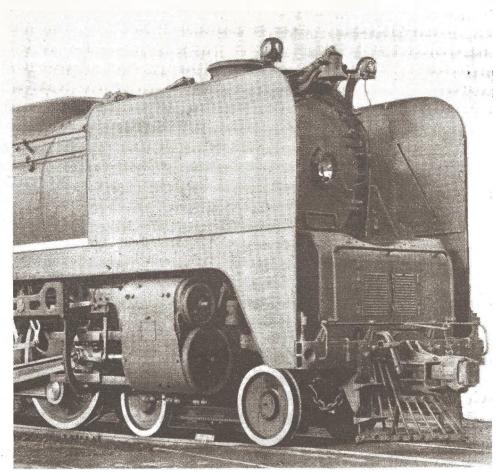


Locomotive of the Month:

WHEN advisory engineer Horatio Allen reported the seven-ton Stourbridge Lion too heavy for Delaware & Hudson trestles, back in 1829, he did not recommend smaller locomotives, but rather, a roadway capable of sustaining still greater wheel weights. That there was more of portent than of whimsy in his counsel is proven by the 235-ton giant pictured above. Each of her driving axles carries in the neighborhood of 68,000 pounds.

To observers of D&H motive power policy, the 300 series marks a second step away from those revolutionary trends in design which produced the high-pressured 1400 Class engines and Dabeg and Caprotti valve gearequipped machines of the late twenties and early thirties.

This swing toward conventional power began with the road's purchase, in 1940, of the first of several groups of high-speed, simple articulated locomtives, having a 4-6-6-4 wheel arrangement. By complementing them with fifteen somewhat larger drivered 4-8-4s, the road is following a practice pioneered by a number of Western carriers which have found that a combination of these two types of engine gives a latitude of performance sufficient to meet virtually every present-day operating condition.



In the case of the D&H, heavy freights will continue to be handled by the 4-6-6-4s, while 4-8-4s are being assigned to lighter manifests on fast schedules between Oneonta, N. Y., and Rouses Point (243 miles), as well as for heavy passenger work.

Despite radical departures from previous D&H engine contours, the new K-62 Class retains many of the English and continental characteristics which distinguished its predecessors. Smoke-lifting shields blending into running-board aprons, a long steam and sand-dome housing, stack flange, recessed headlight, and sheet metal airpump shield are among such features. By way of compensating for the absence of illuminated engine numerals on the sheathed headlight, opal glass panels have been housed in the metal aprons above the driving wheels. Lit from behind, they identify the engines clearly at night.

Specifications

Class K-62
Numbers 300-314
Cylinders 241/2x32
Drivers
Pressure
Weight (engine) 470,000
Tractive Effort 62,040
Builder Alco
Date April '43



Lightning Slinger

I N THE COURSE of any railroader's lifetime he bumps into unusual and often amusing or tragic things. That's life. Over a span of years the home-guard operator may have had as many such experiences as the hundred-job boomer. Yet to the average boomer, who actively or passively creates some of these situations, there have come more unusual incidents than to the home guard.

I have been a railroad boomer more than forty of my sixty-odd years. And even during the rare periods when I "settled down" on press jobs, I was shifted about almost as much as the fellow who often quits his jobs to travel. As an example, while working for the Associated Press in 1912 I was employed on fifteen different newspapers in eleven different cities; subbed four weeks for two brokers, and wound up the old year on the Washington & Old Dominion Railroad, a jerkwater line running between Washington, D. C., and Bluemont, Va.

Two days was the length of my first boomer job, for which I never have been paid. It was on the Buffalo & Susquehanna in Northern Pennsylvania and s o u t h e r n New York. Perhaps that was a portent of the emptiness of the roving life. This is what happened: Called in to the chief dispatcher's office at Galeton, Pa., after two days at Hulls, Pa., for thirty dollars a month, I was assigned to Wellsville, N. Y. While killing time in the chief's office, I cut in on the pipe-line wire, which was in the switchboard for tests, and proudly notified my former boss, a pipe-line oil buyer and bank cashier, that I had a job.

"Come back." he pleaded, "and I'll pay you double what you were getting before."

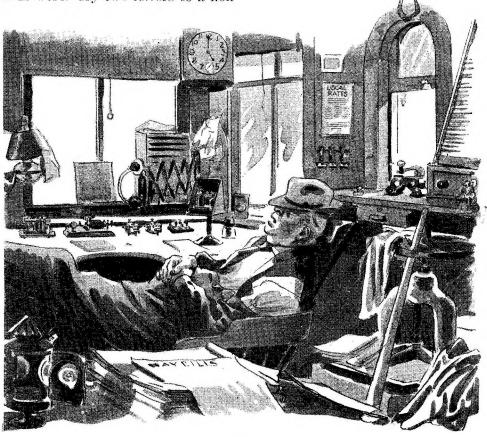


In the week since I'd left, the market broke and he was swamped. It was my home town and I had a girl. By working on the railroad I would put in 84 hours a week, but on the oil-buying job I would enjoy a 32-hour week. Can you blame me for quitting the B&S and going back to work for the oil man again? I was so tickled to return home under those conditions that I waited thirtyfour years before asking the B&S for my two days' pay.

About the middle of the 1930's I wanted the check so I could get a photograph of it and write a feature story. But the Buffalo & Susquehanna was then extinct, having been absorbed by the Baltimore & Ohio, and Lord knows where the old records were. My two letters to a nonexistent chief dispatcher, Galeton, Pa., were never answered.

In the sober light of mature years I can see plainly that "flagging" (working under an alias) isn't a laudable thing. But there are too many persons who associate flagging with crookedness. The truth is that perhaps the great majority of operators who flagged-they're still doing it; I met two under an alias last winter-did it either because they didn't want their references to go back to an old boss or their home town, or because they were "in bad" with the railroad to which they were applying for a job, or for protective reasons.

I have flagged, but it wasn't because I had pulled anything shady.



I have taken railroad jobs under a flag in order to get by until a press job developed in the course of a few weeks. I didn't want to queer my own name, for I knew I'd leave on short notice. In my callow days I was too honest. I once asked a chief dispatcher if he could use me for four weeks, as I had a press job to go to.

"I should say not!" he bellowed.

Then a hard-boiled old boomer put me wise. I liked railroading, but why work twelve hours a day for fifty dollars per month when I could make twenty-five dollars a week for only nine hours daily?

Then, too, as old-timers know, there were some notorious non-union roads who'd "get" a man if he carried a card. A lightning slinger with a card, applying to them, had to flag. There were many other reasons. . . .

Yes, I have met dishonest ops. For instance, in Bellevue, Ohio, a drunken little boomer once told me: "I sure am glad I flagged out on the Coast, for if I hadn't I'd be in jail now. I swiped ten 'yard-long' tickets, worth eighty-five bucks apiece and peddled them to a scalper who gave me only twenty-five dollars for the whole works."

ONCE I worked in the big relay office of the Santa Fe at La Junta, Colo., where I knew positively that not less than seven of the thirtytwo operators were flagging. All of us were on the spot, Topeka generally "getting" a man in less than three weeks. Naturally we stuck together. When we'd go to the postoffice each one would enter singly and inquire for mail under his right name.

Like all wanderers, I was dead broke the day I went to work; otherwise there'd have been no reason for going to work. That was the boomer code. Off at ten a.m., I asked Jones, our office manager, to "fix me up at the Harvey House." He gave me an unsealed envelope to present at the cashier's desk. This, I rashly supposed, would entitle me to a pie-card, like the ones I'd gotten on other divisions of the Santa Fe on former occasions. So I went into a Harvey House; ate a big steak, combination salad, and the rest of the works. The manager was at the cash register when I tossed the envelope and check on the counter. He said :

"A dollar and forty-five cents."

"All right," I piped, "fix up a card."

"Fix up a *card*?" he demanded, raising his eyebrows. "We don't have any cards."

It was my turn to be surprised. "Isn't that letter of mine an okay for a pie-card?"

"No, sir, it's merely an acknowledgment that you are an employe of the Santa Fe Railway and entitled to employes' rates. We don't have any form of credit here."

"Well, you're starting in today," I said, "for I'm broke."

The manager blustered loudly. Everybody in the restaurant heard him and, like crowds always do, stared at me as though I were a culprit. Angrily I snapped, "Well, what are you going to do about it, hey?" and walked out on him.

Exactly a week later I was fired from the Santa Fe job for scrapping on the wire with a Chicago operator. In the fast action of getting my time, the Harvey House bill never was deducted.

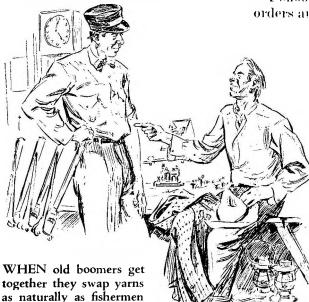
At East Clinton, Ill., the Northwestern's big yard built in 1910, I was discharged at three o'clock in the morning and relieved by the division Superintendent himself. A derailed car in the west end of the yard had smashed a pole, and every wire except the dispatcher's circuit was on the ground just as I came on duty at midnight. From then on the city phone began ringing.

"Let me speak to the operator," they asked. The tenor of all these calls was: "Answer 118" or 224, 311, or come to 93, or "When are you going to clear Boone?" After wasting time on two dozen of them, which greatly delayed my clerical work, I told the yard clerk I'd answer no more phone calls. About two a.m. the clerk said the Super wanted me to answer 118.

"He knows it's grounded." I replied. "What's biting him, ch?"

As a matter of fact, the official was across the Mississippi River in Clinton and knew all about it.

Well, at about three o'clock, a big, well dressed man came to the locked railing door and called out:



talk fish. One stock ex-

perience is "the row I got

into with a conductor"

"Young man, how long have you been telegraphing?"

I had a hunch it was the Super, never having seen him. Even so, his approach was too raw.

"Mister, you're a total stranger to me," I said sweetly. "I don't think it's any of your business how long I've been telegraphing."

"It ain't, hey?" he roared. "You open that door!"

"When you tell me who you are, I'll consider it. We have strict orders not to allow anyone in here."

I pointed to a newly printed slip on the wall, signed by the terminal trainmaster.

My visitor was now frothing. "I'm the Superintendent of this division! Now, you open that door!"

"Why didn't you say so in the first place?"

I expected he'd take a punch at me and I was set for it. He was trembling all over. Instead, he ordered: "Now you get out of here"

"Now, you get out of here!"

I shook my head. "I have a lot of orders and the law says I must make

> a transfer. This thing is going to be done legally or not at all."

His hand was trembling as he read the 31's, the 19's and the pinks.

"You get out of this building at once!" he yelled when I'd affixed my name to the transfer book.

"Let me tell you something, mister," I said. "It is eighteen below zero now. If I go out to wait for the five o'clock shuttle train, I'll freeze my feet and hands. Maybe I'll freeze to death." The road would have a fine damage suit on its hands if that happened, and the newspapers and unions would eat it up. How would you like to see in a Chicago paper tomorrow morning: Telegrapher Freezes to Death; Brutal Official Held!?"

The Super glowered at me. "I've listened to enough of your impudence," he declared. "You may go out in the switchmen's room. But stay away from this office."

COMMEND me to a young boomer operator on a Southern short line. This guy hated the job, the officials and everything connected with them. One night some country boys in the neighborhood of the terminal where he worked got him drunk. When the General Manager arrived about five a.m. this is how the brass pounder had copied a message saying the G. M.'s private car had burned up at the ocean terminal the night before :

"Your damned old doghouse burned up last night. I saved your Oliver tripewriter, but every drop of your hooch was destroyed."

Enraged, the G.M. grabbed the kid by the neck and gave him the bum's rush.

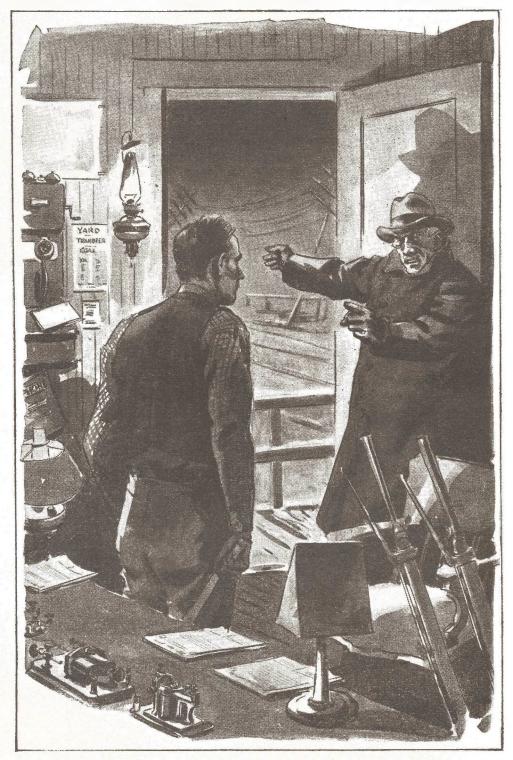
Long ago in April, while I was waiting for a job on the Wabash, I hung around a tower in an Indiana city for a week. The three operators there were not on speaking terms and would not "inherit" each other's boomer guests. So about half an hour before each man came on duty I would beat it, then return and go through the farce of pretending I had spent the other sixteen hours up town. The three men fed me well, but I had to listen to more dirt about the absent ones than I'd ever before heard altogether. If a boomer op didn't have a sense of humor he couldn't make the grade. Of necessity he had to take his troubles lightly and see the funny side of unpleasant situations. Sometimes he had to "carry the banner" all night. If he didn't land the job he'd banked on he often had to walk out of town. I've waited four days to get out of places where crews wouldn't carry me and the bulls wouldn't let me ride.

Many a home guard, weary of humdrum existence, has told me, "If I had the nerve I'd try my hand at booming." Only last winter a Florida op who'd been a dispatcher a year and then, "not desiring to shorten my life by twenty years," as he said, "I returned to the key," wanted to go booming with me.

Actually, he had a child's idea of the Open Road—all roaring fun interspersed with thrilling incidents, just like a movie. I showed him the fallacy of it in these changed times. I pointed out that the yarns he'd listened to from boomers never detailed the misery they'd endured, the turn-downs they'd gotten; of hunger, cold, sleepless nights, exposure in empty boxcars with danger of freezing to death; of being chased by railroad bulls and city police. And I reminded the man that he had fourteen years' seniority.

"Once I met an Erie operator who, like you, wanted to go booming with me," 1 told him. "We fell out in three days. He accused me of enticing him, causing him to lose seven years' rights, and a lot of other things. He was thirty-four, I only twenty-six. No, sir! Never again will I take anyone on the road with me!"

Many years ago a boomer acquaintance of mine blew up on a vard job



"YOU get out of this building at once!"

in Springfield, Ill., in a June heat wave. Given a floater by a policecourt judge, he failed to float. The next day he traded a few boxes of strawberries, salvaged from a farmer's overturned truck, to a saloon for a ten-quart pailful of beer. Still dazed from the previous day's jag and the intense heat, the lightning slinger bewilderedly seated himself on some shady steps near the Alton station and drank the last drop of

beer. Then he fell into a deep sleep. "I had seated myself on the rear steps of the police station," he told me with a wry face. "All they had to do was reach out and grab me by the collar and drag me in. They gave me thirty days, even though I pleaded that the sentence be cut to ten days on the ground that I had saved the wagon a trip."

WHENEVER boomers get together they swap yarns as naturally as fishermen talk fish. One of their stock experiences is the row "I got into with a conductor" (sometimes it's a dispatcher or agent). "An' what do you s'pose he said? 'I'm going to turn you in for this, young man!'

"Go ahead an' do it, big boy! You'll be doin' me a favor. Maybe they'll fire me; then I won't have to wait for my time."

Waiting for his time was the most acute form of punishment the boomer had to endure. They all wanted their time "right now." In earlier years, there was a surprising number of boomers who thought that no matter how they had gummed up things by quitting "in the middle of a letter O" they could "tie up this damned road and stop every train if I want to," if the company didn't pay them instantly. But none of them ever did.



"I WUZ comin' along th' street when I hears your wire," he related, in the stewbum vernacular

One summer, long ago, 1 subbed a week for an Omaha broker operator. Just before noon of a dull day I stepped out to get a cool drink. Dashing back, I heard a roar of guffaws from the office. As I entered, the most disreputable-looking bum I ever saw was chalking up quotations on the big board as deftly and neatly as any slick operator I'd ever seen. He was in his stocking feet, filthy tan socks, his big toes protruding from each one. He hadn't shaved in a week. His face was blackened by soot and grime and there was straw chaff in his beard. Besides that, his clothes were torn and dirty.

To make a long story short, he was an old friend I had known in better days. Arrested on suspicion of being a wanted man in Oklahoma, he'd been locked up at central police station the night before and his shoes had been stolen by a "flopper" turned out at seven a.m. But he wasn't the man police were looking for, so the court turned him loose.

"I wuz comin' along th' street when I hears your wire," he related, having lapsed into stew-bum vernacular. "I had no idea you wuz here. 'I'll try to put the bee on this broker bozo,' I sez to myself. Aus' as I walks in, the sender starts quotin': so I grabs th' chalk an' here I am. Yer sure lookin' swell, kid."

Well, he had made such a hit with the traders that they collected ten dollars for him. One of them sent home for a fine tailor-made suit and a pair of shoes and bought him a new • hat, shirt and tie. Soon the downin-his-luck brass pounder was rigged up better than he'd ever before been in his life. But I knew what the outcome would be. He got drunk that afternoon, peddled his clothing and afraid to face me, sent in a note the next day asking for two bits.

There are all kinds of nuts among boomers. In my travels I've met only a few with anything faintly resembling thrift. One notable case was that of a chap who, perhaps, wouldn't belong in the boomer category, as he was only twenty-two and had traveled little. I met him on the Denver branch of the Rock Island. He was flagging, actually using the surname of a then famous Chicago Cubs pitcher.

Becoming confidential, he handed me a big heavy envelope from an Jowa town attorney. It contained two New York drafts for \$2,500 each, his share of his parents' life insurance policies, the other half going to his younger sister. They had been killed in an automobile accident.

"If you were me what would you do with this money?" he asked.

"If you had had a little more schooling," I said, "you might try to get an education at an Eastern college. But, in lieu of that, inasmuch as you've never been to a big city and are eager to go to one, I'd go to New York if I were you, get a telegraph job, and live there four or five years, and see and hear everything you possibly can-theaters, music, galleries, libraries, museums, fine restaurants. Rub some of the moss off your back. You don't drink and you're quite a tightwad-" he winced and looked foolish—"so there's not much chance of you going to the bad."

A couple of days later I was transferred to Cedar Rapids, Iowa, and never heard of him again.

YOU can't call the boomer "staker" thrifty if he saves up a wad of money only to go on a bender. Dave Killoch, a rover born in New York City, who never drank, was a grand operator, but loved the ponies. One March, in Toronto, he showed me a roll of \$1700.

"I'll double that at Bennings," he boasted. "Watch me!"

We did. He soon left for Washington. Shortly afterward we got a flash that the Bennings skates had cleaned him and Dave was at work for Postal Telegraph in Washington.

Nearly every operator in the States and Canada knew or had met and probably fed old Jack Hurley, once chief operator for a large brokerage house in Philadelphia. When this house failed, around 1905, Jack never recovered from the shock, and became a drifter.

Early one morning in a Texas town where Jack rode in with a freight crew, he tried to put the bee on a dispatcher for breakfast. The DS was irritable and quarrelsome. He promptly threw Jack out of the office. Then he tried to have the poor fellow arrested on the charge of being "a bum operator." The German town marshal—slow, solemn and grave, with a flair for judicial language—looked owlish for a full minute before he vouchsafed:

"Dair iss notting in de penal code off der State off Texas dot says being a bum operator iss a offense ag'in de law. Case dismissed."

Mixed in with humor, the boomer sees many grim things. The scene was at two o'clock one March morning in Patterson, Ga., on the Old Plant System. I handed train orders to Conductor Stutts, a Vermont man also a boomer. As I did so I joshed him about Yankees being air-tight and I said good-night. He gave me a friendly wave as he boarded his caboose. An hour later, the agentoperator at Offerman, a day office two miles east, came on duty and told the dispatcher at Waycross that Stutt's train had run over him and cut the unlucky conductor in two.

Another tragedy comes to mind. Provoked because his relief didn't show up at exactly midnight, a boomer on the Wabash in an Iowa town told me that he decided to dash over to the saloon across the yard where the operator was accustomed to stop and get a beer and tell him to "get a move on."

"As I dodged across the yard, I stumbled over the operator's head," the boomer said. "A switch engine had cut him down, and I found his body two rail-lengths away, his lunch basket still clutched in his hand."

IN A TEXAS town long ago 1 relieved a little French-Canadian operator who'd been unmercifully beaten by the agent. He had doused the oil lamps in the office, and pounded the young chap with a poker. breaking his right leg. Then he had the op locked up. By morning the youth's leg was swollen as big as a nail keg. Citizens of the town, learning of the situation, got one of the railroad's Vice Presidents on longdistance telephone; and a train was held so that the little operator could be taken to the company's hospital.

Scared for a few days, the agent was fairly amiable. Then he began acting in character again. He told me that if my billing and expensing weren't finished by eight o'clock when I was off, I must stay and finish, regardless.

"Not on your life, old boy!" I said firmly. "I'm not like that kid. I work thirteen hours as conscientiously as you do. If the work isn't done by eight it will stand."

The following morning I told a freight conductor of the situation.

"That man'll beat you, too," he warned. "Here, take this." He handed me his .38 special revolver. "Don't shoot him from behind. Plug him between the eyes. You're in Texas now. This town'll give you a medal."

"Nix!" I said. "They'd put both of us in the electric chair for that. I'm not afraid of him."

l assigned my wages in a week or so, to the agent's great exasperation. A couple of years afterwards, in Denver, I met a boomer who told me that a quiet chap, working days as a clerk, had almost killed the agent : and the village had petitioned the railroad saying the clerk had done the community a great favor. Like the fable ending, the company fired the agent and gave the job to the quiet chap.

In my travels I have found that

when I apply to a chief dispatcher for a job, the very first thing he almost invariably asks is, "Where have you been working?" But I found several amusing exceptions. Once on the Wabash, at Montpelier, Ohio, I hit Chief Dispatcher O'Bryan for a job. He looked up quickly from the report he was studying and asked loudly: "How much whiskey can you drink?"

"How much have you got?" I countered, simulating great interest.

"I don't know whether you're a drinking man or not," O'Bryan went on, "but if you go to work for me and want to get drunk, just write me a letter and tell me you want to get off a few days. I'll do my best to relieve you. But don't throw me down like most of them do!"

I went to work and didn't get drunk.

UP IN MAINE one day last spring I heard the most surprising response from an Assistant Superintendent I ever got.

"Can you use a Morse operator?" I asked. I no longer use the adjective "good." I've heard too much kidding in dispatchers' offices about "good operators."

"Now isn't that just fine!" said the elderly, polished Assistant Super. He rubbed his hands and beamed upon me like a nice old preacher. "Yes, indeed, I can use a Morse operator. I suppose you are a very good man. Be seated."

Then he acted like all the others I'd ever met. He dug down into a deep drawer for the old application papers. And then, for the two hundredth time, I was at my old familiar task.

In a Southern city last winter when I hit the chief dispatcher of a

hard-boiled road, which, until Morse men became so scarce, was turning away 24-year-old operators with good references. He looked me over appraisingly.

"I think you're too old a man for us," he said. "How old are you?"

"Eighty-two goin' on eighty-three," I cackled. I knew everything was all off, so I decided to kinda gallyhoot him. The chief's girl clerk tittered.

The chief seemed ill at ease. "Where have you been working?" he asked, curious now that anyone should *dare* get facetious with him.

"It doesn't make any difference, brother," I said. "You're not going to hire me."

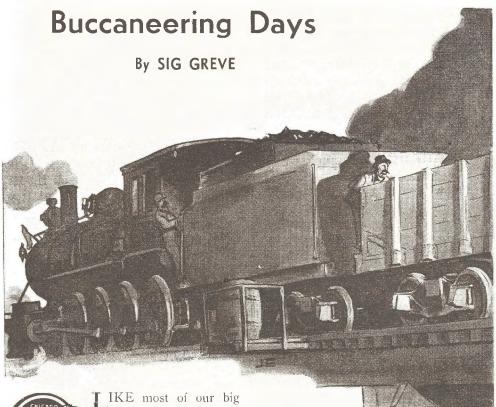
In 1937, out of the telegraph business permanently, as I thought, I threw in with an old boomer lineman in California. We headed for the Rogue River, in southwestern Oregon, to try our hand at prospecting. He and a partner (it's "pardner" out there and that's what it ought to be) had done well in that locality two years before. Charley was the lineman's name. He was a delightful fellow, had been a boss lineman on a score of jobs, and had worked for dozens of railroads, all the telegraph and telephone companies, and for lots of power outfits.

One day while we were eating lunch two fishermen came along. One of them, a plump-faced man, a dozen paces ahead of his companion, looked familiar. I couldn't figure out where I had seen him.

"Havin' any luck, Jack?" Charley asked as he came abreast of us.

"Just fair," he answered. There was the trace of a smile on his face.

That afternoon a neighbor prospector told us that "Jack" was Herbert Hoover, former President of the United States.





LIKE most of our big industries, the railroad business passed through its buccaneering days—a long period, I might add.

which was still in full swing when I started to work.

My first job. in 1891, was checking materials for the Chicago Great Western. The CGW was then extending its line westward from Kansas City to St. Joseph. Mo. Duties required me to stay at a certain farmhouse miles away from nowhere, and this visit jarred loose some of the ideas I had gained from a city upbringing. The only toilet facilities around the place consisted of a primitive bathroom, a cupboard set against the kitchen wall. Inside this stood a wooden tub, which I had to fill with water from the pump, a kettle full at a time, whenever I wanted a bath.

Each morning I was awakened at the ungodly hour of 4:30 a.m., sometimes before the sleepy roosters began to crow. Breakfast was served at five—and what a meal! It was chiefly a bowl of liquid fat in which floated greasy little gobs of bacon. You had to spear the morsels accurately, so as not to waste time.

I did not stay there long. The main office decided I was showing so much diligence in the construction field that I needed a change; and I was assigned to work in St. Paul. Thus in 1892 my feet were planted on the second rung of the ladder that I hoped would eventually lead to fame and fortune. This rung was the Car Service department. Its purpose was to see that cars were shunted when and where they were needed most.

In charge of the Car Service desk was a genial old fellow with a predilection for liquor, so much that he was rarely seen without a bottle. He sipped the red-rye at regular intervals, just enough to insure his being mellow but not actually drunk. During the day drinking seemed



books. In each we kept an identical record of every "foreign" car on our tracks, including their movements in mileage and direction, and of local rolling stock on the CGW and connecting lines. If I remember correctly, there were sixteen pages to a book, all covered with figures painstakingly written in ink.

At the end of the month we totalled the mileage of all foreign cars. The owning company in each case was credited according to the use we made of its equipment. At least, that's what I *thought* we were doing; but I soon discovered all such accounting was a snare and delusion. The first time I took my data into the inner sanctum the agent wore a peculiar look.

"What's this for?"

Without giving me a chance to explain, he crossed out all my carefully penned figures, wrote down new ones, remarked, "There you are," and handed back the book. Now, in those days I was rather timid, but I told the boss he should have made things clear. I was resentful over the way that man fished figures out of the air and I wondered why he hadn't saved us a lot of unnecessary work.

to be his main occupation; but at night, like an owl, he was very much alert.

We, the underlings, took care of twelve

IT SEEMS I had to learn the hard way. On my next promotion, for instance, I found that the more mileage a Car Service agent could "steal" from rival roads, the higher his salary became. Of course, it was difficult to catch a man in the act. To put the matter delicately, you needed a gift for arithmetic to succeed in such a game. This racket has since been dropped from the transportation business. The railroads and other owners of rolling stock got together and agreed to put the use of foreign cars on a *per diem* basis. Every day a car is off its own rails somebody has to pay for it.

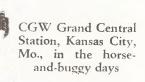
Figures for both freight and passenger cars were juggled under the same system. but most of the finagling was done with freight equipment. An agent might claim that such and such a car had been standing idle a whole month on a siding of his road, when as a matter of fact it could have been traveling most of the time, filled with profitable merchandise. There was no way of checking the use of cars on foreign lines.

It didn't take me long to learn that the Car Service department was not the ideal place for further advancement, so I got a transfer to the Freight Auditor's office. There I was put on the Waybill Revising desk. My duty was to see that the rates indicated on the waybills were correct. If a rate shown was lower than the published tariff, we ordered the agent at the receiving depot to collect the balance. If, on the other hand, the rate shown was higher, we would sit tight and wait for a claim to come along. Sometimes it did.

This job proved a good opportunity for me. In time I became head of the desk and then was given charge of all freight claims except those for damage. By this means I got to know so much about rates that the General Freight department often consulted me.

The CGW rate structure of the 1890s was illogical and contradictory. Alpheus B. Stickney, our President, and his son, Samuel C., our General Manager, agreed that something should be done about it. So they ordered me, with several assistants, to prepare a large book itemizing all ireight and passenger rates on the CGW. After a month of intensive work this task was completed. The volume, about 64 pages, was placed on file with the Interstate Commerce Commission at Washington, and a copy was given to each of our agents and those of connecting lines.

Devious cut rates were hidden in that mass of figures. For instance, the tariff for canned goods was listed under "Peas and Other Canned Goods." Let us say the regular rate quoted by all rival roads for hauling canned goods between Chicago



True Tales of the Rails

and Omaha was 45 cents a hundred weight. We would quote 15 cents (the figure we gave under "Peas, etc.") and thus would grab the competitive business. Our

own local agents could not declare the lower rate, because few knew it was there. It probably would not occur to them to look under "P" for canned goods, but they could call or write our main office for the lowest rate on a certain commodity and we would give it to them.

I recall an amusing incident in connection with the twisted rate situation. One afternoon when I was visiting the traffic manager's office the chief clerk rushed in. He was somewhat excited over a new discovery he had just made.

"Mr. Jones." he cried to the traffic manager, "Sig has been making all kinds of mistakes in the book tariff."

"Scoot!" was the casual reply. "I don't want you to tell me anything I don't know. Sig is likely to do anything."

Our competitors realized we were taking business away from them and suspected we were cutting rates. However, they didn't know how we did it. The answer was to be found in our book tariff, filed with the ICC, but at that time they did not catch on. There were lively fights between rival roads, particularly for traffic on the lines serving the Twin Cities and Chicago. The stronger companies were, of course, battling all the time, but I doubt if they resorted to undercover tactics to the extent that the so-called weaker roads did.

PASSENGER-TICKET scalpers flourished in that era. Usually these functionaries plied their trade near depots of the big cities and sometimes were quite brazen in accosting travelers. As a rule, they had offices in shabby quarters and, like their neighbors, the low-class saloons and employment agencies, catered mostly to transients seeking work in the Northern woods, on farms or on construction

> jobs. You could generally find a motley group of boomers and bums loitering around such places. These men were choice prospects for ticket scalpers. There were also "solid" individuals of both sexes who were not averse to looking for cheap transportation.

> It was not unusual for the "weaker" railroad companies to cooperate with scalpers. Local ticket offices of such lines simply handed out direct to the scalper the supposed onehalf return ticket to sell at his place of business, often going so far as to provide

him with round-trip fares and mileage books. This subject had so many ramifications that it cannot be covered in the present tale. Even at that, it was only a small part of the bag of tricks which some roads used to get revenue.

As every traffic man knows, the trunk lines, even today, obtain the bulk of their income from freight. This situation was even more prevalent on Midwestern roads half a century ago. Nevertheless, it was (and still is) a common practice for carriers to publicize their passenger service in glowing terms in order to build up their freight business by this round-about method. Many fine expresses ran between St. Paul and Chicago, for instance, with relatively few passengers aboard, the theory being that a good show on wheels would win public favor. Thus, what was lost on non-paying "varnish" trains would be more than made up in profitable merchandise hauls.

Railroad agents slyly promoted scalpers' wars. They would confide to newspaper reporters that they were cutting one another's throats for passenger business.

THIS portrait of me was taken when I was Chicago Great Western's Advertising Agent

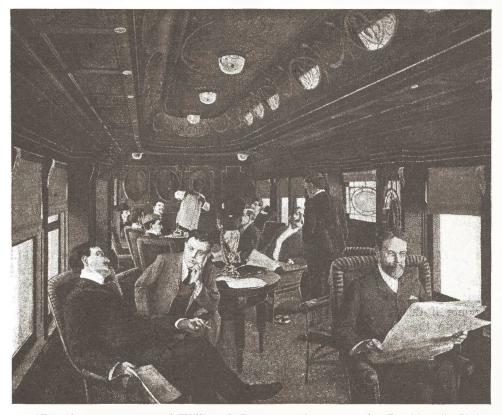


I recall, for example, the time when you could buy a ticket between Chicago and St. Paul for one dollar. Now, fight rumors of any kind quicken a reporter's blood, and the ambitious journalist in St. Paul would make the rounds on Third Street to get all the information he could dig up. More than once the news of such a "war' would make the front pages. The public was eager to read about travel bargains, and this added fuel to the flames. The reporter was well aware that publicity of this kind was valuable to the railroad business, but unless he was shrewd he did not know that the agent who had given him the tip was "working" him and his newspaper.

Through handling tariffs and allied activities I gradually became interested in the broader field of publicity, and in 1900 I switched over to the Advertising department of the Chicago Great Western, which fascinated me not a little.

In those buccaneering days a great deal of advertising was paid for with transportation. That was the common practice, but it didn't stop there. We often took in other commodities in exchange for passenger tickets. Sometimes we boosted passenger business by going on a hunt for such articles as we could use in our offices.

A minor official, for instance, would order a desk from a nearby furniture store. We'll say he chose one priced at twentyfive dollars. Maybe we didn't need a new desk at that time, but we might need it eventually. The dealer would offer the desk in trade for four round trips between St. Paul and Chicago, although the standard rate might have been thirty dollars. After some haggling, the deal would be made; the merchant would be given the



"I SEE where a man named William J. Bryan is going to run for President." Clubcar patrons discuss the latest news of the day as the *Great Western Limited* speeds over the rails between St. Paul, Chicago and Kansas City

True Tales of the Rails

tickets. Maybe he would use them himself; maybe he would turn them over to another member of his family or a friend, or he might even sell them to a scalper.

HANDING out mileage books was a labor of love with me, although at times I thought I worked too hard at it There was hardly a public official or any other prominent citizen along the system who did not believe he was not entitled to free transportation. The subject of legislators asking frequently for passes was much in discussion. President Stickney declared the practice should be curbed

"I suppose these lawmakers not only come to you but go to other departments for free rides as well." he remarked.

"Oh, ves," I agreed.

"And they doublecross us all the time," he added heatedly.

I remember one time a tall, gangling newspaper man from Topeka dropped and asked for a ticket from St. Paul to Kansas City, saying:

"Without it, the only way I can make the trip would be to walk."

"You won't have to do that," I said in a conciliatory tone.

I filled in his name on a piece of paper. The name was Arthur Capper. He is now the United States senior Senator from Kansas. Several times after being elected to this post he dropped into my office to see me. But long before that happened, the ICC down in Washington began looking with a cold fishy eye upon free transportation—except for bona fide railroad employes and dependent members of their families. The time came when this august body ruled that we would have to pay cash for all advertising, for all telephone service, and for various other favors we had hitherto obtained by barter.

The General Manager, Sam Stickney, called me to his office and said that since I had conducted the exchange of tickets for the use of telephones, it might be a good idea for me to take over the phone service altogether. This service had been under the Operating department.

I tackled the problem with an energy



Photo by Adolph Schmidt, Wankegan, Ill

ONLY railroad tunnel in Illinois is said to be this one, 2000 feet long, on the CGW two miles east of Rice station, Ill., near Dubuque, Iowa. At the left you see the ventilator powerhouse

that made me one of the most unpopular brass collars on the CGW. It seemed that everybody, from office boys to the heads of departments, every helper in the roundhouses, yards and elsewhere, had a telephone for his personal use. What did it matter if a phone cost a ticket? This system helped to fill seats on passenger trains that otherwise would have been empty. Fair exchange was no robbery. But paying cash for something changed the tune. I went to work ruthlessly, ripping out one phone after another. The wails of protest continued until my office was hooked up to only a few places.

Getting back to advertising, I will never forget an interview 1 had with the Big Chief. A. B. Stickney had been a pioneer

Railroad Magazine

railroad builder. He wore a rather stern mask over his good-natured interior. When I entered the office at his request. Stickney said brusquely that he didn't think we were getting enough returns from our advertising. One of his friends had admitted he didn't know the CGW ran into Omaha.

"Probably my friend, like myself," Mr. Stickney said, "does not read ads."

I was a bit ruffled, and I countered. "Most likely." Then I asked: "You never read ads? Haven't you ever seen anything about Peruna?"

Mr. Stickney got quite angry at this. Raising his long and dignified frame from his chair, he ordered : "Young man, you'd better go upstairs. I'll call you when I need you."

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I was summoned back to his office a few days later and the question of advertising was reopened. Miffed at his attitude, I retorted: "If you want me to resign, all right."

"No," he said, "that's not the idea. I want to write an ad mysell."

Later, he proudly showed me a proof of an advertisement he had written. It told of the progress of the Chicago Great Western from its beginning. Set in solid type, except for the heading, it was four columns wide and ten inches deep. As a display it was very poor. I glanced at it and looked up quizzically.

"You don't seem to think much of this?" he remarked.

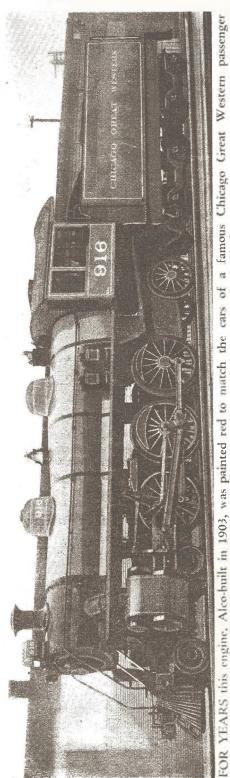
"If it were somebody else's work, would you read it?" I parried, in my best professional tone.

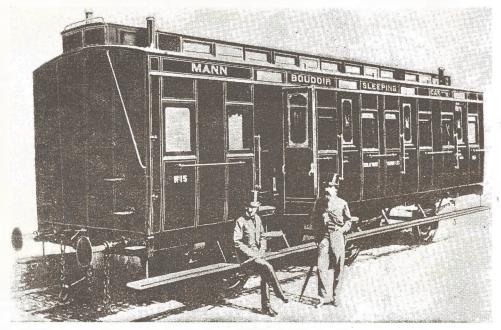
Mr. Stickney became furious. He tore up the sheet of paper and should:

"Get the hell out of here!"

ILLUSTRATING the fact that President Stickney was a fast thinker as well as a straight one, Pill tell this story:

During its early days the CGW contracted for the use of Mann boudoir cars instead of Pullman sleepers. These cars were built on European lines. There were four berths in a room, two lower and two upper; but ran the width of the car—not





SAID the CM&StP President to the CGW President: "I don't believe you could get anyone except sporting men to use these cars." He referred to a Belgian-built type of sleeper introduced to America in 1883 by Col. W. D. Mann, newspaper publisher of Mobile, Ala. The berths were laid crosswise—unlike the Pullman lengthwise design

the length, as do Pullman sleepers. A corridor extended on the side from one end of the car to the other.

On one of the first trips of this equipment Mr. Stickney invited a fellow railroad President, Mr. Early of the Chicago. Milwaukee & St. Paul, to ride with him from Chicago to St. Paul and enjoy the novelty. When these men entered the car, the first thing Mr. Early noticed was the long corridor, with doors to these little rooms, and there were locks on every door.

"Well, what do you think of them. Early?" the CGW executive asked.

The reply was: "Well, Stickney, I don't believe you could get anyone except sporty men to use these cars."

Quick as a flash Stickney said: "Give me the sports and you can have the rest."

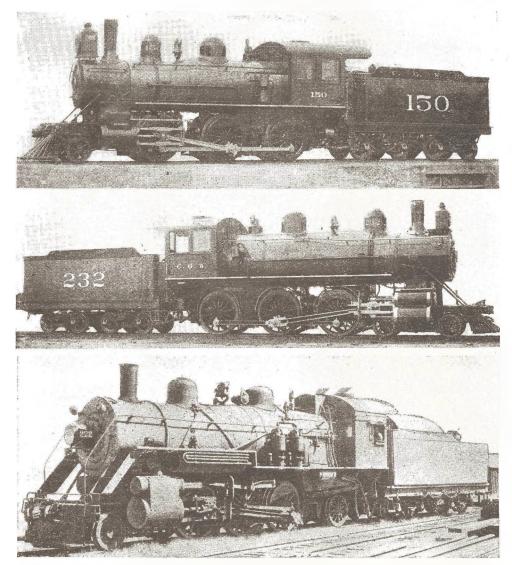
The Stickneys were a fine family to work for. Sam, the G.M., had the reputation of being a stern man and hard to approach; but I didn't find him that way. One day in his office he told me: "I believe the Great Western pays a million dollars a year because people are not allowed to see me. Many of these folks probably could offer new ideas to which I should have access."

On another occasion he informed me there was going to be a boilermakers' strike at Oelwein, Iowa, where our main repair shops were located, and asked me to place ads in all daily papers in the leading cities along the system. I took up the matter with an advertising agency in New York City. Back came the answer: "Understand perfectly. Will advertise quietly."

I laid the wire on Mr. Stickney's desk and remarked: "Did you ever hear of such a danned fool?"

After reading the message, he grinned and said: "Did you ever think that if there weren't so many damned fools on the roads, neither you nor I would have a job?"

During the boilermakers' strike a man



OLD CGW POWER. Nos. 150 and 232 were scrapped years ago; but the other engine, No. 272, Class F-7a, built by Alco in 1902, is still on the active roster

named Walter P. Chrysler was in charge of the shops at Oelwein. Mr. Chrysler, as most people know, later made a name for himself as a manufacturer of automobiles.

In those days the railroads spent lavishly for advertising. The agent of one company put out several thousand copies of a booklet displaying the attractions of a national park along its route, at a cost exceeding \$5000. When bundles of the literature were delivered, a Passenger department official asked: "Who in the world ordered these?"

- "Oh, I did," replied the agent.
- "Who picked out the color?"
- "Mr. Smith."

The official grunted and had all the bundles thrown away. Another order for several thousand dollars' worth, with a different color, was sent to the printing house. A ridiculous situation of this kind would not be tolerated today.

True Tales of the Rails

O^{NE} time in about 1905, Harry Lewis, business manager of the *St. Paul Daily News*, both now defunct, prevailed on me to put a display ad for the CGW in a special edition of his journal. He sold me the space by showing me proofs printed on a nice glossy paper. But when the special edi-

tion came out, our ad appeared on the usual woodpulp stock. Much disappointed, I called up Lewis and said our company wouldn't pay for the ad; we had been taken in.

"You will pay," he said suavely. "I didn't promise to print your copy on the slick paper I showed you."

I took the special edition into Sam Stickney's office, laid it on his desk and growled, "I've been stung!"

Looking it over, the G.M. commented dryly: "Undoubtedly you will be stung many more times in the future, but don't make it too expensive."

As I never again bought an ad in a special edition, Lewis afterward claimed he had saved the Chicago Great Western five million dollars.

And now there comes to mind the case of an artist engaged to paint a picture of scenery along our line. The canvas was a fine bit of work, in my judgment, and the artist was handed a check for \$3000. But one official, who had been around the galleries, was not satisfied. He decided that a certain tree along the river's right bank should have been on the left, or was it that a moose was browsing with his head in the wrong direction?

Whatever the objection was, the painter was instructed to make another trial. He produced a second canvas and was given another \$3000 check. Still, in the opinion of the CGW official, the painting wasn't quite right. While the artist's pride may have been hurt, the prospect of a third \$3000 check inspired him to work on the same assignment a third time. The Accounting department was getting nervous and hinted that the third version of this painting had better be okay. So the final effort was accepted and paid

for---at a total cost of \$9000 for the one scene!

Advertising a g e n t s have a common understanding of one another's problems. I remember asking the representative of a rival road: "How long are you going to keep running those ads-forever?"

"I guess I will," he laughed. "If I keep running them nobody will say anything, but if I make a c h a n g e every brass collar will be taking a shot at them."

As is the case today, railroad advertising men were expected to get free publicity in newspapers

along the line. Sometimes these "news" items are faked, but the newspapers print them anyhow if they are unusual and are good "human-interest stuff." However, here is a true story that so far as I know, has never before appeared in print:

Can you picture a group of passengers leaving a train and marching barefooted to a hotel? No? Well, this even actually happened.

In those days it was the custom for Chicago Great Western train No. 1 to divide at Oelwein: probably the train still divides there. Two sleepers continued west to Kansas City, while two turned northward to Minnesota. On the occasion I have in mind, a porter followed his usual night routine, picking up all the shoes that had been left in the

ALPHEUS B. STICKNEY served for years as CGW President, while his son, Samuel C. (shown in oval) was General Manager



aisle of the St. Paul car and going into the Pullman ahead to polish them. Two other porters likewise were engaged at shining shoes in the Pullman ahead. What happened, I never did know, except that the first porter evidently lost his bearings and wound up in the wrong car, with his arms full of newly-polished footwear. The train was divided at Oelwein, as usual; and when the passengers in the St. Paul car awoke the following morning, their shoes were many miles away!

The conductor, finding this novel situation beyond his capacity to handle, wired headquarters for instructions. Our Passenger department was equal to the occasion. It wired back that the passengers bound for St. Paul would have to get off the train minus their shoes and walk to the nearest hotel, a block from the depot. This they did. Some pilgrims uttered "Ouch!" a few times, but most of them went merrily along. Luckily, it was not the zero season, or the trip could have been rather painful.

When the group reached the hotel lobby they found an efficient passenger agent awaiting them with a yardstick. He measured each foot and soon returned with a new pair of shoes for everyone involved. The footwear was given with the compliments of the CGW. I don't recall whether or not the passengers got back their old shoes, or what happened to the porter, innocent cause of the trouble.

OF COURSE, it was not only our company that had unusual experiences. One night it was raining cats and dogs. A local freight on some other road was ordered to pick up a string of empties at Anoka. Minn. The crew found them on a siding, picked them up, and were just getting into Elk when a man rushed into the caboose. He was the head brakeman, and was he excited!

"Here is something for the book!" he cried. "We've picked up three quarters of a car of coal with those empties. I guess that looks like thirty days' layoff for us."

The crew got into a huddle and agreed

there was only one way to solve the problem. They decided to stop the train at Elk River and dump the coal into the water there. This they did in a hurry, under the cover of darkness. When they reached St. Cloud they had nothing in tow except the empties. The rest of this story would be mighty interesting, but I do not know the wind-up. Maybe some reader can tell us.

Another incident has to do with an engine and caboose being ordered to take a siding until a passenger train went past. They got onto the siding and the crew had the switch fixed so the express could pass safely. But the men fell asleep, and when they woke up none of them could tell what had happened. Had the passenger got by? They didn't know, so they decided to hide their time.

After a while the agent at the nearest station began to worry over what had happened to the locomotive and caboose. A second engine was sent out, and her crew told the patient wayfarers that the passenger train they were supposed to wait for was now well on its way toward Winnipeg! The crew of the original engine and crummy lost no more time in proceeding to their destination.

The nearest I came to never getting older, so far as accidents go, was the night I was returning from Chicago to my home in St. Paul and the train had a mishap.

The CGW and the Milwaukee Road cross each other's tracks at several places. One of these crossings was at New Hampton, Iowa. There the trouble occurred. I had taken a lower berth in a sleepingcar. Another CGW official occupied the berth above me. I was slumbering peacefully, but was awakened by the man in the upper.

"Get up!" he yelled. "We've hit something!"

"I'm all right," I grumbled sleepily. "Nothing's happened to me."

But he kept insisting; so I got up and dressed. The train had stopped. My friend and I stepped out to look around.

True Tales of the Rails

The night was still dark, but we soon learned what a narrow escape we'd had. It seemed that our engineer, not much more awake than myself, had failed to see a train of empty freight cars standing on the Milwaukee line right at the crossing, and had plowed through it, hurling pieces of broken couplings in all directions. One car had been thrown into a field at the left, another into a field at the right. The rest of the Milwaukee drag freight was intact, luckily, still on the track. The only damage to our train was the minor breaking and bending of some locomotive trimmings.

ONE day, before the ICC clamped down on free transportation, a man approached me with an odd proposition. He asked: "How would you like to give your wife five hundred dollars' worth of diamonds?"

I knew there was a catch to it, of course. What the fellow wanted was to barter the diamonds for an equivalent value in railroad fares. I was not opposed to making any reasonable dicker that would bring business for the company, but this personal angle was different. As advertising agent for the CGW at that time I was paid \$500 a month. I figured that my job should last for about twenty years, at a total salary of \$120,000, and explained the matter to him.

"Why should I risk so much money for a mere five hundred?" I challenged. "Give me \$120,000 and I'll talk business with you."

The man with the diamonds walked away, disgruntled. But my railroad job was not so permanent as I had thought. Despite the efforts of my co-workers and myself, the Chicago Great Western became bankrupt in 1909 and had to be managed by a receiver. The company's main offices were shifted from St. Paul to Chicago. Most of the brass collars who moved to the new address were sent back to St. Paul as soon as they had put their departments in working order. When I was invited to go to the Windy City and work in the Passenger department as advertising manager, I agreed to go, but only on a five-year contract. No such contract was tendered. So I quit the iron trail, with a pang of regret, and have since opened an advertising agency myself.

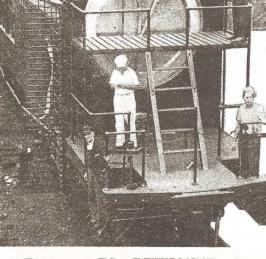
Time rolls on. I did pretty well in my new venture, occasionally handling some railroad accounts. Today, in my eighties, I am still in business. I believe I am St. Paul's oldest former rail official. Many a time I look back with a chuckle to the free and easy buccaneering days, the days before carriers were standardized and regulated the way they are now. We have come a long way since then. We can never go back.

> HORSE-CARS are dwarfed out of proportion in this old drawing of the CGW Grand Central Passenger Station, Chicago

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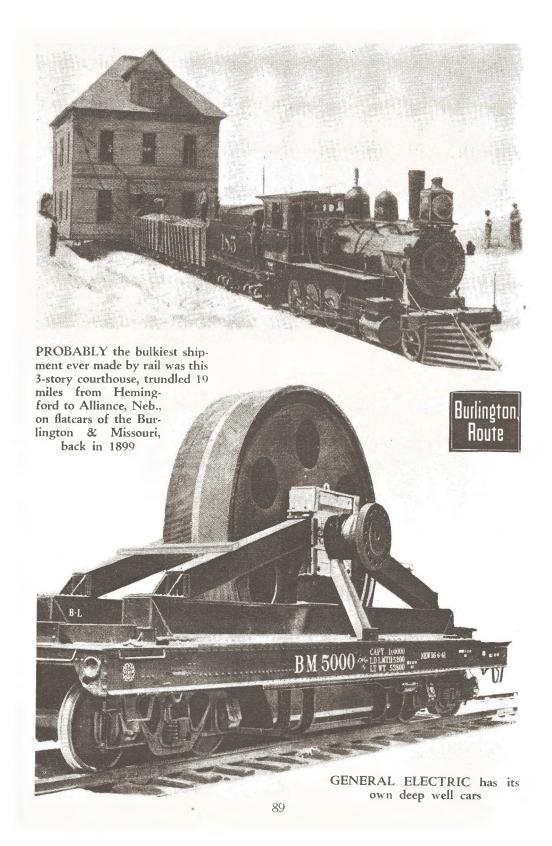
Oversize Shipments

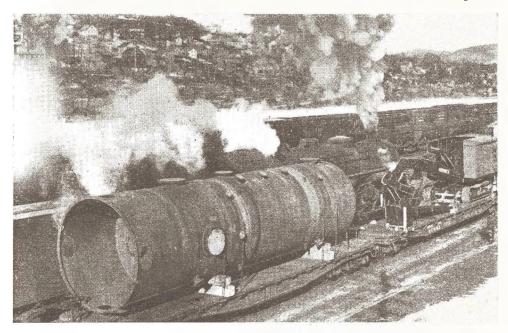
S VITAL to the safe transit of today's freight trains as the operating timetable is a ponderous volume which few railroaders ever get to see. Called Railway Clearances and Car Dimensions, it is the particular property of railway traffic departments which use it as a key to special routings for oversize shipments. On its tables appear all routes between major terminals, together with minimum clearances at threeinch intervals from rail-head to maximum loading height. War time transportation has made this publication the bible of the railroad industry

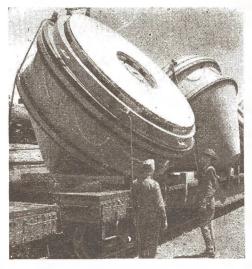




TO DETERMINE clearances, New York Central uses "porcupine" car. Above: Recently enlarged tunnel at Peekskill, N. Y. 88







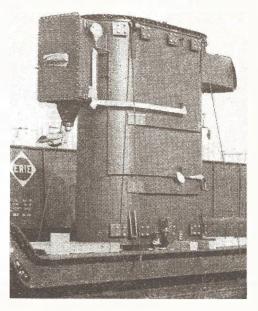
SINGING tops? No, the tilted loads above are buoys for submarine nets, awaiting marine transfer at an Erie terminal

TRANSFORMERS to jolt the Axis out of the war. New Haven depressed-centercars are used to such loads. They regularly carry replacement units over electrified trackage of the home road



ERIE prides itself on being the nation's heavy duty freight road. Originally built to 6-foot gage, its clearances are unusually high and wide.

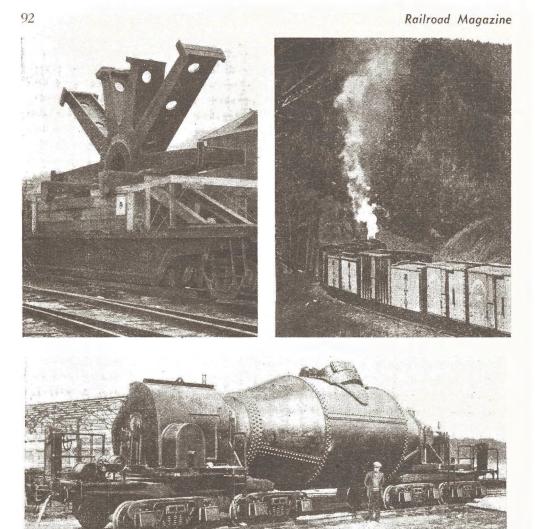
Above: Fractionating towers, invasion barges and heating units present no problem for this carrier



Oversize Shipments

All photos on this spread from Erie Railroad

BELOW: Close-up of the heating units shown in the yard scene at left. Set in flatcar wells, they stand 17 feet 4 inches above the rails





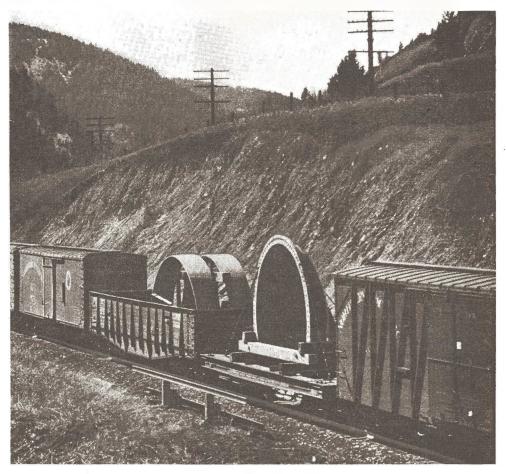
PADDLE-shaped structural steel unit (top of page) was delivered to Parker Dam, at Earp, Calif.. by the Santa Fe

HOT-metal car (center) used in the Pittsburgh area constitutes an oversize shipment in itself



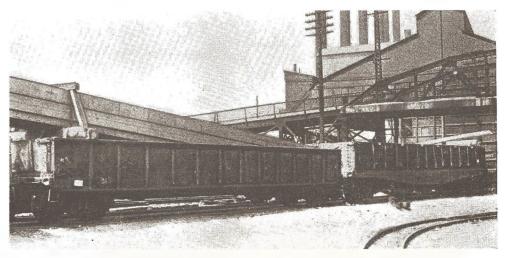
BALTIMORE & OHIO uses a gondola car as an idler, to protect 80-foot H beams

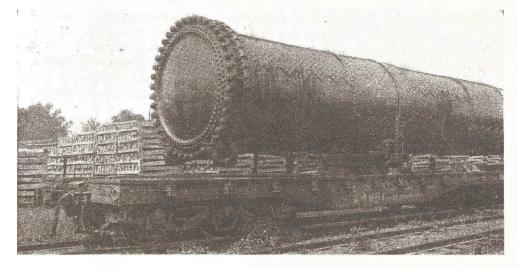


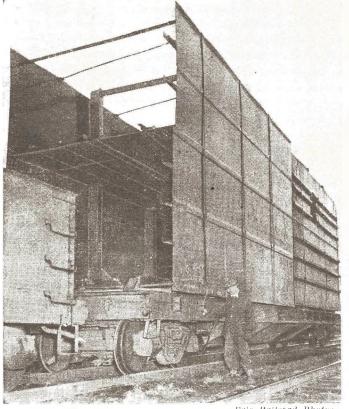




BOUND for a hydro-electric project, oversize shipments thread Rocky Canyon toward Northern Pacific's Bozeman Pass. As a rule such consignments are placed near the engine, where they are under constant surveyance







ABOVE: One of the toughest single shipments on record, this 154-foot Creosote cylinder was handled by the Louisville & Nashville out of Birmingham, Ala. Known as a "quadruple" load, its ends required bolstering on two flatcars separated by as many idlers

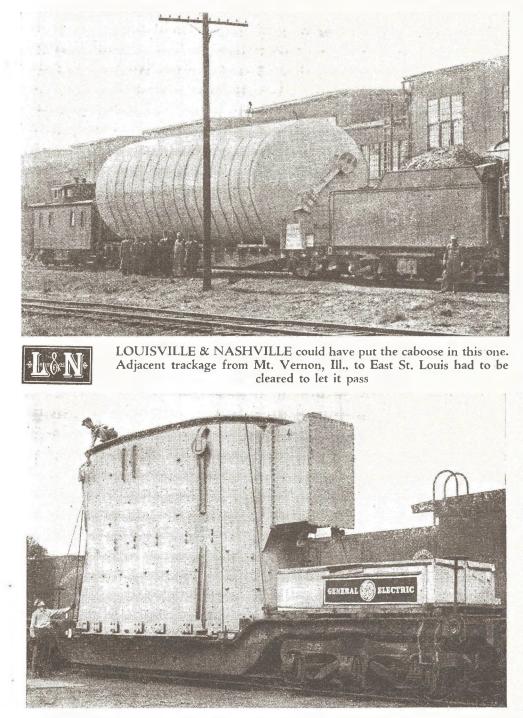
Erie Railroad Photos

MORE special consignments for the Erie. Above: prefabricated ship part, 17 feet high and 11 feet 9 inches wide, passes through an Ohio garden. Right: 123-foot oil "cracker" weighing 200,000 pounds constituted the heaviest load ever handled by the system



NEW YORK CENTRAL is proud of the part it played in transporting the world's largest telescope lens from Corning, N. Y., to the Mount Palomar Observatory, in Southern California, back in 1939

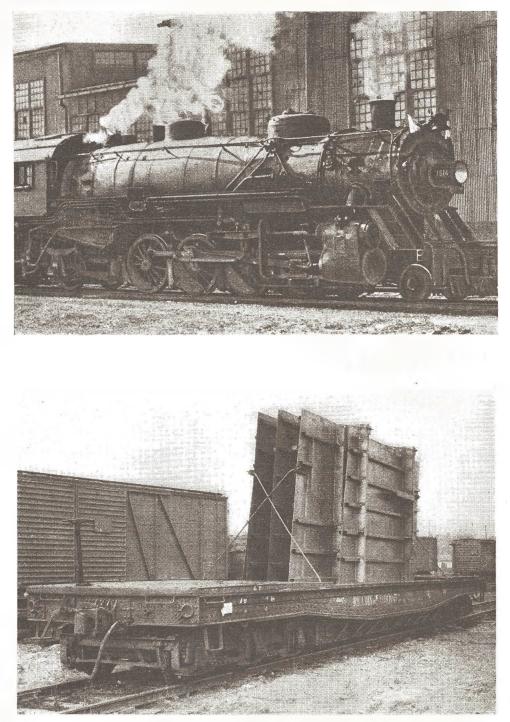






ANOTHER General Electric load. Standing 11 feet wide by 16 feet 7 inches high, it travelled safely from Pittsfield, Mass., to Covington, Wash., recently

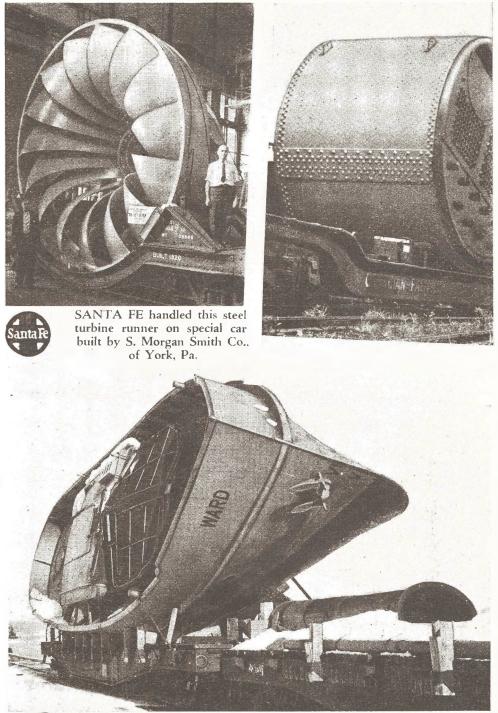
Oversize Shipments





PREFABRICATED ship parts ready to roll out of Bethlehem, Pa., over the Reading Lines. The bracing of unconventional loads is a science in itself, requiring the services of specially trained carpenters and mechanics. Most difficult to handle are those shipments which must be tilted to insure clearance

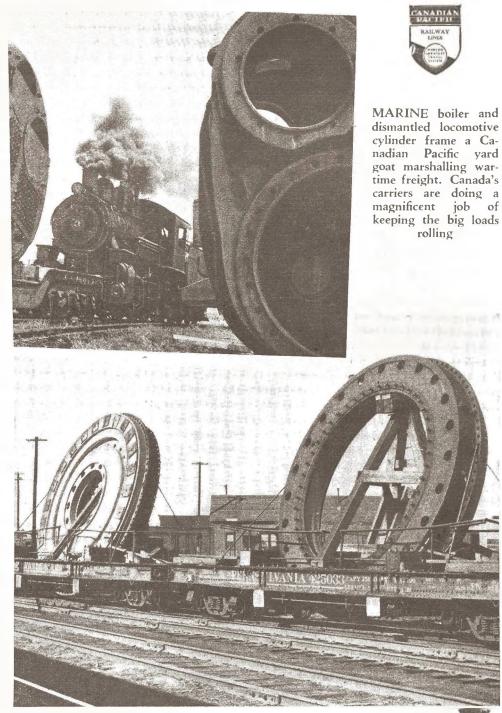
Railroad Magazine





FORTY-ton tug boat with fifteen-foot beam cleared Canadian National bridges with one inch to spare

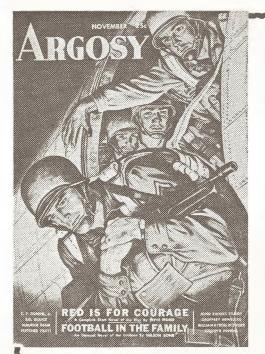
Oversize Shipments



PENNSYLVANIA tilted these power-plant parts to get them over its line, enroute from Eddystone, Pa., to Boulder Dam, Nevada



99



Book-Length Novel

Red Is for Courage by STEVE FISHER

Novelettes Invasion, Limited by C. P. DONNEL, JR.

War Song of the Highlands by PHILIP KETCHUM

Serials

Football in the Family by NELSON S. BOND

Red Sun Over Bengal by KENNETH PERKINS

Hell Afloat by EUSTACE L. ADAMS

TIME TO RELAX

For extra hours of reading pleasure for the entire family, turn to ARGOSY. A few of the stories of adventure and romance that you will want to read in the big November issue are:

Short Stories

Background for Sound by JOHN RHODES STURDY

Honorable Rat by GEOFFREY HEWELCKE

Tomorrow Morning's Final by MAURICE BEAM

Coming in on a Prayer by DUANE YARNELL

Reunion on the Riviera by RUSSEL GORDON CARTER

> Track Clear! by CHARLES W. TYLER

Bad Trouble at Smoky Bowl by WILLIAM BYRON MOWERY

> Hot Wires by BILL GULICK

November ARCOSY on sale October 8



FRENCH-CANADIAN children shriek with laughter when the rotary comes down the street in Levis, Que. This is one of the most tortuous trolley lines in the Maple Leaf Dominion

Electric Lines

Canadian Trolley Oddities By ANDREW MERRILEES

WERY railfan has heard of freak locomotives, but relatively few are familiar with odd streetcars or unusual uses to which trolleys have been put. Up here in Canada we have many such cases.

Suppose we begin with Montreal's prison cars. These were two grim-looking, all-steel, jet-black vehicles which brought prisoners from the local jail to the courthouse and took them back. Both bore the crest of the City of Montreal and the word *Prison* on each side. Almost every day at noon, one of these "black Marias" could be seen waiting on a special track outside the courthouse on the Champ de Mars while the court was in session. After a time, guards and their glum-faced captives

Conducted By STEPHEN MAGUIRE

would emerge from a private door and enter the car for the journey up St. Lawrence Boulevard to Bordeaux Prison, a huge stone structure shaped like an asterisk. These cars had well-upholstered scats for the guards but hard wooden ones for the "passengers." They were replaced in 1927 by rubber-tired vans.

Montreal, like some cities in the U.S.A., also had funeral cars. These had special sliding panels which could be opened from the outside to remove the casket. Trolley hearses, like prison cars, were painted a somber black. For years an electric hearse was used for almost every interment in Hawthorne Vale Cemetery, which was then well outside the city limits. You see, in those days highways were not well paved, and few people wanted to ride on them, even to funerals.

Both Ottawa and Quebec had mail cars at some time during their period of operations. However, these were not the ordinary mail cars such as used to run along



Photos on this page from Robert R. Brown, 700 St. Catherine St., W., Montreal, Que. WITH a canvas shield protecting the flamboyant legend on her splash board, Quebec District Ry. sweeper No. 5 clears the way for--

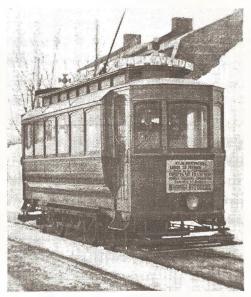
the streets of many cities in the States around the turn of the century. For the Ottawa cars, taking advantage of their mail contract, had the words *Royal Mail* painted on their sides; and under Canadian law any vehicle so lettered had the right of way over others. The Ottawa Electric found this privilege very useful. In fact, the company painted *Royal Mail* even on equipment that was not used for mail delivery, in order to take full advantage of its position.

Until very recently a trolley car bore the British royal coat-of-arms and, the names *Duke and Duchess of Cornwall and York*. Any passenger inquiring the reason for these embellishments would be told proudly that he was riding in the very same car that the Duke and Duchess of Cornwall and York (later King George V and Queen Mary) had occupied on their official visit to the Dominion in 1901.

This may have been the only time that visiting royalty used a Canadian streetcar, and for that reason the names and crest were carried on the vehicle until the day it was burned at the Rockcliffe carhouse fire in 1937. The car was fitted up with upholstered easy chairs and potted palms for the royal occupancy, but the luxuries were removed later and regulation seats were installed for public service.

Ottawa also had some other curious double-truck cars which were made of two single-truck car bodies spliced together on one underframe. This trick was imitated in some other Canadian cities, but not with marked success. And now, in considering Canadian car curiosities, we might mention two lines belonging to the Roman Catholic Church.

Deep in the French-populated eastern side of Montreal is a large tract of church-



-car No. 38, after a big blizzard in 1898

owned land on which is situated St. Jean de Dieu Hospital, the largest insane asylum in Quebec Province. The sisters who run this institution aim to maintain themselves and the hospital as much as possible on revenue derived from the produce grown on their many acres of farm land. This area is, to all intents and purposes, a world apart. It is surrounded by a high iron fence. English is rarely spoken there.

Until a few years ago, Sunday visitors to St. Jean de Dieu could see one of the few church-owned railways in North America. This line traversed the entire length of the grounds. It was used for

Electric Lines

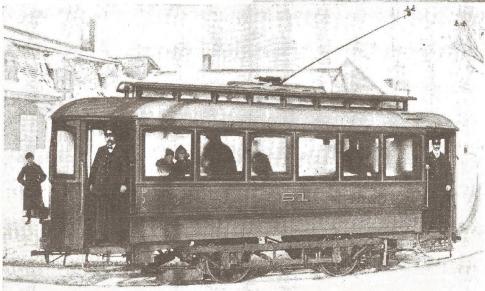
hauling steam railway coal cars from the rail connections on the river front to the hospital boiler house, as well as farm produce from field to barn. St. Jean de Dieu also still has an extensive narrow-gage electric railway running through the wide passageways in its buildings, the electric locomotives of which bear the names of various saints. For many years this railway has carried passengers, dishes, laundry, and other loads.

Another outdoor asylum railway is operated at Villa Mastai, a few miles east of Quebec, in connection with a churchowned institution of that name situated near Montmorency Falls.

Turn to a third Canadian electric railway with a religious background. Although not owned by the church, this pike probably has the distinction of being the only such line blessed by a Roman Catholic cardinal. Upon its opening from Quebec to the shrine at Ste. Anne de Beaupre on August 15th, 1889, the Quebec, Montmorency & Charlevoix Railway and all

RIGHT: Here's the kind of snow that justifies operation of rotary plows on the Levis County Ry. Car 103 is enroute to St. Romuald d'Etchemin





FROST on the windows and squealing flanges on the frame. Quebec and Levis lines are mainly single-tracked with independent return routes

its belongings were blessed by the Cardinal of Quebec. This carrier is now operated by the Quebec Railway, Light & Power Company and does a big summertourist business.

Wow many readers have visited Ottawa and observed that not one streetcar in the Canadian capital carries the digit 7 in its number? If you did so, and asked Ottawa citizens the reason for this, they probably told you that they hadn't even noticed it themselves.

The truth is, there has never been at any time in Ottawa a streetcar bearing the number 7. Why? Because Thomas Ahearn, owner and projector of the Ottawa Electric Railway, just didn't like that number and so he forbade it to be used on his cars. When Ahearn & Soper of Ottawa electrified Quebec street railways in 1897 they carried on the superstitious practice of omitting sevens, and for a time it was perpetuated in Quebec as well as in the capital. The custom has been followed in Ottawa up to this day.

Mr. Ahearn also had a foible about changing the numbers of streetcars that got into accidents. Thus, when car 38 killed two children about the turn of the century its number was promptly changed to 58, and so on.

Now a few words about Toronto, the capital of Ontario, our richest province. It is not generally known that the streetcar system of this city is not standard gage but the outlandish width of 4 feet 107% inches. To discover the reason for this we go back to the year 1861. Toronto at that time was known as "Muddy York" on account of the poor condition of its unpaved streets. Huge ruts ran along the middle of each thoroughfare, and wagons had to follow these ruts or run the risk of getting hopelessly mired.

With this in mind. Alexander Easton, projector of the Toronto horsecar lines, strongly advised against the use of standard gage (4 feet $8\frac{1}{2}$ inches). Instead, he recommended 4 feet $10\frac{7}{8}$ inches—the distance between the wheels of an English cart. This gage, he argued, would not oblige wagon traffic to run with one wheel in a rut and the other in the mud, eventually forming a new rut just inside one of the rails. City officials foolishly agreed, and the line was laid to this gage, providing a permanent pair of iron-railed



NO WORK today! Loud were the laments of French-Canadian operators and shop workers when the Haute-Ville car barn of the Levis County burned to the ground in February, 1921

Electric Lines

ruts for the use of vehicular traffic as well as for the railway.

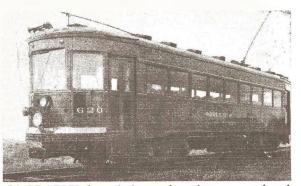
As you might have expected, complications arose. In course of time suburban branches of the same freak gage were built from Toronto to Mimico and Scarboro, while a standardgage interurban linked Toronto with Newmarket and Sutton. In 1904 all three of these suburban and interurban lines came under the same management and one of the odd-gage

lines was converted to standard. To transfer cars from one division to another the Toronto & York Radial Railway had to get permission from the Toronto Railway Company, owners of the city transit system, to run its cars in the dead of night, slowly along the grooves of the freak-gage city track for five or six miles to the terminus of the other division.

In 1920, when the Hydro Electric Power Commission of Ontario took over operation of the three T&YR divisions, it changed the remaining odd-gage Port Credit line to standard. Seven years later the City of Toronto acquired these lines and at once began changing them back to the old peculiar gage, in order to make them conform to the municipal system. This meant no more freight revenue from hauling steam-railway freight cars over the lines—except for about three miles in Aurora, where a three-rail arrangement was set up and a standard-gage freight motor was stationed to haul cars to and from industries and a nearby steam railway interchange. The Metropolitan Division was converted from standard to freak gage at a cost of \$28,000-only to be abandoned less than two years later!

The foregoing is a record of reversing the usually accepted procedure of standardization. But now we come to something that happened the right way.

The rule of the road in Saint John, New Brunswick, as well as in Vancouver and Victoria, B. C., was changed from left to right in 1921. This necessitated rebuild-



PROBABLY the only interurban that ever replaced a bus line is the Montreal & Southern Counties, a subsidiary of Canadian National

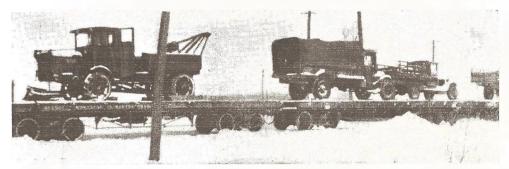
ing the door arrangements of all streetcars and interurbans in those cities. The cars in question originally had been built for "keeping to the left," in accordance with the English practice.

FOR those with a bent for history, here are a few facts about the start of "juice" railways in Canada. The country's first electric car ran in Windsor. Ont.—opposite Detroit, Mich.—in October, 1886. This car operated under the Van Depoele system, a system which was introduced in St. Catharines, Ont., in September, 1887, when several similar cars began operation there.

These primitive cars were only 16 feet long. Single motors were located where the front vestibule would otherwise be, and were connected by chain and sprocket to the wheels and axles. The cars frequently went off the track, deep into the mud. All the male passengers thereupon would have to get out and lift the car back on the track. The men also had to get out and lift a car off the track to let a fire engine pass, later shoving it back on the track again.

Since these cars could not be reversed, turntables were provided at each end of the line to turn the cars. Another reason for this practice was that the trolley connections were not removable from the wire, as they are today. In winter these cars, like most horse and early electric cars in Canadian cities, were provided with pea straw on the floor to keep the

Railroad Magazine

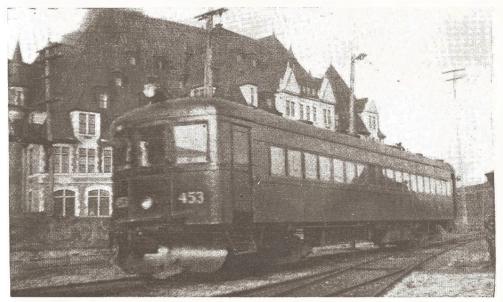


WHEN busses, trucks and highway plows stalled in snowdrifts between St. Cesaire and Abbotsford a few winters back, M&SC flatcars hauled them into Montreal

passengers' feet warm. Needless to say, most of the cars were open-vestibuled. Both motormen and conductor were exposed to the elements. It was nothing to see one of these light four-wheelers jerked off the rails and parked beside a tavern while passengers and crew got liquid fortification against the cold Canadian winter.

Religious fervor of the Ontario pioneers was shown by the fact that not until 1895 did traction companies in Ontario secure the right to operate on Sunday. Until then the trolley car was probably too new and enjoyable a thing to find a place among the approved sabbath activities for young people of the Victorian Era. Even today some Ontario companies adhere to ancient laws that prohibit them from ringing gongs, blowing whistles, or making other unnecessary noise while passing churches during service. In one case, as condition of the sale of a piece of church property to the railway it was provided that the company should agree to coast its cars through the property past the edifice at certain hours on Sunday.

Until about 1925, both single and double-truck open motor cars were a common sight in Canadian cities and towns, operating either singly or hauling open trailers.



HEAVY steel interurban 453 wheels out of the Quebec Railway, Light & Power Company's St. Paul Terminal

Electric Lines

During this year the Ontario Railway and municipal boards prohibited the use of open cars in regular service, and they began to disappear rapidly thereafter. Today not a single open car is left in service in the whole Dominion. The last line to use them was the Niagara Gorge Route, operating a popular scenic line in the vicinity of Niagara Falls. A rock slide interrupted this service in 1935, and it was not resumed.

HOW many rail lines do you know of that have supplanted bus companies? Canada has at least one, the Montreal & Southern Counties Railway. This is an subsidiary of the Canadian electric National. Prior to 1909 a rather primitive bus service operated between Montreal and the town of St. Lambert, on the opposite shore of the St. Lawrence River. The busses were solid-tired, shaky vehicles which did not provide comfortable service. In addition, they aroused the wrath of Montreal's City Council for "unnecessarily battering the pavement and despoiling it with dropping oil." Permission was given for an electric railway to supplant the busses, using the Victoria Bridge to cross the St. Lawrence River into St. Lambert. This line is running today-perhaps the only interurban that ever replaced bus service! But instead of stopping at St. Lambert, the M&CS continues fifty miles beyond, to Granby, Que.

Several winters ago this same railway demonstrated once again its superiority over bus competition. It hauled several stalled busses, trucks and highway plows into Montreal on M&SC flat cars, having picked them up where they had stalled in snowdrifts on the highway between St. Cesaire and Abbotsford. Fortunately for the busses, the interurban line paralleled the highway at this point. Winter in old Quebec is severe, and most people are wise enough to use rail transportation.

Various flimsy pretexts doomed most of Canada's interurban railways, until today there are a bare half-dozen left. These six, we confidently expect, will continue running at least "for the duration."



POST-WAR Dreaming: That's the title of a recent editorial in the Los Angeles Railway *Weekly Topics*, which so aptly shows their present predicament growing out of a labor shortage, and is such interesting reading that we cannot refrain

from passing it on to you:

THE TOMORROW we're fighting for is a mighty pleasant, dreamy world—filled to overflowing with the Four Freedoms. . . . Every man dreams of his tomorrow. Streetcars of tomorrow fill our dreams. Super, snazzy, streamlined, speedy transit vehicles run through our minds.

Tomorrow, every passenger will have a plush, roomy seat by himself, and a smoker will have an automatic devise by which he can shut himself away so he'll not bother other patrons. Cigars, cigarettes and gum will be furnished free, of course.

Tomorrow, beautiful hostesses will stroll up and down the spacious aisles serving sandwiches and coffee while passengers watch a movie flashed on the top of the car—and opera glasses will be attached to each seat so that patrons may read from any newspaper in sight.

Tomorrow, streamlined streetcars will be equipped with helicopter propellers so that they can fly over traffic snarls—and every conductor will be a singing Sinatra.

Tomorrow, all you need to do is press a button and your personal section takes off from the rest of the car and runs automatically to your door. Attachments will pick you up and put you down in an easy chair, fill your pipe, and hand you a book.

Tomorrow's transit—a beautiful dream. A streetcar at your office every thirty seconds. Every house a stop. Radio and telephones at your elbow. Television at your right. Windows which open and close automatically. Nurses for the babies. Libraries on the rear end.

Fare boxes that play a "thank you" tune when the token drops. Every transfer good for a theater or a dance. Some of the more progressive streetcar companies may introduce a line of chorus girls, or a ballet group, to dance in the aisles.

Straps will be fixed so that you can pull them down to swing the children. Cars to the golf courses will furnish caddies and golf balls; to the picnic grounds, lunches and flypuper. A speaking tube will be at your seat so that you may tell the operator your pet peeves—that your breakfast toast was burned, etc. An automatic radiophonograph will call streets, loud and clear, with news comments between stops.

Yessir! You'll like to ride our cars of Tomorrow; but tomorrow depends upon today. Today we need help. If we don't get help today, you may have to walk--tomorrow!

* * *

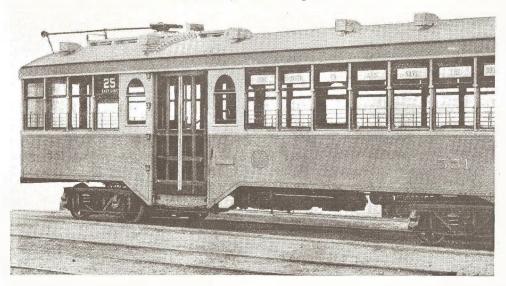
NEWPORT: In connection with the shot of old cars at Newport Beach, (Aug. issue) we learn from Frank I. Bowler, 400 Fourth Ave., Haddon Heights, N. J., that in the early days there were three tracks at the terminus shown in the photo. Trailers were operated behind motor cars, which upon arrival at the top of the rather steep grade to the beach were uncoupled and remained there long enough for the motor cars to race down hill to sidings.

Then the trailer would coast down, coming in on a different track and stopping at the end of the rail. The motor car could then go in and couple up for the return trip. In this way loops were avoided at the end of the line. However, Mr. Bowler believes, the practice was discontinued around 1898.

HOME TRANSIT: Marion (Ind.) Railways is not the only small line that, due to efficient management, has prospered in recent years, writes Sgt. Fred W. Moulder, Hq. & Hq. Co., Armored Force, Fort Knox, Ky.

"Although much has been written about the Marion company, this state boasts another small electric system that is doing excellently—Home Transit, Inc., of New Albany," says Fred. "Like Marion Railways, it is the city section of an abandoned interurban line, and was purchased from the company by a group of local men."

Home Transit operation consists of ten cars running on eight miles of track and covering three routes: State Street, Vin-



Electric Lines

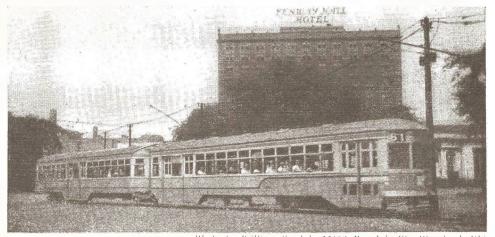


Photo by William Surdyk, 11508 Rosedale CL. Cleveland, Ohio ONE hundred feet long, Cleveland Transit System's 5000 Series cars seat a like number of passengers

cennes Street, and Elkin Avenue. Only two cars are double-trucked, the rest being Birneys. Recently the Birneys have been running double-headed, due to increased business and the single-tracks which prevent frequent headways. Fifteen-minute service is the rule on the entire system.

Home Transit's 95 has been repainted as a War Bond car, with red roof, win-



dows in white, and lower panel blue. Standard colors are gray roof, yellow down to bottom of windows, and blue on lower section. Fred asks: "Is the 95 the only War Bond Birney in operation?"

* *

ARTICULATED CARS: "Your article on double-deckers was good," says Bill Surdyk, 11408 Rosedale Court, Cleveland, O. "As everyone knows, these cars were failures. But why don't you write about cars that are a success—for example, the Cleveland articulated types?"

There are 28 such cars in Cleveland. They are so successful that the company planned 200 more, but war interfered.

Each is 101 feet long, weighs 40 tons and seats 100 passengers. Built by Kuhlman Car Co. of Cleveland in 1928, it rides smoothly because of the long wheel base. Each carries a crew of three—a motorman and two conductors.

We wonder how many other cities are now using articulated cars.

* *

PURDUE TROLLEY: "Your article about the University of Illinois interurban car was interesting, but I hope somebody has told you about the one owned by Purdue University and operated by the Electrical Engineering School," writes James Gibson, 1680 Robert St., New Orleans, La. "When I was at Purdue," he recalls, "we took this car out on a spur track and ran it for about a half mile. The Nickel Plate uses the spur to bring coal to the power house at school, with the aid of an overhead wire. There was no wire in the laboratory where the car was kept, or in the section of track near the building, so we had to plug a long extension cord into a socket in the lab in order to get the car outside.

"Once in the open, a steam crane pushed it toward the electrified spur. We had to get across State Street, where the Lafayette Street Ry. then operated a trolley line. The wires were too low for the crane to pass under. So some of our class blocked traffic on the street while the crane gave the car one good shove, and we helped keep it rolling until we reached the electrified track. After our ride, we returned to the campus by getting up speed and coasting over State Street, with one of the fellows pulling down the trolley just as we reached the end of the wire.

Jim has reason to believe that this car came from the Electric Railway display at the St. Louis Fair, where it was used in wind-resistance experiments. The cab had several demountable "noses" of various shapes which could be placed on the front in order to see which offered the least wind resistance.

* * *

FREIGHT ROAD: Cpl. Bob Richardson writes us from "Somewhere in Iran" that there may be another addition to the list of juices pike published in our May issue, just received by him.

"Last year, in High Point, N. C.," he reports, "I saw a short electric freight road that supplied switching service to local industries via city streets. Trackage was once part of an obviously larger line. I could see a steeple-cab loco without any lettering, near the shops of a steam road, but I didn't have time to make inquiries."

Bob is referring probably to the remnant of the High Point, Thomasville & Denton juice line. We think it is a private pike. Perhaps a reader from that section of North Carolina can give further information.

Another correction from Cpl. Richardson: The Ohio Midland Light & Power changed its name to the Ohio Midland Ry. back in 1941 or 1942.

* * *

FARE REGISTERS: Our article on open cars in the August issue reminded Joseph Cervery, 114-52 175th St., St. Albans, N. Y. 12, of the old-style fare clocks those cars used to have.

"Recently I saw one in use in a bakery," he states. "Flour from trucks was being unloaded on to a slide into the cellar of a building. About the middle of the slide one of the registers was slung underneath with a bar going up the center of the runway. Every time a bag of flour passed down it struck the bar, registering the number with a dull clink—just like the old days when the conductor pulled the string."

BOOMER TROLLEYS: Two more groups of trolleys that have travelled over various lines are brought to our attention by Ed. Frank, Jr., 1866 N. Bissell St., Chicago, and Bernard L. Ahman, Jr., 3213 Frisby St., Baltimore, 18, Md.

Ed Frank nominates the two (250-'1) pieces of equipment of the Chicago & Joliet Electric Ry. he knew back in the early 1930's. These cars came to the C&J from the Central Illinois Traction, where they ran between Mattoon and Charleston and were numbered 230-1. When the C&J quit service, they were shipped to the Jamestown Street Ry. of New York State, which was abandoned in 1938. "Where are these cars now?" asks Ed.

DOUBLE-ENDERS: Some of Montreal's double-end cars have been pressed into service on busy single-end runs, reports Leonard Jeffries, 914 Davaar Ave., Outremont, Que., Canada. For some reason the company decided to chop off part of the front trolley pole, leaving a stub on the roof that looks somewhat strange. Who knows the reason for this polecutting?

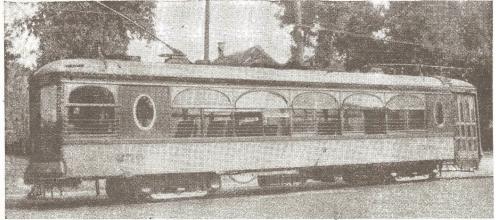


Photo by Edward Frank, Jr., 1866 N. Bissell St., Chicago

GRAY-and-scarlet boomer trolley. Originally the Central Illinois Traction Company's 230, she became, in turn, the Chicago & Joliet's 250 and the Jamestown (N. Y.) St. Railway's 87

"Add to your list the present 300 series in Norfolk, Va.," declares Bernard Ahman. These four cars were first purchased from the Perley A. Thomas Car Co., High Point, N. C., for use on the North Carolina P.S. lines in Greensboro. They started service there in 1929 as cars 100-'4. This company later changed its name to the Southern Public Utilities, and several years afterward the cars moved on to the Charlotte, N. C., city lines, as Nos. 90-'4. In 1938 they were transplanted to the Richmond Division of the Virginia Electric Power Co. where they were operated until the defense traffic in the VEP Norfolk Division became so great that the company had to shift them to their overtaxed shipyard routes.

These cars were the 400 series in Richmond, but were renumbered in the 300 group by Norfolk, as that company already had made use of the 400 series on second-hand trolleys they bought from Springfield, Mass.

CAREER CAR: Speaking about cars having different owners, Pvt. Jim Buckley of Kelly Field, Texas, believes the career of No. 109 of the Sacramento Northern sets some kind of record. St. Louis Car

*

Co. built this one in 1906, as No. 14 of the Phila. & Western Ry. But just before it left the builders, it was sold to the United Railroad of San Francisco, who at the moment were looking for trailers of its type. The URR turned out to be as fickle as the P&W, and before they received the car they sold it to the Northern Electric. By this time the wanderer had seen three owners, and hadn't even turned a wheel!

Northern Electric took it into the fold and it saw service from 1907 until 1912 as trailer car 251. After it was motorized and a baggage compartment installed in 1912, the car was sold to the Marysville & Colusa. Later both the NE and the M&C merged into the Sacramento Northern. For years she ran on the M&C as their 10, and in 1915 the M&C consolidated with the NE, so No 10 again became a Northern Electric, this time numbered 109, for variety.

With reorganization of the NE in 1918, the Sacramento Northern was formed and took over 109, running it on the Colusa branch until passenger service was discontinued Oct. 31st, 1940. The rather complicated history of this car ended in November, 1941, when she was consigned to the scrap pile.

The Callboard

A MAZING is Roy F. Snyder's record-breaking sale of tickets at Ellsworth, Ia., despite the fact that passenger service was discontinued at this depot back in June, 1942. Between Dec. 1st of that year and March

10th, 1943, more than six hundred and fifty dollars worth of pasteboards were passed beneath his wicketed window in the little town of 500 where he has been Chicago & North Western station agent for the past seven years. Snyder says. "Ellsworth is surrounded by towns served by other C & NW stations. Three miles to the west is lewell; four miles

south, Randall; and four miles to the east is Radcliffe. Williams, Ia., is six miles to the north on the Illinois Central."

Snyder keeps a stock of skeleton form tickets on hand and gets his rates from the division passenger agent at Des Moines. He does not claim to be a salesman. but says his friends really are responsible for his success in this line. "My method of selling the public train transportation is this." he explains, "be a real friend to my acquaintances and treat everyone alike, at the same time doing favors whenever I can." More precisely, when Snyder is asked about trains, connections and rates, he often makes out a complete itinerary of the proposed trip and adds whatever helpful information he can. A copy of this accompanies the ticket when the final purchase is made.

News of the service to be had at Ells-



ROY F. SNYDER



MANY passenger tickets are sold in this freight depot

worth spread, with the result that prospective travelers went out of their way to patronize the little red waystation. "One customer," he recounts, "drove over to my office from Williams to buy a ticket and then motored on to Iowa Falls to catch his train for Seattle. He liked the treatment I gave him so much that he sent an air mail letter thanking me for sending him on the route I did. Another man living at Ames, Ia., traveled the twenty-five miles to Ellsworth to buy his ticket, then returned to Ames and boarded our Challenger to Los Angeles. He was a former Ellsworth resident who hadn't forgotten me." Latest report is that the Williams man returned on June 16th and bought tickets amounting to nearly one hundred and fifty dollars.

Wire work, freight and passenger duties keep Snyder busy, for Ellsworth is a one man station. "Even so," he says. "when someone from the community comes in for freight, express or a ticket, I try to find time to visit for a few minutes."

Son of John F. Snyder, Rock Island agent for forty-four consecutive years,

The Callboard

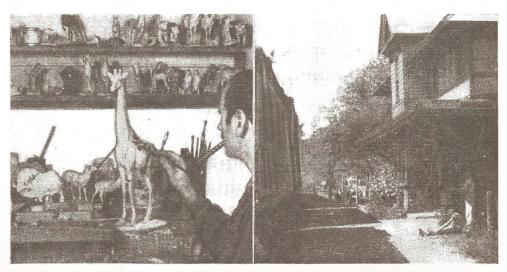
Roy Snyder decided when a small boy that he, too, would be a telegrapher. One of his earliest memories goes back to when his father opened up the station at South Bend, Neb., located on the former Burlington & Missouri River RR., now the CB&O cut-off between Ashland, Neb., and Pacific Junction, Ia. It was at the time when the Rock Island built the cutoff between Council Bluffs and Belleville, Ia. Jay Gould was trying to void the Rock Island and Union Pacific contract for wheelage rights across the Missouri River bridge at that point. "Pending the court's decision," relates Snyder, "the Rock Island operated a train from Fairbury to Omaha and return each week day. Well do I remember the celebration after the Rock Island got a favorable decision. Flags and bunting decorated the engine of the first train to make the run from Council Bluffs."

Later the family moved to Alvo, Neb., so Roy would not have to walk as far to school as he had at South Bend. Unknown to his father, who disapproved of his son learning telegraphy, the boy got out the office code book and began studying it. "Whenever father was out of the room," recalls Roy, "I would practice on the key without opening the circuit and always was trying to get some word or letter from the main line sounders." He had many opportunities for this because at Alvo the living room was a part of the office.

"One day when I was about twelve years old." says Roy, "father was outside getting coal and sealing some grain cars that were to go forward. When he returned, I told him 'SE' had been calling 'AO' and finished with '9.' My father said there wasn't any call 'SE,' that it must have been 'Z.' Anyway, he answered the call and found it was a train order from the dispatcher at Fairbury.

"When he had finished copying it, he got up from his chair, turned around, and looking me in the eye said, 'You little devil, when did you learn that much of the code?' I told him I'd been studying by myself. From then on, every evening he gave me an hour's code practice by shorting the line instrument with a car seal. Needless to say, I was walking on air !"

In 1898, when Snyder was fourteen, he began his career as a railroad employe. The family had moved to Brayton, Ia., after his father traded stations with the agent there. "It was the following summer," Snyder says, "that the agent



ANIMAL SCULPTOR, Louis Paul Jonas, has a studio in old abandoned New York Central station at Mahopac, N. Y. Scenes in and around it are shown in a Universal short film, "Cactus Artist"

at nearby Lorah. Ia., became ill, and the dispatcher at Des Moines asked my father if I would be able to handle his work for a few days. Father sent word that I could do the job as well as he could, since I knew station routine in addition to my Morse.

"After that, I went from place to place relieving various agents for a few days at a time, and kept it up summers until I was through school. Because of my age, the agents paid me out of their salary. What a pension I would have in store for me, if in those days my name had only been on the pay roll! I hired out to the KD in 1900 and later went cooning."

Busy as Snyder is nowadays at the Ellsworth depot, he still finds time for his hobby, photography. Back in 1906 his enthusiasm for it caused him to leave the road to work with H. M. Anschutz, a photographer in Keokuk, Ia. Later he opened his own studio at Eddyville, Ia. "But finally I sold out," he reminisces, "and came back to where I could smell the smoke. Now I like to take railroad



YOUNGEST OP? Monty Powell, 14, holding a man's job on the IC, is shown with George Phillips, who taught him telegraphy

shots and make enlargements of them. One wall of my office is covered with local views; the other, with pictures I have snapped during my travels. Now the place begins to look like the reception room of a photographic studio."

Like some other rails. Snyder has a few switch keys and old passes, among them one issued to his father in 1878 by the old Keokuk & Des Moines Valley RR.

* *

ILLINOIS CENTRAL may well be proud of fourteen-year-old Montague Powell, its youngest agent-operator, for he is making good at a man-sized job.

Monty lives at 630 W. Jefferson St., Clinton, Ill. He first became interested in railroad telegraphy through his friendship with George Phillips, a neighbor of the Powells and a veteran IC brasspounder. Phillips let the boy borrow his "bug" and helped the high school freshman learn the Morse code. When the IC started a course last spring at his school, Monty signed up. But after a few lessons it was evident that he was too advanced for the class. The company put him on part-time work in the dispatcher's office at the Clinton depot, where he received pay and gained actual experience.

After passing the rulebook examination at the end of his school term, Monty was signed on the extra operators' list and sent to Patoka, Ill., where a flood had created rush business. This first job lasted two days. Back at Clinton, he assisted Operator Phillips for a few days before going to Greenup, Ill., to handle the second trick. The end of June found him at Wapella, about five miles north of Clinton, as agent-operator.

Monty is now a sophomore at Clinton High and is looking forward to another summer on the IC extra list.

* *

YOU might think stamps were rationed, judging from the way so many fans mail letters upon which someone else has to pay postage due. Ernie Plant believes the time has come to do something about it. Ernie, a former Canadian Pacific railroader, is president of the Lower Mainland Railroad Club, 3226 E. 26th Ave., Vancouver, B. C., Canada, and carries on a heavy correspondence with fans in many parts of Canada and the States.

"It gets me," he says, "why some people

The Callboard

don't find out about postage rates before they start writing letters. You fans in the States should know that a one-cent stamp won't take a card to Canada. I don't mind paying the odd pennies now and then, but when I get seventy-five letters and postals in a week and maybe thirty of them are short on postage. I want to chuck the whole hobby."

Ernie reminds picture collectors to enclose a stamp when requesting information, and a dime for a list and sample print. Though not in business for profit, hobbyists do have to meet expenses.

"Size 116 prints cost six cents each and the list a lot more." Ernie writes. "One month I put out fifty prints and thirty lists. made by hand, but did not receive a dime nor even stamps for one-tenth of them. Besides, I paid postage to get the letters."

Then there's the problem of photos and negatives. One fan sent Ernie six dirty, scratched, and badly exposed negatives with a letter stating: "These are first-rate. Just fix them a bit more, give them a good washing and they will be O.K."

"If a fellow sends for a hundred of my prints," declares Ernie, "I tell him he has to take the good with the bad. If any are too bad, I'll substitute good ones. However, with rare shots even those in poor condition may be acceptable."

"Some fans' idea of taking pix differs greatly from mine," continues Ernie. "I like a snapshot taken three-quarter view from the front about fifty feet from the subject, and side view taken from a distance of seventy-five to one hundred feet." COL. ROBT. S. HENRY, Assistant to the President, Association of American Railroads, and author of *This Fascinating Railroad Business*, will address the Railroad Enthusiasts' N.Y. Division on "The AAR in Peace and War," Oct. 22nd, 7:45 p.m., in Grand Central Terminal Bldg., Room 2728, N.Y. City.



Robt. S. Henry

This meeting will be open to the public, with no admission charge.

NEW EDITOR of the National Railway Historical Society *Bulletin*, Leon R. Franks of 30 N. Lime St., Lancaster, Pa., announces the return to publication of six issues each year of their interesting little magazine. The former editor, Hugh R. Gibb, 1201 W. Butler St., Philadelphia, is now national secretary of the NRHS. The North Jersey Chapter recently elected these officers: Howard E. Johnston, president; George W. Walrath, V.P.; Wilbur E. Wyckoff, sec.

THOMAS E. OWEN, editor, Louisville & Nashville Employes' Magazine, Louisville, reports his company is still receiving many orders for the L&N history which we reviewed in our August issue. This book (210 large pages, more than 200 illustrations) sells at one dollar. The Railroadians of America bought a supply for its members.

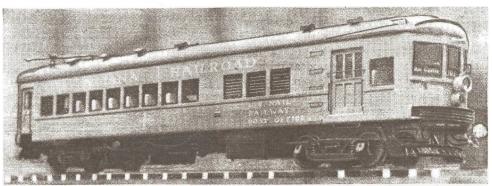
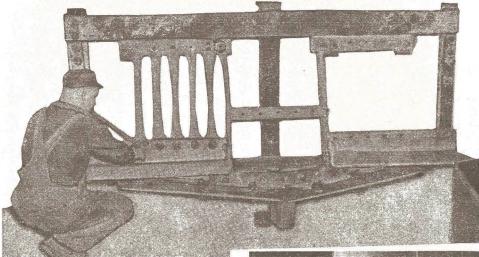


Photo from John Clark, 2702 3rd St., N.W., Canton, Ohio

PRE-WAR STEEL was used by Lawrence Poole, of the NRHS, to build a detailed scale model of Indiana Railroad R. P. O. car 375, which operates on about 10 volts DC from an overhead trolley wire. The power truck is in the front pair of wheels

Railroad Magazine

So You're Going to Be a Machinist!



By WAYNE HOWLAND



IF YOU happen to be one of those individnals whose working day is spent in a railroad shop or around machinery, you should find these episodes help-

ful and entertaining.

Being a railroad man, who, during a good long furlough from the "banjo" and stoker, has worked in quite a few shops, I wish to offer a few ideas on how to stay out of the First Aid room. I know that many of the nurses in those rooms are good-looking, but the longer you lolks stay away from the shop's First Aid, the shorter this war is going to be.

When a non-railroader breaks a safety rule, he makes a bee-line for the First Aid. When a railroad man violates a rule, he goes either to the hospital or to the Superintendent's office. Sometimes his presence is required in both places. That is the only time the "main pin" ever waits for a man.



TOP: Shaping a Reading pilot on a jig. BOTTOM: No job for a novice! An ace welder deposits fifty pounds of bronze overhead, while replacing a segment of a cracked cylinder

Railroad Machinist

About the first thing a person does when he or she has to go to work is to get into "fightin' clothes." Don't wear clothes that hang loose about you. Trousers with baggy knees are excepted. I mean the kind of shirt the young men like to wear, that hangs outside the trousers. More than one shirt-tail or jacket has been lost when caught in an unguarded belt or set of change gears. That, of course, was the other fellow's fault because he left the guard off. Don't take a chance on the other guy.

And for the ladies who work in railroad shops: Get something in the line of a dress that doesn't have long loose sleeves. Wear slacks if you care to, but remember that you use your arms and hands in your work, and a wide sleeve or bracelet likes to wrap itself around a lathe dog, drill-press spindle, or milling cutter. If I were a shop foreman I would insist upon the girls wearing sweaters with sleeves that come halfway to the elbow.

Speaking of loose clothes reminds me of a time when as a kid I was running a turret lathe and witnessed a stripping act that had Gypsy Rose Lee beat a mile—in time, I mean. Opposite my machine and a bit to the left, another turret lathe was in operation, working on seven-eighthsinch bar stock. The material was slightly bent and as the machine was running quite fast it made a terrible clatter in the two stock supports. The operator, a big farmer named Ed, was monkeying with the oil-pump belt. In doing so, he got dangerously close to that rapidly revolving stock. I hollered at him to get a pipe-to run that stock through, but he yelled back, "Mind your own business!"

Being one who does as he is told, I eased a reamer up to the hole in my work, put my machine in motion, and as I engaged the feed I looked over at Ed again. At the same instant, that blue shirt of his got too close to that gyrating bar stock and, bingo! All he had on was his cap and sleeves—that is, from his waist up. Luckily, he wasn't hurt.

NOW, see what I mean? If you are operating a turret lathe or automatic, make sure that your bar stock runs in such a manner that it won't catch anyone who thoughtlessly gets near it. If the stock is too long and sticks through the end of the pipe, tie around it a brightcolored rag which will be clearly noticeable as it revolves. Better yet, turn in a suggestion that a ten or twelve-inch disk be affixed to a pipe standard so it may be

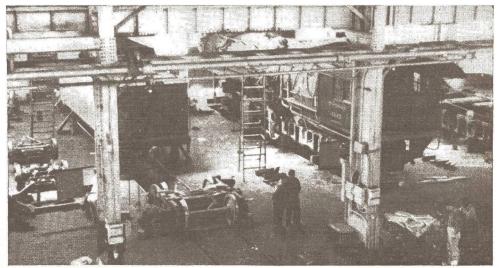


Photo by W. F. Thrall, Jr.

RAILWAY backshops are equipped to handle the heaviest repairs. Here's a crane operator's view of Southern Mallet 4017 at Birmingham, Ala.

placed at the end of your bar material.

After you arrive inside the shop, walk, don't run. You may run right into trouble. Whatever you do, pay attention to where you are going.

I recall the Southern Wheel Co. shop I worked in, which was situated close to the DL&W main line. The Lackawanna *Limited* went past there every day just before quitting time and that's the reason a man walked home from work one evening. This fellow had finished helping the blacksmith cut a piece of steel from a red-hot bar and was killing time before the whistle blew. After two or three minutes the *Limited* tore past and our hero whirled around to see what the engine number was. As he did so, he hooked onto the horn of the anvil, which upset him. He didn't fall down; he just sat down, but what he sat on was that scrap of hot steel which lay on the floor!

Instead of bounding right up, he continued to sit, his eyes and mouth wide open, as if what he felt wasn't true. All at once, he decided it was a fact. He bounded up, made one jump in the direction of the slack tub, and lost no time in immersing his posterior in the water. That put out the fire, but he might better have sat in the oil vat; he would have recovered more quickly.

In every phase of railroad work, each action, whether it is performed by one person on foot or by a big hog with over a mile of cars, is made with care in order to avoid accidents. So don't make any quick move unless it is necessary.

Many railroad shopmen are operating engine lathes, turret lathes, or hand-screw machines. You are in a position to notice things you have never seen before if you are foolish enough to do as I did—once. All you have to do is to put your finger into a hole in the work which you have drilled, bored or reamed, while your machine is in motion. Do that and you will be able to observe the mechanics of the finger and what makes it bend. That is, if you don't lose the digit. I might add that it take at least four stitches to fasten it back together. If you have to ascertain the condition of a hole such as has been mentioned, stop your machine and then use the curved end of a scriber or a sharp-pointed feeler. Do that and you will be helping every one of our lads who are in the armed forces. Don't help Hitler by wearing a bandage on your finger.

THERE are times when a man has a machine set up on a job and he has to use it for some other work before he finishes his task. If and when you have to use another's machine, be sure to leave it as you found it, everything but the chips and dirt. Clean them off, then wipe up.

To leave things as you found them is especially important with a lathe where the work is fastened on a face-plate and the whole thing can be removed from the spindle without disturbing the setup. Make a miscue under those circumstances and the result may be heard for a long distance throughout the shop, and if anyone gets hurt you are liable to get the credit for it. To point out what I mean, I'll tell this one.

It seems that a tool-maker had a bench lathe set up with a jig fastened to the faceplate. Before he was finished, another job cropped up which required the use of a small, high-speed lathe. The toolmaker, under orders from the foreman, relinquished the lathe to the other guy who, in order to do his job, found it necessary to remove the face-plate. While doing his work, he had to use the highest spindle speed obtainable, which was about 1500 R.P.M. After completing the required operation, he left the machine as he found it, or he thought he did.

The tool-maker took over, placed a boring tool in the tool-post and after setting it to suit him, started the lathe in motion. Boy, oh boy! That little machine began to do the "dipsey-doodle" and sounded just like a pheasant taking off through the woods. The tool-maker was on the wrong end of the lathe to risk an arm to reach and shut it off. Before he could get into a safe position to stop it, the jig was thrown off the face-plate. It sailed through the air

Railroad Machinist

and, with a loud crash, went out of the shop via a closed window. Had the party of the second part left the handle controlling the spindle speed in the position in which he found it, everything would have been jake. Luckily, no one was injured and the lathe wasn't damaged, but a lot of time was spent on the second setup, after the jig was dug out of a nearby railroad embankment.

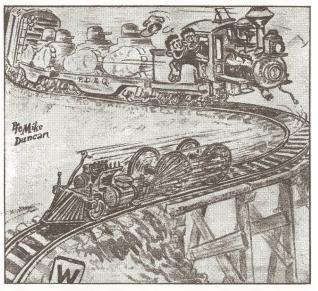
Nowadays tools cost too much money and are too hard to obtain to misuse them. Experienced machinists have been known to use a pair of inside calipers as a chip hook. But this is the pay-off. One foreman in a shop used to

go around carrying a twelve-inch rigid steel scale. He and that scale were inseparable. That scale meant as much to him as a piece of chalk means to a boilermaker. But as time wears on, tools wear out. So did the scale.

One morning he showed up with a brand new scale, twelve inches long, of the semi-flexible kind. He showed it to a few workmen and then started on his usual morning prowl through the engine room. About five minutes after he went in there, that place lit up with a bluewhite light and wheels stopped turning.

In a matter of seconds he came out of the engine room, walking like a blind man. He couldn't see where he was going, but the rest of us observed what he was carrying. He had about three inches of that new scale left between his fingers. It seems that he had always been in the habit of poking in and around places with the old scale, so he initiated the new one by sticking it in behind the switchboard.

A NOTHER thing. Don't measure work while your machine is running. I'll never forget the time I let a sap take my three-inch "mikes" while he was operating a shaper. He was a beginner and had



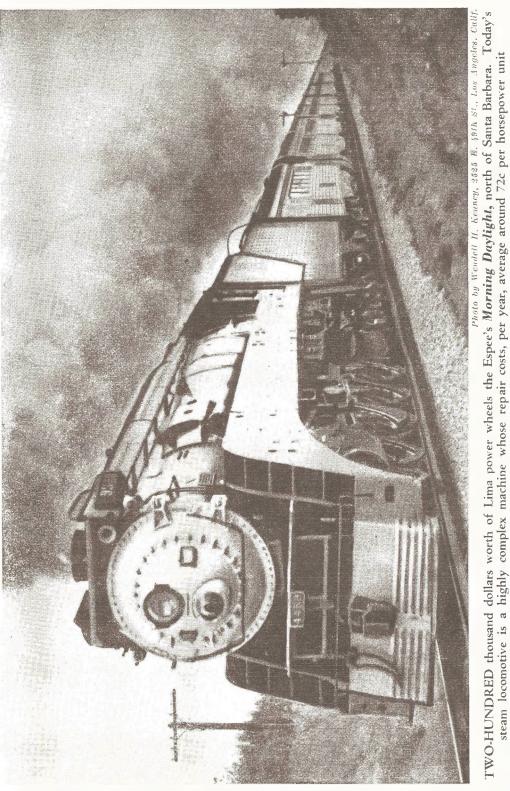
"YA CAN'T trust them nut-splitters since they been workin' on articulated power!"

been cautioned more than once about measuring work with his machine in motion. So, being under the impression that he knew right from wrong, I let him use them.

Come quitting time and he returned the micrometers. They were a "reasonable facsimile" of an old C clamp. He thought that he could check his work while the shaper ram was on the back stroke. It didn't work for him and it won't work for you.

While on the subject of tools, take a tip and get your own. Tell your foreman what you need and he will see that the company orders them for you. Most companies procure tools for their employes and then let them have them at the cost price. They also keep them in repair free of charge.

Buy a good, standard make of tools that you know will pass inspection. There is war enough in the world today without fighting with the inspectors. I once knew an inspector who refused to OK a piece of work for me because it was a "thirtysecond off." I checked my six-inch scale against his new scale which he hadn't used as yet and which bore a name but no address. You wouldn't believe it, but



his scale had thirty-three 32nds in every inch. Good tools are just as essential to shop men as a good watch is to an engineer. He cannot carry a dollar watch, neither should you stock up on fine tools from the "dime and dollar" store.

And now a word to young people starting in with electrical work, especially those engaged in shop maintenance. Belt men and oilers may appreciate this suggestion also. If your shop hasn't already devised some means of warning others that a motor or line shaft is not to be started while one of you is busy at some distance from the switch or starting box, here's a tip that will let you work without getting gray hair. And it is patterned after Rule 26 in the Book of Rules.

If possible, ask to have some disks made and lettered to hang on the motor starting handles or else on the switches that control the power supply where you have to work. These disks can be ten or twelve inches in diameter and painted any color, preferably bright red. Stencil on them "Danger Don't Start." Provide them with a hook and when you have a job around a motor or belt, hang the disk on the switch and work in comfort. That is your "blue flag." It will be understood that the one who hangs it up is the only one with authority to remove it.

While working overhead, you cannot be too careful, both where you walk and where you work. That statement brings to mind an incident that occurred when I was employed as an electrician's helper in a large shop in the first World War. I had been instructed to go overhead and oil the motors. Grabbing the quart oiler and a ball of waste, I climbed to the steel work above the machinery. After working along the bay for awhile, I came to the big motor that ran a battery of four spindle automatics.

Below me a bunch of girls in unionalls were working as inspectors. The day being about 90 in the shade, they were trying various methods of cooling off with the

aid of the air hose. At first I was highly entertained; a few minutes later I was severely shocked. Not morally but electrically. While rubbering at the girls below, I had managed to stick the long snout of that oiler right on a brush-holder on that motor. Having a good hold in the ring on top of the motor was all that saved me from being knocked from the steel platform and down into one of the four spindle Gridleys.

A ND now, a word of advice from one who knows. When you hear a train whistle near your shop and you wish that you had taken a road job instead of doing what you are, just thank your lucky star that you are working and working hard, so that those long troop trains you see going toward the coast, will soon be taking the boys in the opposite direction. Give your railroad all that's in you. The majority of you work in, out of the weather, you are well paid, and your hours are regular.

The next time you go to work, figure out where you have unintentionally been a helper of the Austrian paperhanger. We all have, at one time or another, and probably never gave it a thought. When you hear a train go past the shop and the engine sounds as if the hogger has her in the "company notch," take a glance at your department service flag and try just one more notch of feed or spindle speed. Perhaps your work will stand both.

If it doesn't work satisfactorily, and you can spare a little time, try grinding the tools you are using. If the setup you have is not too complicated, the increase in the work you turn out as a result of speeding up the machine will more than offset the time spent in tool grinding.

Railroad shopmen, all of us, are enlisted in the struggle to knock out Hitler. Our job is no less important than that of the man who dispatches trains, pulls freight or builds locomotives.

All-time Locomotive Roster of the New York, Susquehanna & Western

LAST month we ran a history of the engines of the New Jersey Midland Railway and the Midland Railroad of New Jersey, together with those of their successor line, the New York, Susquehanna & Western, covering the period 1870-1879. Our second and concluding installment deals with subsidiary lines, Erie locomotives sold to the NYS&W, and principal specifications of all engine classes. Both roster and accompanying photographs were supplied by the Railroadians of America

WILKES-BARRE AND EASTERN										
No.	Re-No	D. N.Y.S.&	W. & Class		Type	Builder	Con. No.	Date Built		
1	25	G-0			4-6-0	Rogers	4814	Jan. 7, 1893		
2	49	F-26			2-6-0	Rogers	4867	May 17, 1893		
3	50	F-26			2-6-0	Rogers	4868	May 18, 1893		
4	51	F-26			2-6-0	Rogers	4869	May 20, 1893		
5	21	D-25	J.	W. Ogdei	n 4-4-0	Rogers	4871	June 5, 1893		
6	13	D-25			4-4-0	Rogers	4872	June 6, 1893		
7	14	D-25			4-4-0	Rogers	4918	Sept. 1, 1893		
53	97	H-25			2-8-0	Rogers	4905	Aug. 5, 1893		
54	9 8	H-25			2-8-0	Rogers	4937	Oct. 23, 1893		
55	99	H-25			2-8-0	Rogers	4938	Oct. 23, 1893		
56	93	H-2 5			2-8-0	Rogers	4939	Nov. 27, 1893		
57	94	H-2 5			2-8-0	Rogers	4940	Nov. 27, 1893		
58	95	H-25			2-8-0	Rogers	4945	Nov. 30, 1893		
59	96	H-25			2-8-0	Rogers	4946	Nov. 30, 1893		
	SUSQUEHANNA CONNECTING R.R.									
101	64	F-27			2-6-0	Rogers	5213	Sept. 1, 1897		
102	65	F-27			2-6-0	Rogers	5213	Sept. 1, 1897		
103	28	D -0			4-4-0	Stroudsbu	ırg (rebuil	t) Feb., 1898		
				BLAIR	STOWN	RAILWA	Y			
No.	Re-N	lo.	Name		Type	Builder	Builder's No.	Date Built		
1	27	Blair	stown		4-4-0	Danforth	1038	Jan. 1877		
2	26	John	D. Vail		4-4-0	Danforth	1078	Jan. 1879		
				LO	DI RAI	LROAD				
No.	Re-N	lo.			Type	Builder		Date Built		
2	1			(0-4-0-T	Rogers		Dec. 1869		
ERIE LOCOMOTIVES SOLD TO THE N.Y.S.&W.R.R.										
N Y S Num		Erie Number	Class	Built	New Boiler	Received from Erie	Authorized	Re-Numbered		
4		334	D-6		1897	7-24-11	9-30-11			
5		335	D-6		1897	1-14-09	11-23-09			
6		367	D-0 D-6		1897	12-23-08	11-23-03			
7		343	D-6		1897	7-31-05	8-10-09			
•										
а.	New	/ Jersey	Midland	's Pompt	on becai	ne the Susqu	uehanna No	o, 8		

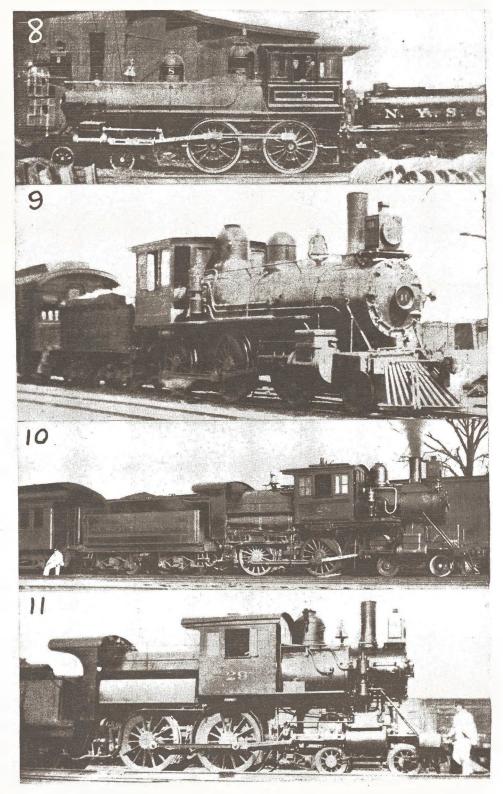
9. When NYS&W needed power in a hurry, Rogers sold them an eight-wheeler

under construction for the Pennsylvania, Poughkeepsie & Boston

10. First engine "constructed" at the road's Stroudsburg, Pa., shops was Camelback 28. Actually she was rebuilt from a Rogers engine

11. The 29 was originally Delaware, Susquehanna & Schuylkill's No. 17

Locomotives of the NYS&W



Railroad Magazine

					Received		
-		D 44	1000		from Erie	Authorized	Re-Numbered
9	500	D-11	1898		3-3-10	5 - 10 - 10	9-13-10
10	501	D-11	1896		11-14-09	5 - 10 - 10	5-21-10
18	373	D-7	1873	1897	6 - 13 - 11	9-30-11	12 - 27 - 11
26	867	G-8	1891		5- 7-06	8 - 10 - 09	10-23-09
27	896	G-8	1891		4-16-07	8-10-09	10-12-09
29	862	G-8	1891		11 - 25 - 10	9-30-11	12 - 19 - 11
*30	899	G-8	1891	1921	9 - 30 - 12	7-13-12	12 - 19 - 12
31	.905	G-8	1896		2 - 29 - 16		2 - 16 - 16
32	871	G-8	1891		4-4-13	7-2-12	11 - 17 - 13
33	882	G-8	1891		7-7-13		10 - 16 - 13
*34	975	G-8	1891	1921	6 - 10 - 15		9-22-15
*35	868	G-8	1891	1921	7-10-14		2-28-16
36	903	Ğ-8	1891	1918	6-16-14		2-12-16
37	880	Ğ-8	1891	1010			8-9-21
38	907	Ğ-8	1896				8- 9-21
101	1000	H-4	1880	1897	8- 9-05		2-13-06
102	1001	H-4	1880	1897	8-19-05		2-19-00 2-19-06
102	1003	H-4	1882	1897	9-12-05		12-26-07
103	$1005 \\ 1015$	H-4	1879	1898	8-14-05		3-12-06
$104 \\ 105$	1015	H-4 H-4	1882	1899	1- 9-06		2-3-06
$105 \\ 106$	1099	H-4	$1882 \\ 1877$	1900	12-19-05		
$100 \\ 107$	1055	H-4	1880	$1300 \\ 1897$	12-19-03 12-29-05		$\begin{array}{ccc} 6-& 9-06 \\ 5-14-06 \end{array}$
107	$1010 \\ 1024$	H-4	$1800 \\ 1878$	1898	4-17-06		
	$1024 \\ 1036$	H-4 H-4	1878	1898	12-18-05	3-26-06	4-17-06
109		H-4 H-4	1882	1899	12-18-05		5-9-06
110	1049	н-4 Н-4	$\frac{1002}{1883}$	1899		3-26-06	4-23-06
111	$1090 \\ 1000$		$\frac{1865}{1881}$	1897	7- 5-06	3-26-06	7- 5-06
112	1009	H-4			4-23-06	3-26-06	4-23-06
113	1039	H-4	1877	1899	6-19-06	3-26-06	6-19-06
114	1046	H-4	1878	1899	6-16-06	3-26-06	6-16-06
115	1086	H-4	1878	1900	12-22-05	3-26-06	4-10-06
116	1082	H-4	1882	1900	4-21-06	3-26-06	5-26-06
117	1019	H-4	1878	1898	9-10-06	3-26-06	9-10-06
118	1025	H-4	1884	1898	7-12-06		7 - 12 - 06
119	1079	H-4	1883	1900	3- 9-07		3- 9-07
120	1032	H-4	1882	1898	1 - 14 - 07		1 - 14 - 07
121	1051	H-4	1883	1899	3- 9-07		3-9-07
122	1056	H-4	1882	1899	3 - 18 - 09	11-23-09	3 - 18 - 10
123	1057	H-4	1882	1899	3 - 27 - 09	11 - 23 - 09	2- 3-10
124	1031	H-4	1884	1898	12 - 14 - 09	12 - 27 - 10	1-24-11
125	1055	H-4	1877	1899	9 - 29 - 09	12 - 27 - 10	1-14-11
126	1069	H-3	1878	1899	12- 8-09	12 - 27 - 10	1-14-11
127	1087	H-4	1882	1900	10- 6-09	12-27-10	1-11-11
128	1004	H-4	1884	1897	10-11-10	9-30-11	11-14-11
129	1006	H - 4	1882	1897	7-18-10	9-30-11	1 - 15 - 12
130	1085	H-4	1883	1900	1-23-11	2-21-1 2	2 - 16 - 12
131	1026	H-4	1884	1898	5-16-11	7-13-12	7-19-12
132	1028	H-4	1881	1899	8-22-11	7 - 13 - 12	7 - 30 - 12
133	1037	H-4	1879	1899	12 - 24 - 10	7-13-12	7-15-12

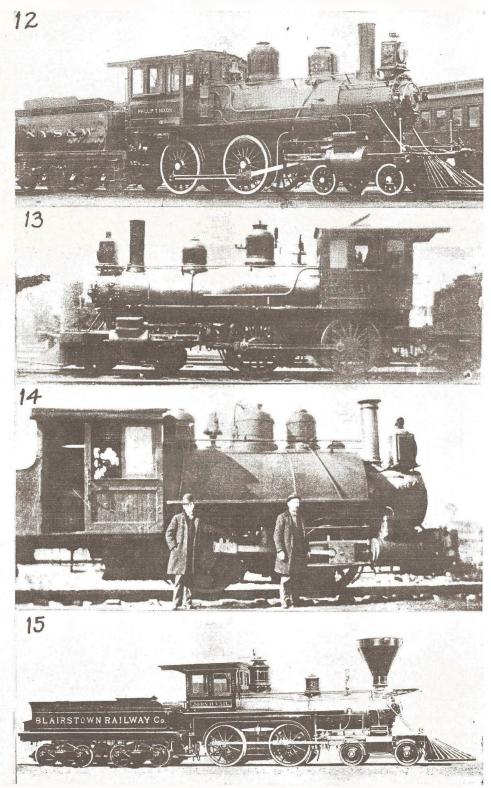
12. Low-wheeled for power, the 23 bore the misspelled name of her engineer. At Brother Nixon's request, the error was corrected

13. Suburban engine 19 burned lump anthracite

14. Third Susquehanna 1-Spot was a saddle tanker, used to work the Lodi branch

15. From the Blairstown Railway came No. 2, dubbed the "dinkey" by the men who ran her

Locomotives of the NYS&W



134 135 136	$1058 \\ 1062 \\ 1092$	H-4 H-4 H-4	$1884 \cdot$	1899 1899 1899	5-10-11 7-18-11 7-18-11	7-1: 7-1: 7-1:			
		N.Y.S.	&W. Loo	omotiv	es Renum	ibered E	rie		
140	1540	H-27	1906				1929		
21	104	D-25	1893				1929		
$\overline{23}$	405	D-25	1894				1929		
*New F	Boiler Baldy	vin, Extra O	rder 11840, 1	Der. 1921.			2020		
		NEV	V JERSE	Y MID	LAND R	AILWAY	7		
		Dir	nensions	and W	eights of	Engines			
En	igines		Cyls.	Driv.	Wt. Driv.	Total Wt.	Fuel		
70 an			17x24				Wood, Soft Coal		
	and 74		16x24				Soft Coal		
75 an			18x20				Hard Coal		
76, 77	7 and 78	, ,	17x22		18700	72200	Hard Coal		
80 to	8-1		17x22		48700	72200	Hard Coal		
85			16x24				Hard Coal		
85			19x2-		61000	84000	Hard Coal		
87				63 % "	55000	80500	Hard Coal		
15			18x24	63%''			Hard Coal		
NEW YORK SUSQUEHANNA & WESTERN									
					Classes of				
En	igines		Cyls.	Driv.	Wt. Driv.	Total Wt.	Fuel		
31 an	d 32		18x24	63%″			Hard Coai		
D-6	Erie,								
		6 and 7	$17\frac{1}{2}x22$		84300	125700	Wootten Boiler		
D-7	Erie, 1	18	$17\frac{1}{2}x22$		86500	125900	Wootten Boiler		
D-11	Erie, 9) and 10	19x24	68″	93100	134800	Hard Coal		
D-2 5	12, 13,	14							
	21, 2	22, 2?	18x24		67800	103000	Hard Coal		
D-26	18, 19,	. & ``)	17x24				Hard Coal		
D-0	11		18x24				Hard Coal		
D-0	28		18x24		73000	110000	Wootten Boiler		
D-0	29		17x24		0.1.10.0	85000	Wootten Boiler		
G-0	24		19x24		94400	122250	Hard Coal		
G-0	25	()	19x24	62	104000	134000	Hard Coal		
G-8	Erie, 2		01 00	00"	110700	144500	11 (1) 11		
E or		0 38 44 50 57	21x26	62	118500	144500	Wootten Boiler		
F-25 31 to 44, 76, 77, 78, 80 to 84 19x24 54" 81000 94000 Hard Coal									
F-26	45 to 5		19x24 19x26		$\begin{array}{c} 81000 \\ 102000 \end{array}$	$\begin{array}{c}94000\\118200\end{array}$	Hard Coal		
F-20 F-27	-45 to 5 -52 to 6	_	19x20		120000	138000	Hard Coal Wootten Boiler		
г-27 F-28	- 52 to 6 - 85 to 9		19x20 19x26		120000	127000	Hard Coal		
н-28 H-4		01 to 136			131300	127000 145600	Wootten Boiler		
H-4 H-25	- 1110, 1 - 93 to 9		20x24		131300 112000	130000	Hard Coal		
H-26	100		20x24 20x24		112000 127000	130000 145000	Wootten Boiler		
H-27	100		20x24 28x32		232700	260100	Soft Coal		
11-21	1.40		20102	00	202100	200100	Sore Coar		

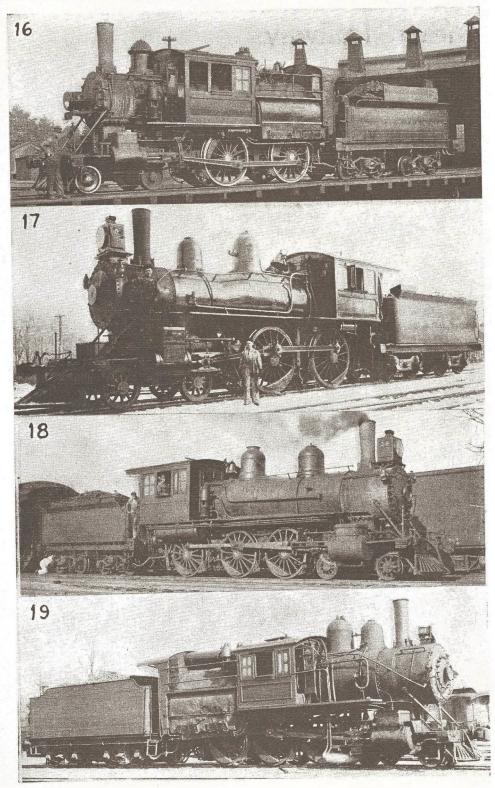
16. Tall-stacked 6-Spot, posed for her picture at the North Paterson engine-house in 1919

17. No. 9's 76-inch drivers couldn't knuckle down to Susquehanna grades, were later replaced by 68-inch wheels

18. A heavy passenger job, No. 24 hauled the Middletown mail train

19. A plumber's nightmare, the 35 carried air pumps atop her Wootten boiler

Locomotives of the NYS&W



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Indian Railways Girded for War

By N. VISWANATH

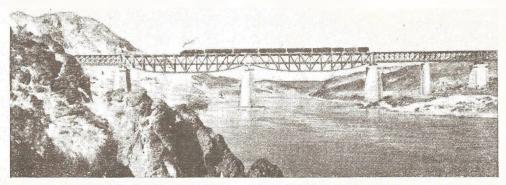
I NDIA is a rich prize which the Nazis and Japs alike have long coveted; but no Axis nation will ever annex this vast fabulous empire —not if the three-quarters of a million Indian railway employes have anything to say about it. For these employes, almost to a man—and a woman—are united in their determination to keep the invaders off their soil.

India's carriers are playing a progressively vital role in turning out military supples. More than 16,000 railway workers are engaged in making armament and munitions in converted r a i l w a y workshops. The country has about 40,000 miles of railway, dating back to 1844, which carried 576 million passengers and 93 million tons of freight in the years 1940 and '41. Over these rails are rolling thousands of troop specials a

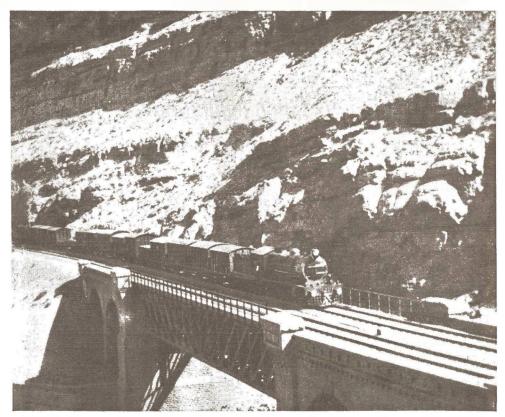


year and thousands of wartime freight trains.

In many directions Indian railways have had to make big sacrifices, and with reduced resources have to meet exceptional demands. Three large railway workshops have been handed over for war supplies, while



SIXTY-YEAR-OLD bridge in northwestern India 128



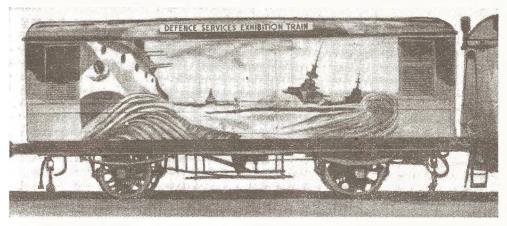
NOT until war ends can the full story be told of the heroic part played by India's railways, with 40,000 miles of line and three-quarters of a million employes. Photo shows a tunnel in the Himalayas

much of the capacity in others is turned over to meeting the demands of the armed forces. Railway track has had to be sent overseas or taken to meet defense needs within India.

The lines which the Government of India has been compelled to lift represent only a fraction of the total demand. Rails set free by relaying and reserves of rails have also had to be given. Railway equipment and stores are being requisitioned in huge quantities for India's far-flung lines of defense.

The engineering branch of the Indian railways has undertaken many special projects for the Defense Department, one of which is the construction of military bases served by railway sidings. At one junction, for instance, a reserve base involving the use of thirteen miles of track was completed in an almost incredibly short period. A still larger scheme was undertaken at another place, thirty-five miles of track being spread over a big area in a hilly district.

Three years ago the Indian Railway Board was asked to supply considerable track for military operations abroad. As stocks of spare rails held by the railways were limited, it became necessary to abandon unprofitable branch lines to release the necessary steel. The military demand was for a type and weight of rail

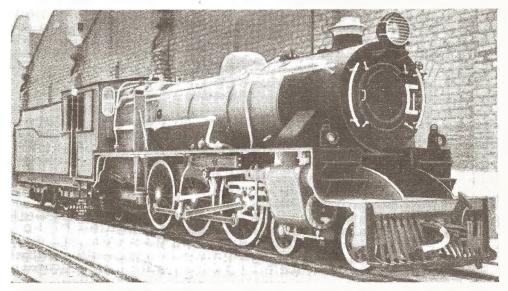


TWENTY-THREE cars, including the above, made up a train which rolled 15,000 miles to publicize India's war needs

which India could supply. Certain lines were ripped up, reluctantly it is true. Hundreds of miles of rails and, in some cases, bridge girders, signal and interlocking material, etc., were dispatched to foreign ports. Recently there have been increasing requests for rails to be used for military purposes in India and elsewhere.

To meet demands, the Indian rail-

ways also have supplied large numbers of locomotives and cars for overseas use, the exact figures being a military secret. Coal-burning engines were overhauled and converted to oil fuel before being sent away. Freight cars were requisitioned from all roads in proportion to their stocks. Meanwhile, too, special cars and trains had to be given priority for the movement of troops, war



ONE-SPOT of the 1300-mile Assam Bengal Railway, built by home talent, is equipped with Walschaert valve gear

Indian Railways Girded for War

materials and prisoners of war. Despite these facts, or maybe because of them, the administration managed to spare enough equipment for a defense services exhibition train of twenty-three cars. This train recently completed a 15,000-mile tour of India, visiting 175 cities and villages and being inspected by fully eight million people enroute. One effect of its tour has been that the public can now take a more intelligent interest in the war. They have seen a tank, an armored carrier, several kinds of howitzers and guns,

signal equipment, mines and the clearing of minefields. They have viewed films showing African battles and activities of all the fighting services. Thus they have had the visual evidence of the magnificent part that India's troops are playing in the conflict.

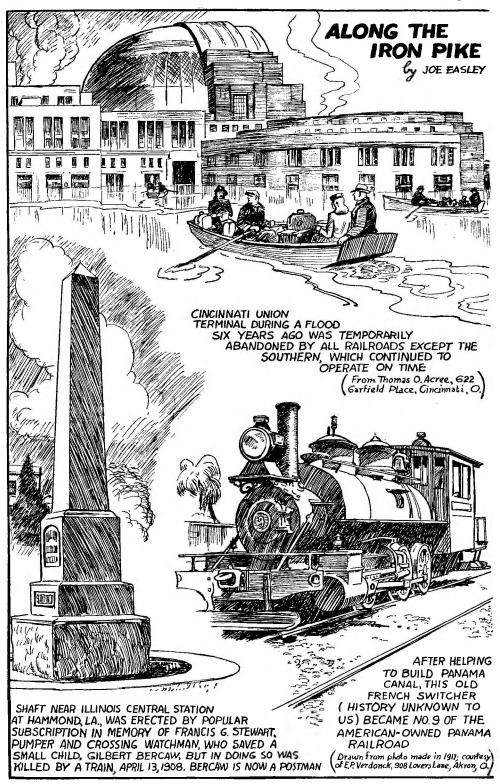
Technical groups have been formed to train for all branches of railway military service, including traffic, engineering and shop units. The men who have previous railway experience are given preference.

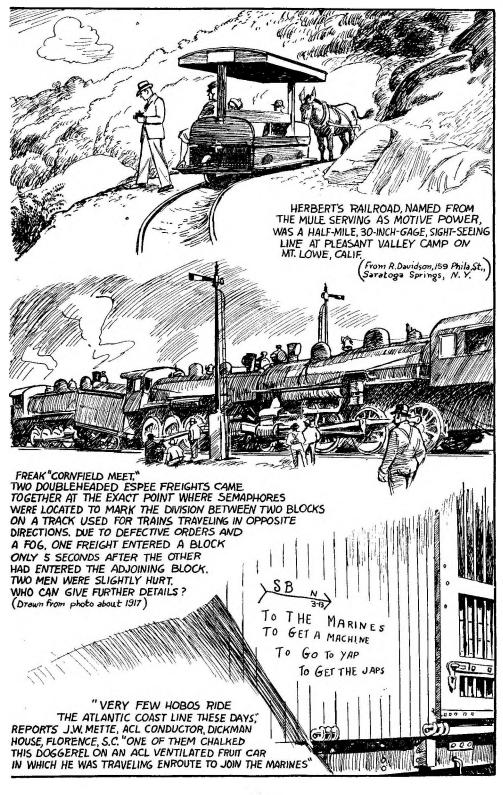
To conserve metals, the use of raw material is restricted to the absolute minimum. As in other lands, reclamation of discarded material is practised in India on a vast scale. Conservation is achieved by heartbreaking economy. The salvage of steel and iron has been extended to the areas adjacent to railway lines, and hundreds of tons of short pieces of rail fragments, broken metal, and worn-out and discarded spikes are collected.

In short, the story of the Indian railways' contribution to the war effort is largely a duplication of the situation you find in other Allied countries. The crisis is much more acute than that in America, for instance, and correspondingly more heroic measures are being taken. Not until the global war is over can the full story of India's railways be told.

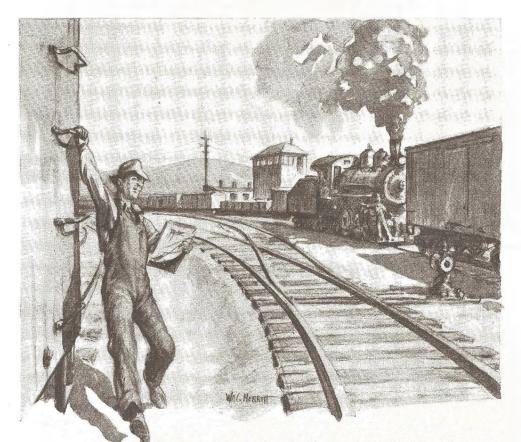


YOU WOULDN'T call it a "water-level route"! Northwestern Railway bridge in India is 230 feet above the stream





On the Spot



S INCE the "Spot" department is as friendly and informal as a family circle, we like our contributors to use first names as well as last ones, whenever possible, whether you refer to yourself or to anyone else. In a forum of this kind there seems to be something stiff and distant about "T. Hetherington" or "T. E. Hetherington." When you ask a question at the dinner table, it isn't: "Has T. (or T. E.) come home yet?" No, sir, you want to know if *Tom* has come home yet.

Of course, a lot of people sign so much mail or so many checks or blanks in the course of a day that they effect a real saving in time by using the signature "T.E. Hetherington." Others do not like their first names. Sometimes a correspondent calls a man "T.E. Hetherington" because he does not know the name is Tom. In each instance the writer

has a good reason for adopting the "T.E." form, and we concede that everyone should sign his name exactly as he wants to.

Far be it from us to interfere with personal rights. Our editorial plea is directed only to those who have no feeling about the matter fellows who would just as soon write the full name as the clipped one.

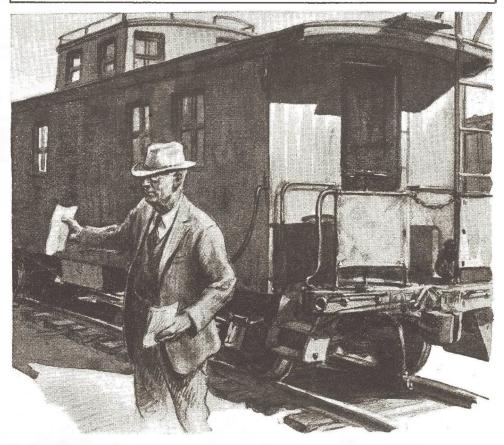
We argue for "Tom" or "Thomas," rather than "T.E.," because we maintain that the given name is more explicit, is more friendly, is easier to read and is less subject to typographical errors, besides being set apart from initials of railroads, college degrees, military or naval units, abbreviations in street addresses, etc.

* * *

HOME ROADS. Our editorial in the September "Spot" expressed curiosity as to whether or not any reader had as his 134

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The Reader's Viewpoint



Number One favorite road a pike that was not in his local territory, and if so, why. The mail resulting from this query was rather heavy. The general tenor was this: It's perfectly natural for a railroader to stick up for the company he works for, and a fan to prefer the railroad that passes his own door. With this point of view, you remember, our editorial expressed approval.

A very few readers had the temerity to champion "foreign" carriers. Take the case of M. C. Poor, 4883½ N. Paulina St., Chicago. "Mac" lives in the Windy City, but for years his rail hobby has centered around the "Old South Park Line" in Colorado. In fact, he is now compiling material for a *Bulletin* on this line, to be published by the Railway & Locomotive Historical Society. Mac picks the Denver, South Park & Pacific because he claims it was the most picturesque of all the colorful old mountain narrow-gages.

A native of New York State says: "The Milwaukee Road has the softest spot in my heart." Meet Pvt. Samuel Rieger, Co. A, ASTP (STAR) SCU, 4760, Grinnell College, Grinnell, Iowa. Sam's reason is that last year when he took a job with the U.S. Forest Service and camped in northern Idaho "the Milwaukee trains were, for weeks at a time, the only contact most of us had with the rest of the world."

He adds: "The trainmen apparently knew this, for they often threw off magazines and newspapers to us as their trains crossed over the 200-foot-high trestle just above our camp. Ed Zuelke, whose father works for the Milwaukee at Alberton, Mont., at the other end of the division, never had to wait for the mail in order to get his daily paper. It was tossed from the observation car of the westbound *Olympian* or the caboose of a westbound freight."

And now we learn that a railfanette. "Becky" MacCarty, 10 Boylston St., Worcester 5, Mass., prefers the Santa Fe because to her it symbolizes the romance of the old Santa Fe Trail.

"It isn't just a whim or passing fancy with me," she pleads. "It's something away back there in the days of gas-lamps, checkered vests, boom towns, dance-hall gals and Indians. It is Santa Fe itself, golden sun and long clean stretches of prairie land. Fiesta time, laughter, life, love and death. Most of all the stillness of night and over all the call of a Santa Fe whistle as its engine pulls out into the night ahead."

Becky, with the soul of a poet, has a boy friend "whose interest in trains is amazing and who has a model railroad layout costing hundreds of dollars."

"Through him," she writes, "I found *Rail-road. Magazine*, which I have since been mentally devouring from cover to cover. My friend is in the habit of tearing his copies apart, saving only the locomotive rosters and other technical data for his personal files. I am trying to change his mind. I ask him to keep each copy intact, placing them all in a bookcase. Some day I'll let you know who wins."

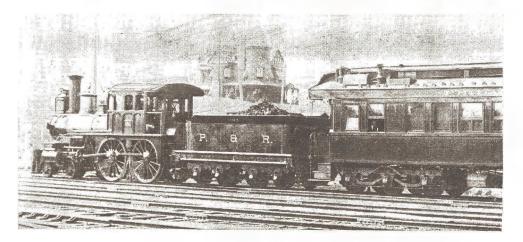
Yes, Becky is "Santa Fe all the way."

SWANKY Philadelphia & Reading equipment of a half-century ago: Milholland eight-wheeler No. 304 and the palace car Orient This slogan, she tells us, was coined by Nick Heffner, an AT&SF employee. And now. turning to the other side of the picture, we print a typical home-guard viewpoint, submitted by another reader from Massachusetts : Edward E. Wood, Jr., 68 Needham St., Dedham. Ed is a motorman-operator and extra starter on the Boston Elevated Railway. He has a keen imagination and a flair for writing. After quoting from our September editorial, "It is only natural for you, or anybody else, to take pride in a home road." he goes on:

"That is an understatement, 'To take pride in a home road'! How little it conveys to the casual reader! If you lived for years beside a track and watched the trains come and go regulars, extras, specials, old types, new types, steam, gas, electric and Diesel wouldn't you 'take pride in a home road?' You betcha!

"And no matter where you travel or how interesting the equipment or practice may be on a foreign line, the familiar herald on the side of a boxcar will make you glow with pride and, perhaps, a wee touch of homesickness. You will watch that old red car out of sight, oblivious of the fact that there may be 30 or 40 more boxcars in the train, that the boxcar is one of the simplest and least interesting of all cars manufactured. Your mind will conjure up the old division point, the big stone station, 'the turntable and the roundhouse beyond; the wrecker and its train, grim and fascinating, always ready; the coal derrick and its waiting string of gons . . .

"All this and more will be recalled by that lone herald. And for a moment the present is forgotten as the bygone scene is relived."



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C. D. Croninger

WITH my father in the cab coaching me, I made my first pay trip firing on the New York Central (Toledo Division) several years ago. Though he was the regular fireman, I felt that the responsibility for getting our 2-8-2 over the road that day was all mine. My biggest mistake was in

heaping too much coal on the fire, but Dad quickly straightened me out. Since then for 20 months I have fired many other runs, including the 20th Century Limited—I was the regularly assigned fireman on that crack run when I was only 18 years old and had only 15 months experience! Who can beat that? True, I held that position for but one signup, but I did fire the Pacemaker for a while. Am now in the Navy, on a furlough from the Central.

Dad wielded the scoop on the Toledo Division for 25 years. My brother, now in the Army, fired engines on that same stretch for two years. But the iron in my blood goes back much further. A greatgrandfather of mine was a NYC section hand, Dad's father is still running engines on the Wabash out of Peru, Ind., my mother's father was once employed on the Indiana Public Service interurban line, and I have an uncle who's a B&O engineer.—AV/c C. D. CRONINGER, USNR, 28th Batt. H-1, Room 83, B. Quad. U.S. Navy Pre-Flight School, Iowa City. Iowa. **CORRECTIONS:** The five-man crew, all members of the Drumb family, mentioned in this department last month, should have been credited to the Katy instead of the Rock Island. The error arose because several readers sent us newspaper clippings, none of which mentioned the road, but one contributor rashly said it was the Rock Island.

P. L. Brown, Box 242, Sapulpa, Okla., writes: "You omitted the Frisco's 1060-'69 series in your recently published list of roads with Hudson type power."

MY FATHER, E. E. Hobart, began firing for the SP in '94, was made an engineer in 1900, was retired from Roseville yard service in '34, had a "Spot" letter

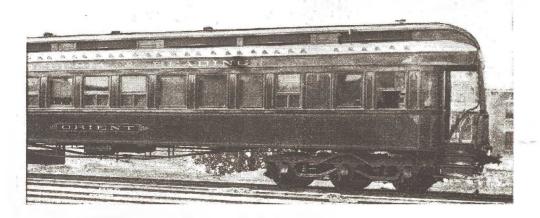


about a train wreck printed in April ¹41 Railroad Magazine, and died last April. He belonged to B. of L. E. Div. 415. I want to hear from anyone who knew him, or knew my grandfather, Josiah Jacka, employed about 25 years at SP car shop 5, Sacramento, Calif., or knew my uncle, G. W. McCoy, Sacramento, retired 1923 as SP engineer.— JOSIAH F. HOBART, Box 308 Pacific Grove, Calif.

66C WITCH KEYS" (Aug. issue) must

 \mathcal{O} have interested a lot of readers. I was surprised at the large number of strangers who wrote me commenting on my true story. The magazine sure gets around. So far I have received more than fifty letters from various points in U.S. and Canada. I cannot tell you how much it means to me, an old re-

Photo from Geo. M. Hart, Doylestown, Pa.



tired "rail," to get all this mail. One letter came from Mary Ann Taylor, a 15-year-old girl in Toledo, O. Thanks especially to the rails who added five more switch keys to my growing collection, and to the daughter of a North Western engineer who also donated a key.—ELTON M. EVERSOLE, 929 St. Johns Ave., Highland Park, Ill.



* * *

I WAS agreeably surprised to find in your September issue a picture and short history of *Uncle Dick*, famous Santa Fe locomotive

whose story lives on through the way she acquired her name. Uncle Dick had long been displaced by larger power on the Raton Mountain and was a humble yard engine when I lived there as a boy in 1902. From the largest she had become quite the smallest engine on the Santa Fe and could be seen at times, for comparison, nuzzling up to the giant tandem-compound decapods, the helper engines, world's largest, that had by that time come to rule Raton Mountain.

It appears, from the tale I was told, that the name was bestowed through an agreement with "Uncle Dick" Wooten that the Santa Fe was to name the biggest engine after him. Wooten and his sons were tough citizens who squatted on Raton Pass and set up a profitable racket by extorting tolls from the emigrant and wagon trains on the Santa Fe Trail. Building a railroad over the pass to the Southwest would mean an end to the toll business. So Uncle Dick blocked the right-of-way.

At length clever under-cover Santa Fe representatives, posing as hunters, became very friendly with him and, by using whisky, brought about a deal. In addition to having the engine named after him, the old man stipulated that he and all of his family were to have lifetime passes on the Santa Fe. Thus the feud ended.—J. T. PATTERSON, Mechanical Engineer, Norfolk Southern Ry. Berkley, Norfolk, Va.

* * *

JOHN JOHNS should give us a story about "feather-bedding," which needs a good presentation just now. I mostly prefer tech-

nical or historical fact articles, but would like to read a present-day fiction story on the subject mentioned. That would have more point than propagandizing a cause long since won. as Johns did in "Hours of Service" (Aug. issue).

I have railroaded in the Great Northern claims department, on Milwaukee Road extra gangs and as a Northern Pacific brakeman. In 1940 I married a Milwaukee conductor's daughter. Am now in military service. My company clerk in the Solomon Islands was the son of a gang foreman for whom I had once worked. When war conditions permit I'll send you a true tale about a New Zealand Railways hospital train.—1st Lt. ROBERT H. KLUCKHOLM, 0-410768, Hammond General Hospital, Modesto, Calif.



WHO can figure out a longer train trip in one direction than the journey taken last July by Mrs. Mendelson of Miami, Fla.? This

lady went to Prince Rupert, B.C., Canada. After examining her maps I cautiously venture the opinion that this is the longest possible train ride in North America where the passenger continues in the same general direction. She traveled from southeastern U.S. to northwestern Canada. The only way of adding more mileage to a direct route of this kind, so far as I know, would be for Mrs. Mendelson to have started from what is now the southern end of the FEC, Florida City, some 30 miles south of Miami. The lady used this route: Miami. Jacksonville, Atlanta, Nashville, Evansville, Chicago, Winnipeg, Edmonton, Jasper to Prince Rupert. riding on the FEC, the ACL, the AB&C, the NC&StL, the L&N, the C&EI, the Soo Line and the CNR .- Dr. A. E. ROSENTHAL, 1105 Huntington Bldg., Miami, Fla.

LOOKING over old issues of Railroad Magazines, I cannot help being impressed with its continual improvement. Those early issues had too much "blood and thunder" and too few pictures. The wellorganized departments and fine illustrations are instructive to all of us who are interested in railroading. Should you have requests for timetables of 63 years ago, I should be only too glad to answer questions from my copy of Appleton's Railway Guide of Aug. 1, 1880. —CARLTON B. FITCHETT. Justice of the Peace. 866 Main St., Poughkeepsie, N. Y.



E^{IGHT} different steam routes connect Fort Worth and Dallas, Texas. You can decide for your-

self which lines get most of the business, from the distance figures as published in the latest Texas Lines Mileage Table: Texas & Pacific, 31.7; Rock Island, 33.7; Fort Worth & Denver, 36.4; Frisco, 43.8; Cotton Belt, 49.9; Katy, 74.7; Santa Fe 81.8; Southern Pacific, 83.2 miles.—W. J. SNELL, 222 Emma Ave., Fort Worth, Texas.

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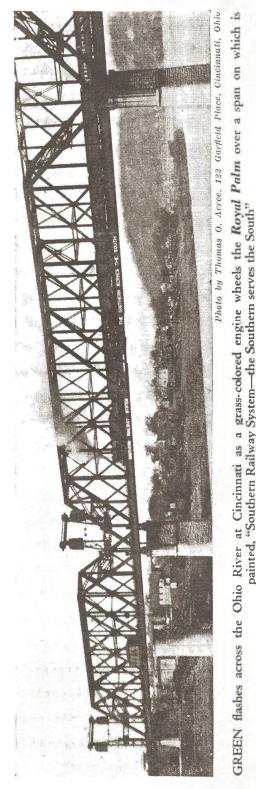
S PEAKING of old train orders, I have five dated 1882 or '83, all written on plain yellow tissue paper, not on printed

xpres

HOW many old-timers remember *Railroad Man's Magazine* as a lusty infant? Arrow points to our June '09 issue on a news-stand in the 69th Street terminal of the Philadelphia subway-el system and the Phila. & Western interurban.

LOWER shot was taken five years later at the Louisville & Nashville depot of Village Springs, Ala. It shows our Jan. '16 issue, with (left to right) "Cy" Williams, then a student op; John Jennings, engine watchman; Grady Wells, railfan, and W. R. Chiles, L&N agent

Upper photo from John Gibb Smith, Jr., 6701 N. 121h St., Philadelphia, Pa.; lower scene from "Cy" Smith, Box 252, Miami 2, Fla.



forms, signed by the conductor and engineer. -L. B. SWEARINGEN (agent, Milwaukee Road and Pennsy), Woodward, Iowa.

* *

BIGGEST thrill in years came to me the other day when a man unexpectedly gave me 61 different issues of Railroad Magazine (including Railroad Stories). some dated as far back as 1932. And I am having a feast of good things, reading them ! -WALTER BARRY, Jr. (age 14), 4052 Purdue, Dallas, Texas.

ske ske

UALIFICATIONS for stu-Rock dent firemen were not cov-Island ered in my article, "If You Are a New Fireman-" (Oct. issue). Here they are. Any white man in U.S. or Canada has a good chance of becoming a student fireman, regardless of whether or not he is familiar with locomotives, provided he is between the ages of 21 and 35, (in some cases, 45 or even higher, if the man is experienced), is of good character and average sound health (freedom from hernia is essential) and has normal vision (no color-blindness) and can read and write English.

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Southern

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Railway

painted,

The ease and neatness with which you fill out an application blank gives officials an accurate check on your mental ability. So does your reaction to the rulebook exam you are expected to pass. This exam is not, of course, as rigid as that given to an experienced man. You are handed a rulebook to study, and the exam shows the ease with which you absorb essential information. just as the doctor's check-up indicates, among other things, whether or not you are a drug addict or an alcoholic case.

Another point omitted from my article last month, due to space limitation, has to do with tools and other equipment kept in the engine cab. In bygone days each cab carried a box containing tools with which the engineer repaired breakdowns. The kit included wedges. By laying a wedge on the rail and running any individual driver up on it you could raise the driving-box. And hard chunks of wood were furnished to block between the spring-saddle and the frame, thus taking the weight off any particular driving-box when the driver was backed off the wedge.

Rods, crossheads, cylinder heads and all other parts of the old-time engine were light as compared with those of our modern



GRANDPA and Uncle Silas rode the chariot; the rest of us traipsed along behind on foot. Seriously, though, this old photo from Frederic Shaw, 542 18th Ave., San Francisco, shows a speed-car; but we can't identify the railroad nor any of the sturdy trackmen

power, and in those days the engine crew could handle almost any minor repair. Today, broken valve-gear parts are about all the crew can replace on heavy power. The crew no longer attempts to take down main-rods. Because of the present-day mechanical lubrication of cylinders, today's crew leaves up many main-rods that would have been taken down in the same types of breakdowns years ago.

The only tools our Rock Island engines carry are a hammer, a big monkey wrench and a large cold chisel. On engines equipped with alemited rod bushings a grease-gun also is supplied. While some locomotives still carry the wedges I mentioned, about the only use we make of them is to raise a wheel and block between the frame and spring-saddle to take the weight from a driving-box that may be running too hot to reach a terminal; and even this is rare.

Properly speaking, the tools I have referred to are used by the engineer. On a coalburning engine the fireman's tools consist of a scoop, and in cases where the coal can be stirred without forming clinkers, a rake for the fire. Even on stoker-fired power a scoop is carried for emergency use, in addition to small tools with which to clean out the jets. About the only implement that an oil-burning fireman can claim for his own is a long, heavy, chisel-edged slice-bar, which is utilized to clean carbon from the firebox channel. However, on all classes of power a six-foot rod, with a handle on one end and a hook on the other, is carried on back of the water tank for use in swinging tank spouts to the manhole.

Now, here is a list of supplies kept on the average locomotive: a tallowpot containing an emergency supply of valve oil (because of this the fireman himself is sometimes called the "tallowpot"), a long-spouted oilcan filled with engine oil, at least five red fusees of tenminute burning duration, a dozen torpedoes, five flags (two white, two green, one red), two identical lanterns except that one has a white globe and the other a red globe, a set of packing hooks to be employed by the head brakeman in treating hotboxes, and a threegallon tank bucket to be used in carrying water for hotboxes or, in bad-water districts, to be utilized for mixing boiler-treating compound. In bad-water districts, an adequate supply of boiler compound also is carried on each trip. The Rock Island now uses a compound in powder form that is sifted directly into the tank while taking water.

Besides these things, you will find in the deck of all oil-burning engines a steel box holding not less than one-third of a cubic yard of dry sand available for sanding-out boiler flues. And each oil-burning locomotive is supplied with a sand horn. This is filled with sand; the small end is inserted through a hole in the firebox door while the engine is working hard; a heavy draft drawing the sand through the flues completes the job.

The flagging equipment I mentioned is for the use of the head brakeman or, in emergency, any member of the crew. Most brakemen also carry their own electric lantern. I need hardly add that the white and green flags could not be termed flagging equipment. The white, carried on the proper place, denotes an extra, while the green indicates a section of a regular train.—HOMER C. KEITH (locomotive engineer, Rock Island), El Reno, Okla.



WARTIME speed-up of America's railroads has shelved many old traditions. The shortage of power killed the practice

of assigning certain engines to regular runs. I've seen many locomotives come in on a "high stepper" (fast passenger run) and then, after quick, efficient servicing by shopmen, hightail out at the head of a long string of reefers. Nowadays old girls of the vintage 1910-'12 are pulling more loads faster than they were thought capable of 20 years ago. This is accomplished by straightaway passenger runs of 500 to 1000 miles, as compared with the old method of cutting out engines at the end of each division for servicing. Strategically located coal chutes and water tanks enable shop forces to give the engines the once-over while the crews are changing.

We runners don't have the time any more to give locomotives the personal attention they used to get. In days of peace, we took pride in keeping the wedges adjusted just

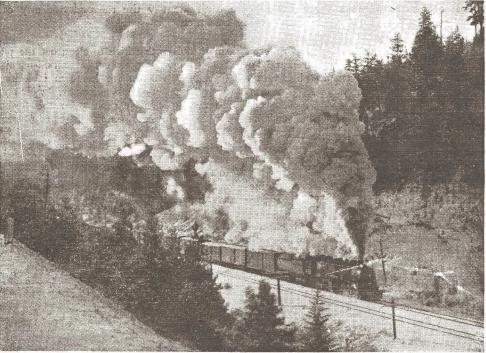


Photo taken Christmas Eve, 1939, by Richard Kindig, 3831 Perry St., Denver, Colo.

"RAILCAMERIST'S DELIGHT" would describe this shot of Union Pacific No. 3525 (2-8-8-0 type) rolling a 75-car westbound extra at about 15 miles per hour, approaching Nordeen, Oregon. Mr. Kindig tells us there was a 2-8-8-0 pusher engine (No. 3613) on the rear of this train

On the Spot

right in order to prevent pounding drivingboxes and to make the old girl ride comfortably.

Neither do we cater so much to our own comfort. Stoker-fired engines have increased the shop work because they are made to pull greater tonnage, since maximum steam pressure must always be maintained with stoker engines.

As a result, the engineers work with longer cutoff on grades in order to handle the heavier tonnage without dragging up the hill. This makes greater wear on rod bushing, crown brasses, shoes and wedges, piston packing and valve and cylinder rings. Praise to the shopmen for keeping 'em rolling under such handicaps!

When I started railroading many engineers had their own distinctive whistle tunes. I knew an old hogger on the Atlantic & West Point who entertained the countryside with Nearer My God to Thee and Way Down Upon the Suwance River. When I was a child I used to thrill to the imitation of a crowing rooster which emanated from the whistle of a Seaboard engineer. This man used to run between Savannah and Americus, Ga. I believe his name was Gilstrap-"Whistling Gil," we called him. Today the companies have such strict whistle-signal rules that it is no longer possible for folks to recognize engineers by their tunes. Besides, whistle valves are now designed so they are either open all the way or closed, thus preventing musical hoggers from opening her gradually to develop tonal variations.

We engineers do not pine too much for "the good old days." We are more interested in moving wartime traffic today. Dispatchers cheerfully work hard to handle two or three times the number of trains they used to handle before the war. Train crews try to rest in ancient maintenance-of-way cars, which often is all they can get for cabooses. Yes, we're all making little sacrifices. but the cause is more than worth it.—PAUL C. REPPARD, Sr. (engineer, Atlanta, Birmingham & Coast Railroad).

(Editor's note: Since writing the above. Engineer Reppard made more than a ''little sacrifice.'' He died suddenly, partly from injuries sustained while on duty. We will miss him. Over a period of years he frequently contributed fact articles, true tales. photos and 'Spot'' letters to this magazine. The sad news comes from his son, Paul C. Reppard, Jr.. Alantic Coast Line trainman, 312 E. Liberty St., Sarannah, Ga.)



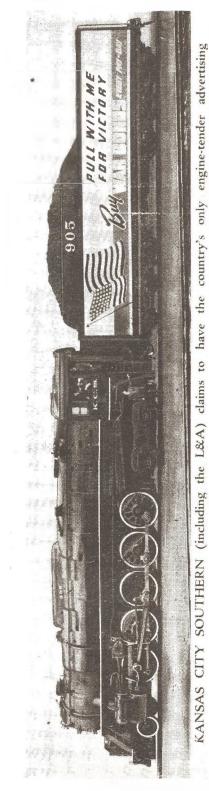
Photo from H. G. Monroe, Atlanta Journal

TOM L. COUCH, NC&StL yard engineer at Hills Park, Atlanta, Ga., regularly acts as a human ladder to help the roundhouse mascot, *Little Hop*, down to the ground after their daily 50-mile jaunt back and forth in the yards

TENDERS usually are coupled to engines. It might become embarrassing if a tank should decide to go roving by itself. I remember when such an event actually happened. Back in 1902 I was in charge of a switching crew on the old Indiana Midland. Around 9:30 one night I was making up a train on the hill at the west end of Anderson, Ind., yard, together with Switchmen Billy Martin and Price Fickle, and Engineer B. (I'm with-holding the runner's name for reasons you'll soon discover.)

We were switching cars from the main stem to two sidetracks. Local No. 16 was past due, and I followed the beam of our

Railroad Magazine



engine's oil-burning headlight to make sure the belated train wasn't steaming up the line. After kicking a couple of cars off the main, I sprinted out again to see if No. 16 was in sight. All I saw was a dark object looming ahead. I signaled my engineer to stop. thinking this object was the overdue train heading our way without a headlight burning. I ran up to the switcher and noticed her tender was missing. Sure enough, her tank was the shadowy form I had seen a dozen or so car-lengths down the main. 1 called over to Engineer B.:

"What's wrong? Your tank's broken off!"

"Oh !" he said thickly. "I wondered what I've been hittin' every time I backed up."

It seems that B.'s chief aim in life was to keep the distilleries running full blast. He sure had done all he could that day to boost the whisky sales index. Well, we shoved all the cars into a siding, chained the runaway onto the yard goat and headed back to town, without waiting for the engineer to cause further trouble. This incident can be verified by Price Fickle, one of the brakemen, now towerman at the Big Four's Madison Ave. crossing in Anderson. If any oldtimers want dope on the Indiana Midland I may be able to help. I began working in 1890 at age of 14; am now a retired engineer.-M. B. DONOVAN. 2804 Madison Ave., Covington, Ky.



CO ACCUSTOMED have Par-J sons, Kan., folks become to the sound of the deep-throated whistle at the Katy Shops sounding at 4 o'clock each day that when the whistle was blown at 3:30 on a recent afternoon for the first time and

without preliminary public notice, many actually turned their watches up a half hour.

The explanation is that the shopmen had asked the management to change their quitting time in order that they might have an extra half-hour to work in their Victory gardens. They asked that they be allowed to take a half-hour for lunch, instead of an hour, and that the extra time be taken off at quitting time. This was done and the whistle now blows at 3:30 p.m. daily.

*

LTHOUGH I don't recall ever having run the A Espee 1776 (pictured in July issue), I did handle plenty of other 1700's while on the Salt Lake Division. These old "mud-hens" were the pride and sorrow of the men unfortunate enough to run them. The 1764 was so slow that the boys said she "could run all day in the shade of one tree." I began on the "Briny" Division in 1907; later worked on the L.A. Division. In 1909 the company stopped my pay, so I stopped work. You might say I was fired. Am now 75, and working for the J. R. Watkins Co., with no



Photo by Ardell O. Hollis, Georgia Tech student; courtesy of Central of Georgia Magazine WIDE SMOKESTACK? Guess again! What you really see on this Central of Georgia engine is the feedwater heater

more fear of the callboy or brownies.— S. M. HUFFMAN, 804 S. Verdugo Road, Glendale, Calif.

A M NOW pounding brass for the Espee in the Colorado Desert. Could have have stayed in and around Los Angeles. The boys in the Superintendent's office tried to talk me out of leaving L.A. in that friendly, patronizing way they treat you when they think you are slightly nuts. They were sure I was crazy to want to come out here in summer. Right now the thermometer daily walks up to 112 degrees. But I know this country pretty well; and I wanted to get away to where the trains rolled, and out of that grief and congestion of the Los Angeles area.

This is thirty miles west of Yuma, just a station and section houses, operator's quar-

ters, post office and desert store. It is here that General Patton trained his division that has done so well in North Africa and Sicily. The Army is all about us now, units spotted out there all over the sand. The other night a company of Army engineers pitched camp next to the station and at once began construction of a 1000-foot spur. They didn't dally with it. The spur had to be completed within two days, and they worked in shifts, 24 hours a day. Then the quartermaster and railroad detachment moved in, and the cars began to arrive. Only at night do the trucks come in for ice for the camps 50 and more miles away, and there's mostly no roads at all.

This old desert has seen strange doings, but nothing like the way the Espee is moving traffic. The *Golden State*, that prize baby all shiny and monogrammed, that formerly they'd cut your head off if you delayed, occasionally runs in six or seven sections, some of them with assorted loads and equipment that suggests maintenance-of-way trains. But they make the time. A freight train that's less than a mile long looks like a bobtail, and they sneak up on you so quickly you've got to watch sharp to be ready with the board or a flock of orders to hand up as they go by. They don't whistle for the board any more, so you have to keep your eyes both ways at all times.

It has been a lot of fun. I've now some time to myself, and have that *Eddie Sand* story for you on the fire.—HARRY BEDWELL, Glamis, Calif.

* * *



I^T HAPPENS about once in a lifetime, but it happened here the other day at the Canadian National's old Bonaventure terminal.

Two cars of the same number, CNR 502819 and Pennsy 502819, were spotted at the freight sheds, much to the confusion of freight handlers and checkers. There was doubt as to whether or not the shipments were being loaded into the right car. Maybe some reader can recall a similar occurrence. —K. GRIER THORNTON, 1581 Macgregor St., Montreal, Canada.

LAST engineer on the 14-mile Woodstock Railroad in Vermont, abandoned 1933, was H. H. Paine, who was pictured in your magazine last month as leaning out the cab window, under which his name was painted in big letters. Paine is now employed as 'a school janitor. This I learned the other day from a trainman when I visited Boston, Mass., on a 48-hour leave.

I am a furloughed Canadian National

Railroad Magazine

trainman and member of the Railroad Camera Club, now being taught military photography —a course I applied because of my railcamera hobby. While stationed at Lachine, Que., I accepted an invitation to visit and have dinner with Robt. R. Brown of Montreal, who showed me much material of railway interest. Mr. Brown was most hospitable. I thank *Railroad Magazine* for his friendship. I also visited Albert Hale. Medford, Mass., who entertained me with movies of the old two-foot-gage Sandy River Line, etc. —KEITH PRATT, AC2; R217,782; RCAF, No. 8, AOS, Ancienne Larette, Que., Canada.

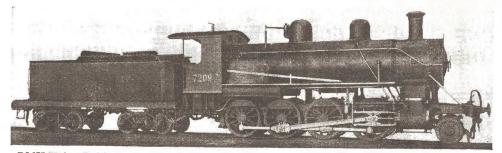


A LTHOUGH it is common practice to refer to a locomotive as "she," how few of them have feminine names! The only two engines named for sisters that have come to my attention

were Nos. 8 and 9 of the old St. Lawrence & Ottawa Ry. These were the *Lady Lisgar* (named for the wife of a Governor-General of Canada) and the *Lucy Dalton*. Both were 4-4-0 types with 17x24-inch cylinders and 60-inch drivers, built by Taunton Locomotive Works. *Lady Lisgar* in 1871, the other in 1873.

Later both were rebuilt, and about 1900 had these dimensions: cylinders, 16x24 inches; drivers, 62 inches; total wheel base, 7 feet 6 inches; diameter of boiler, 45 inches; weight on drivers, 47,000 pounds; total engine weight, 70,000 pounds; tender capacity, 2500 gallons.

The Lucy Dalton worked on the St.L&O from 1873 to Jan. 1, 1882, when the road was leased by the Canadian Pacific, but apparently kept her original name and number until April '85, when the StL&O engines were renumbered in the CPR series, the Lucy



BUILT by Baldwin for the Italian Government years before the war, this freighthauler may be in military service today, or she may have been wrecked by a "blockbuster"

On the Spot

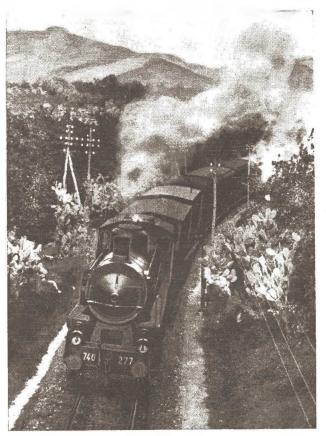
Dalton being 322. Fifteen years later she was sold to the Parry Sound Colonization Ry. and became the One-Spot. In 1896 the Colonization line was taken over by the Ottawa, Arnprior & Parry Sound Ry. (known to the boys as "Only Abuse and Poor Salary") and Lucy Dalton was renumbered 607.

The OA&PS was owned by the Canada Atlantic Ry., which in turn was acquired by John R. Booth, then Canada's richest lumberman. The two roads were formally merged in 1899, but OA&PS engines retained their old numbers. The Lucy Dalton continued as No. 607 until the CA was bought by the Grand Trunk in October. 1905. Then she became the 1319, and as such was scrapped prior to 1910. This, in brief, is the history of a famous locomotive (photo on page 149).

About 20 years ago the CPR exhibited an engine which was supposed to be the *Lucy Dalton* but actually was not. A picture of her, with Sir Edward Beatty standing in front appears in J. Murray Gibbon's *Stecl of Empire*. I have never found out what engine she really was.

The StL&O, upon which the *Lucy Dalton* first ran, began construction in 1851. Controlled by the Ogdensburg & Lake Champlain, it was intended to form part of a through line from the lower end of navigation on the upper Ottawa River to Rouses Point. N.Y., and thence to the New England states—a route over which huge quantities of lumber were expected to be hauled. For this reason it was one of Canada's few standard-gage roads at that ttime.

Car ferries were to operate between Prescott, Ont., and Ogdensburg, N.Y.—which they did, and still do. The road was originally called the Bytown & Prescott. It was to have been built to a point on the Ottawa River above the Chaudiere Falls at Bytown, whence steamboats could operate many miles up the river. But the company had not bought enough steel rails, or perhaps could not raise enough money; so the line was built



NOW IN ALLIED HANDS. The train you see here is curving through lemon groves of Sicily, enroute to the big seaport, Messina

to a makeshift terminus at Sussex Street, Bytown, about two miles below the falls. It is said that wooden rails were used for the last few miles.

The Sussex Street depot was convenient for passenger traffic, but virtually destroyed the road's usefulness as a lumber carrier. Freight had to be carted about two miles over a hill from the steamboat landing to the station.

This line was completed to Sussex Street on May 10th, 1854. A year later Bytown village was made the capital of Canada and its name changed to Ottawa. The railway, then called the Ottawa & Prescott, failed to pay for itself on account of a lack of freight traffic. In 1858 it was taken over by an iron company of Birmingham. England, which had supplied its rails in exchange for railway stock. After going into a receivership it was sold at auction in 1866 to a representative of

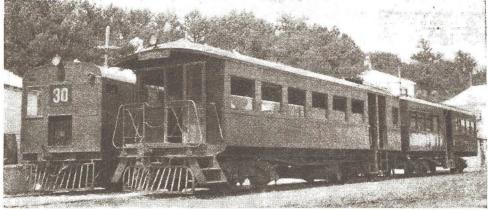


Photo from F .M. Weiss

BEFORE the Bermuda Railway was built, about 12 years ago, not even automobiles were allowed on the dreamy little island, a British colony off the North American oast. The railway is standard gage, 22 miles long; owns 10 locomotives, 18 coaches and 9 freight cars

the iron company and other bondholders. Next year it was reorganized as the StL&O; and in 1871 a branch was built to a point above the falls. From then on, the road enjoyed moderate prosperity. It is now operated by the CPR under a 999-year lease. That's about all I can dig up on the *Lucy Dalton*, but it is enough to show she was quite a boomer.—ROBT. R. BROWN (*Eastern Canadian representative, Railway & Locomotive Historical Society*), 700 St. Catherine St. W., Montreal, Canada.



A^S A MEMBER of the British Army doing railway work in the Middle East, it is

hard for me to keep up with the latest rail developments elsewhere. Recently I was delighted to be handed a half-dozen copies of *Railroad Magazine*. Each held me from start to finish. My pals also enjoy them. What I like most are the fine pictures of locomotive practice and performance. I am a motive power enthusiast, having collected books and photos on the subject since early schooldays.

Here in the war area my friends and I often hold "tent meetings" to discuss our hobby; and now, with a few *Railroad Magazines* in camp, these sessions are brightened up a-plenty. In civil life we are all British enginemen, interested in railway life over the globe.

Prior to the war I was a young spare

fireman on the London & North Eastern. In 1940, at the age 20, I joined the armed forces as a fireman. A year later I was promoted to engine driver, third class. Then I became a driver first class, and left England for duty overseas. Have had some experience in handling trains on desert track. If I can get a locomotive action shot here passed by the censor I will send it to you.

Will some reader tell me about the Union Pacific's colossus of steel, the 4-8-8-4 type No. 4000? From the photo in your Feb. '42 issue. I imagine her to be about the world's largest, most powerful engine. Wish I could take charge of her controls for a trip or two. —Cpl. FREDERICK SAVILLE, 1,923.547, Royal Engineers, 193rd Railway Operating Co., Middle East Forces.

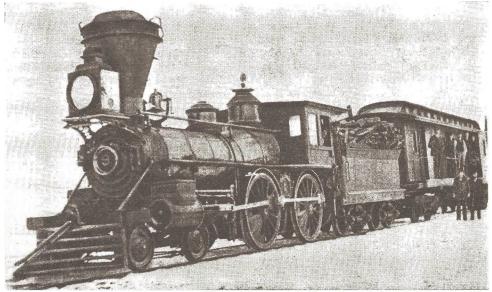
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NEW American 2-8-0 freight locos are now operating some of the heaviest freight trains

on the Great Western in England. They work turn-about with the standard GW 2800 class mineral engines on the principal freight and supply trains. U.S. engine No. 1612 came through Tyseley here at the head of an especially heavy train. The marker plate on her smokebox reads: U.S. Army, Corps of Engineers, Manufactured by American Locomotive Company, No. 70443, September, 1942.

Patients at the Military Hospital here are grateful for the old magazines, books and other reading matter I have been sending



From Paul Standard, Canadian Pacific Railway, N. Y. City

THE LUCY DALTON, built in 1873 for the St. Lawrence & Ottawa, was one of the relatively few engines named after women. Note the outside passage way in the baggage-mail car. This permitted trainmen to pass back and forth without entering the mail compartment

them, thanks to *Railroad Magazine* readers in U.S. and Canada who responded to my published appeal. It is now difficult to send parcels of magazines, but readers may still mail single copies.—ARTHUR J. RICHARDS, 21 Briarfield Road, Tyseley, Birmingham, England.

GYPTIAN CAR. The May '42 Railroad E Magazine, which has just turned up here in the Middle East where I am stationed (Editor's note: Letter was postmarked Egypt), shows a picture of an old-time state car of the Viceroy of Egypt. You ask for facts about it. This car, highly ornate with an open platform in the middle, was built in 1880 by American Car & Foundry, Springfield, Mass., as part of a royal or khedival train in the days when Egypt was under the suzerainty of Turkey. All these cars were scrapped long ago. The present train used by King Farouk of Egypt, also luxurious, was built in Italy and equipped at Egyptian shops.—AC1 K. C. LUMSDEN, 925,804, Royal Air Force, 75 OTU. MEF.

EVEN though the war is on, I manage to get *Railroad Magazine* here in South Africa almost every month, through a friend of mine. I have several photos which should interest U.S. readers. One shows a 2-6-2 American switcher, built by H. K. Porter & Co. in 1899 for Simmer & Jack Mines Ltd., South Africa. Three of these were shipped here. All three are still in service hauling ore trains. Another picture shows a 4-8-2 tank loco, built by Baldwin in 1932 for the S.A. Iron & Steel Corp. There are two of these; both work 16 hours a day.

The world's heaviest 42-inch-gage engines are the 136 in service on the South African Rys., Class 23. All are equipped with H.T.I. mechanical stokers. Weight of engine 111 tons (2240 lbs.) and tender 104 tons. A feature of all new motive power here is the extended footplate over the front of the tender. This makes a rigid foothold for enginemen, as compared with the hinged plate between the loco and tender. I want to swap good-quality South African engine photos for those of other countries.—RALPH L. HARDY, 329 Jules St., Malvern, Johannesburg, South Africa.

I FIRED the Central Vermont's *North Star* between St. Albans and White River Jct., where she was to work from on her run to Winsor. That was in the spring of 1885. The sengine (*fictured in Aug. issue*) was one of a three 4-4-0's built at St. Albans. Vt., in 1872. All had 16x24-inch cylinders and 60-inch chrivers. Their boiler decorations consisted of the throttle, a steam gage with oil bug light, three gage cocks, a blower and Hancock inspirator and a shelf over the firedoor for oilcans. No air pump. The CV was a real pike in those days, with headquarters at St. Albans, docks in New York, and rail connections to New London, Montreal, Ogdensburg and Chicago, all under CV control. The

road now is now a Canadian National branch. The *North Star* was scrapped in 1898.—E. A. EARLE, 34 Morton St., Bloomfield, N. J.

* * *

ONE of six 2-8-2 engines of Cock o' the North class (built in 1934-'36) recently has been converted into a 4-6-2 type, with 74-inch drivers. Evidently the 8-coupled drivers didn't take kindly to the curvature of the Edinburg-Aberdeen route Cock o' the North herself, originally built in 1934 with poppet valves, was later altered to Walschaert gear with piston valves.—H. S. F. SCULLERY, 4 Apperton Road, Sidcup. Kent, England.

* * *

NOW we come to the results of balloting on our September issue. Every month we conduct a straw vote to determine which stories, features, articles and departments are most popular. Some readers use the coupon on page 161. Others vote on postcards or in letters. All votes count the same. Here is the September popularity list, in descending order of amount of votes received:

- 1. True Tales of the Rails
- 2. Throttle Artist, Lathrop
- 3. On the BR&P, Moore
- 4. Light of the Lantern
- 5. On the Spot
- 6. Rails in Catskills, Gross
- 7. Along the Iron Pike, Easley
- 8. New Dispatcher, Josserand
- 9. Electric Lines, Maguire
- 10. Railroad Camera Club
- 11. Locomotive of the Month
- 12. Model Trading Post
- 13. Development of Locomotive
- 14. PC&Y Motive Power
- 15. The Callboard

PHOTO-OF-THE-MONTH, meaning the picture in our September issue which received the most reader votes, is Fred Jukes's old-time action shot of the *Overland Limited*, page 84. Runners-up include the cuts on pages 138, 132, 102 and 126. (Locomotive of the Month comes under the heading of illustrated features; it is never voted for merely as a photo.)

The Eastbound Train

- THE eastbound train was crowded one cold December day.
- The conductor shouted, "Tickets" in his old-time-fashioned way.
- A little girl sat sadly, her hair was bright as gold.
- She said, "I have no ticket," and then her story she told.
- "My father is in prison. He's lost his sight, they say.
- I'm going for his pardon this cold December day.
- My mother's daily sewing to try to earn our bread,

- While poor dear old father is in prison almost dead.
- My brother and my sister would both be very glad
- If I could only bring back my poor dear old blind dad."
- The conductor could not answer, he could not make reply.
- Then, taking his round hand and wiping the teardrops from his eye,
- He said: "God bless you, little one, just stay right where you are.
- You'll never need a ticket while I am on this car."

-Anonymous.

DOWN TO THE SEA IN BOXCARS

E VERY DAY enough freight cars to carry the daily food of half the people of the country roll into the seaports, loaded with war materials and other freight for export.

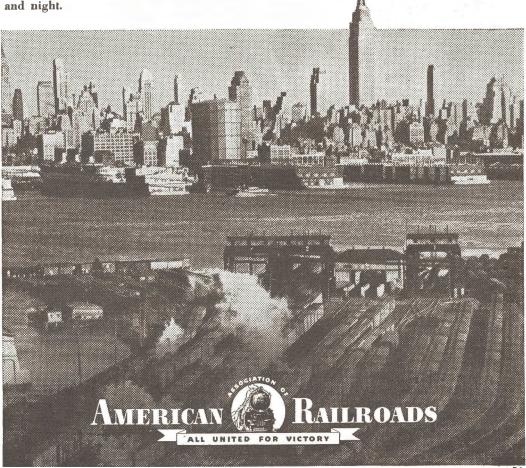
To do this part of the war job has, at times, meant rushing special trains of critical materials clear across the continent to catch convoys. It involves, every day, maintaining near each of the nation's ports of embarkation a sufficient "bank" of cars loaded with war freight to insure that no convoy shall be delayed, no ship shall fail to be loaded promptly.

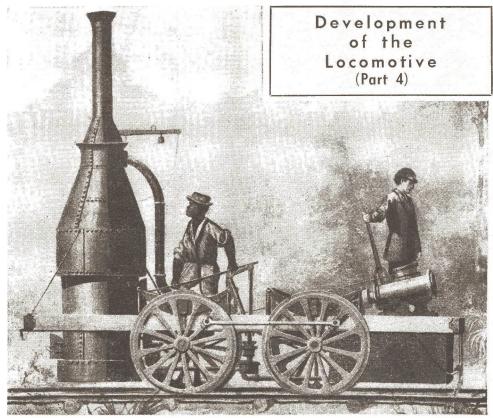
And this is but one small, though most important, part of the day's work of the railroads. The total job means starting another freight train on its run every four seconds — starting a special troop movement somewhere in the United States about every six minutes, day and night.

Those are some of the reasons why coaches and Pullman cars are scarce for ordinary travel, why trains are sometimes crowded, why travel is not always up to the high standard which you expect and which the railroads try to maintain.

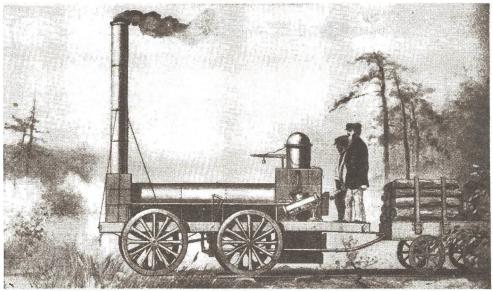
Other war needs have prevented railroads from obtaining the additional cars and engines they need, but they are using to the limit what they have and what they can get to meet the nation's demands for transportation.

Like other resourceful, self-reliant, American enterprises, the railroads are subordinating everything else to victory — to maintaining the freedom that has made America strong.





AFTER her boiler had exploded, the Best Friend of Charleston was rebuilt in 1831 along drip-percolator lines, as illustrated here. The original engine was pictured in our August issue



Winchell Collection prints from Milton Bernstein, chairman, Railroadians' Museum Committee THE WEST POINT (1831) was an experiment in horizontal boilers

Railroad Camera Club

Railroad Camera Club

TTEMS sent to this department are pub-L lished free, and in good faith, without guarantee. Write plainly on a separate sheet or card containing your name and address. Do not bury your Switch List entry in a letter dealing with other subjects. Briefly include all essential details. Some entries are too vague to get results.

Redball handling is given to each item we get the first ten days of each month, if accompanied by a Reader's Choice coupon (clipped from page 161 or home-made).

Use these abbreviations: pix, photos; cond., condition; ea., each; elec., electric; env., envelope; esp., especially; incl., including; exc., except; info., information; mag., magazine; n-g., narrow-gage; negs., negatives; p.c., postcard; pref., preferably.

And these photo sizes: Size 127-15/8x21/2 inches; Size 117-21/4 x21/4; Size 130-27/8x47/8; Size 118 or 124-31/4x41/4; Size 122 or pc.-31/2x51/2; Size 116-21/2x41/4; Size 616 same as 116 on thin spool; Size $120-2\frac{1}{4}\times3\frac{1}{4}$ inches.

The term tts. always refers to public timetables-unless preceded by emp., when it means employes' (operating) timetables.

(R) indicates desire to buy, sell or swap back issues of Railroad magazine or its predecessors, Railroad Man's or Railroad Stories. (Specify condition of magazine.) (*) indicates juice-fan appeal.

* *

WHEN writing to anyone listed here, again let us remind you to enclose a stamped envelope for reply. If you do not get an answer, it may be because the man involved was called away for military service.

*

WARNING: Military authorities have just issued a drastic ruling which forbids unauthorized persons to carry cameras onto beaches or waterfronts anywhere on the U. S. eastern seaboard, or to take coastal. pictures in that area, under penalty of two years' imprisonment.

The Switch List

GEORGE J. ABRAMS, 80 McLellan St., Dorchester, Mass., wants booklet *The Ry. Industry*; also info. on duties of frt. traffic solicitor; also wreck pix, any road, esp. New Haven. (*)JIM ADAMS, 3525 Milton Ave.; Dallas, Tex., sells and trades trolley and steam pix. Send stamp for list.



Sit back in your easy chair and enjoy the finest collection of railroad photos you've ever seen. Views of engines, rolling stock, track, clear cut detail, interesting perspectives in natural backgrounds and printed on slick paper that increases the brilliance and richness of the photos. Volumes are in modern ring binding and printed on one side to permit easy removal for scrap book or framing. The best photographers, amateur and professional, have contributed their combined skills to bring you the most complete picture story of American railroading. Your money is well spent at \$1.00 per volume or \$4.00 for set of 4 volumes. Eastern. Midwestern. Farwestern or Colorado.

KALMBACH PUBLISHING COMPANY

1029 N. 7th Street, Milwaukee 3, Wisconsin

component Clip Coupon New ____ KALMBACH PUBLISHING COMPANY 1029 N. 7th St. Milwaukee 3, Wisconsin Enclosed is \$..... Send me at once: Set of four albums, \$4. Album I, Eastern. Album 2, Far Western. Album 3, Midwestern. Album 4, Colorado.) ううう Name Address City and State

HELP KIDNEYS if back a

Do you feel older than you are or suffer from Getting Up Nights, Backache, Nervousness. Leg Pains, Dizziness, Swollen Ankles, Rheumatic Pains, Burning, scanty or frequent passages? If so, remember that your Kidneys are vital to your health and that these symptoms may be due to non-organic and non-systemic Kidney and Bladder troubles—in such cases Cystex (a physician's prescrip-tion) usually gives prompt and joyous relief by helping the Kidneys flush out poisonous excess acids and wastes. You have everything to gain and nothing to lose in trying Cystex. An iron-clad guarantee assures a refund of your morey on return of empty pack-

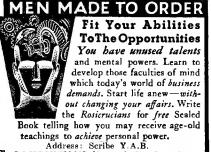
money on return of empty pack-age unless fully satisfied. Don't delay. Get Cystex (Siss-tex) from your druggist today. Only 35c. ystex on't

Why put up with years of needless discomfort and worry? Try a Brooks Automatic Air Cushion. This marvelous appliance permits the opening to close, yet holds reducible rupture securely, comfortably-day



and night. Thousands report amazing results. Light, neat-fitting. No hard pads or stiff springs to chafe or gouge. Made for men, women and children. Durable, cheap, Sent on trial to prove it. Never sold in stores. Beware of imitations. Write for Free Book on Rupture, no-risk trial order plan, and proof of results. All correspondence confidential. BROOKS COMPANY, 159-G State St., Marshall, Mich.





The ROSICRUCIANS, (Amorc) . San Jose, Calif.

C. F. H. ALLEN, 284 Maplewood Ave., Rochester, N. Y., wants p.c. size pix McC. B&M. Offers same size B&A, CNR, CPR, CV, NYO&W, D&H, etc. (Editor asks: What subjects, Mr. Allen? Locos, trains, stations, cars, human-interest shots, right-of-way scenes, or what? what?)

́WМ. Cpl. WI ment, Ft. I. BARNES, ASN 37036298, Signal Detach-Warren, Wyo., wants latest UP loco roster with specifications

with specifications. (R*)G. L. BARRETT, 136 Westview Ave., Syracuse, N. Y., offers May, July 1916 and Aug. '17 *Railroad* Man's Magazine; also various issues '29 to '32, all good cond., unclipped; in trade for good interurban negs. (*)CPL D. BECKER, 36,726,693, Sig. A. W. Co. 761, Drew Field, Tampa, Fla., will buy size 616 open-trolley pix of New Haven, Conn.; Wildwood, N. J.; Phila., Pa: also natriotic trolleys various cities

Drew Field, Tampa, Fla., will buy size 616 open-trolley pix of New Haven, Conn.; Wildwood, N. J.; Phila. Pa.: also patriotic trolleys, various cities. (R)G. R. BOEDDENER, 19832 Roslyn Drive, Rocky River, O., will pay 25c ea. plus postare for Railroad Magazine of Jam, Feb., Apr., Oct., Nov. 1940; Jam., Feb., Apr., July, Aug. '41. Will buy any one issue Railroad Stories, also any 2 issues Railroad Man's Magazine, older the better. Only perf. cond., unclipped. Write first. Also wants info., maps, pix on Sullivan Pass Ry., esp. data on loco No. 2. BRUCE BOWDEN, 26 Sterling Road. Waltham, Mass., wants B&MIRR pix; send list incl. no. and wh. arrangement: also B&M rosters. emp. tts; state price. Will trade or sell size 116 prints; list and sample 10c. JAMES BOWIE. 637 St. Marks Ave., Brooklyn 16, N. Y., offers cash or size 116 prints in exchange for same size prints; or will eell prints for ea., 25 for \$1. Many 8x10 pix, 15c ea. Send 6c for Jist. (Editor's note: Is this supposed to be a guessing contest, Jim? Do you specialize in juice, steam or both?) (*)W. J. E. BROSCHART, 63-46 Fresh Pond Rd., Ridgewood, N. Y., will trade rosters of 300 U. S. trolley lines. also rare pix; wants rosters. NY roads, esp. HV. NY State Rys., IRC, RTCo., CM Tract., P&WF, Orange Co. Tract.; also pix of horse- and cable-cars. early 'el' lines in Bklyn. (R)TOM BROSNAHAN, Pierceton, Ind., wants circus books. Offers cash or 110 issues Rai/road Magazine, 1935 to '43; all but 2 unclipped and have covers.

(R)TOM BROSNAHAN, Pierceton, Ind., wants circus books. Offers cash or 110 issues Railroad Magazine, 1935 to '43; all but 2 unclipped and have covers.
(R'PIERCE L. BROWN, Box 242, Sapulpa, Okla., will pay good price for Dec. '34 Railroad Magazine, good coud. unclipped. Write first.
(*)JOHN BRUNNER, 571 Ellicott St., Buffalo, N. Y., trades Buffalo car tokens for those of other cities.
(R)EHERE UDER, 1621 N. Edward St., Kalamazoo. Mich., will sell all issues Railroad Magazine for 1930, '31, '32, '33, '38, '41, '42. Make offer. Wants to buy gold loco watch charm. (Editor's note: You forgot to state condition of magazines.)
(R)CLIFFORD BULLIS, 68 N. Race St., Greenville, Pa., will pay \$3 for Feb.-March, Aug.-Sept. '33 Railroad Magazine; also will buy copies before '32 at 50e each. Write first.

(*)JIM CARPENTER. 4615 MacArthur Blvd., (*)JIM CARPENTER, 4615 MacArthur Blvd., Oak-land 2, Calif., wants clear size 116 negs. of San Diego Elec., Sac. N., Eureka Mun., Stockton Elec., Fresno Trac. San Jose, for which he offers same size negs of San Francisco and Oakland. New ploto list of over 300 pix plus sample print 20c. Wants pix of Calif. steam, short, n.g. and lumber lines, sizes 116,122. Swaps tis., guides, tickets, trolley transfers of his area for vource yours.

tis., guides, tickets, trolley transfers of his area for yours.
(R)JAMES BUTLER, 9234 Commercial Ave., Chicago. wants Feb. 35 Railroad Magazine or pages from it containing article When the Circus Went West.
WM. CLASON. 10106 Curran Ave., Cleveland 11. Ohio, offers \$2.50 ea. plus postage for any of these starts representations of the start o

BOB CUTTER, c/o FPHA, P. O. Box 47, Bath, Me.,

RAILROAD CAMERA CLUB is open to all who collect railroad or streetcar pictures or other railroadiana such as timetables, train orders, trolley transfers, magazines, 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-addressed stamped envelope. If you don't want to clip page 161 make your own coupon. Address Railroad Magazine, 205 E. 42nd St., New York City, 17. Tell us what you want or what you offer; otherwise your name will not be printed here.

offers p.c. pix from boat collection; p.c. pix of eruiser launching at Bath Iron Works, 10c plus postage. Also collects uniform buttons, passes, tickets, etc. (R)H. I. DULANY, JR., 509 67th Pl., Benning Sta., Washington, D. C., will buy Railroad Magazine, May, Nov. '38, Jan., Mar., May, July, '39, Apr., May, Sept., Dec. '40, Apr., May, July, Oct., Nov. '41, Jan. '42; also any '37 and before

Autor 40, Apr., May, Juny, Langer 40, Apr., May, Juny, 201 any '37 and before. J. R. DUNHAM, Box 745, Vista, Calif. J. R. DUNHAM, Box 745, Vista, Calif. J. R. DUNHAM, Box 745, Vista, Calif. will trade 5. R. De MIAM, Dox 143, Vista, Callt, will trade size 116 pix of AT&SF locos: 1960 (2-8-0), 3119 and 3148 (types of 2-8-2s) for size 116 pix of locos all types and roads; will trade size 116 and 120 pix all types rolling stock for loco pix. Will buy size 116 negs. of locos. Send list.

hst. (*)Pvt. JOE DIAZ, 36729536, 850th Engineers Co., A.P.O. 644, New York City, wants good pix Detroit St. Rys., Cincinnati St. Rys., 3rd Ave. System, Com. Co., Hershey Transit, LV Transit, Phila. Suburban Co., Pub. Serv. Rys. of N. J. Also wants to hear from trolley fans in England. DON DUBOIS, B&O fireman, 254 N. 10th St., East St. Louis III. wants to hear from any fireman or conj.

St. Louis, III., wants to hear from any fireman or engi-neer with whom he worked. (R)ERIC EDWARDS, 53 Gamble Ave., Toronto, Canada, wants Sept., Dec. '37, Feb. '43 Railroad Maga-

zine.

(*)JOHN ERICKSON, 16 Lincoln Pl., Brooklyn, N. Y., offers emp. tts. of PT. NY and Phila. div. PRR. NY&LB. Wants pix of PRR, LIRR, New Haven power, LVT, Phila. & W. and Phila. Suburban Transit. Cash or trade

LVI, Phila. & W. and Phila. Suburban Transit. Cash or trade.
(R)CARLTON B. FITCHETT, JR., 866 Main St., Poughkeepsie. N. Y., wants to hear from anyone with complete file '30 and Jan. to Apr. '31 Railroad Man's Magazine, who could have photostatic copies of pages made. All replies answered.
STANLEY FRENCH, Livermore Falls, Me., offers train orders, loco and train pix, tts. emp. tt. of AT&SF, Los Angeles Div. List sent on request.
(R)R. WESTON GISH, 2 Silver Lane, Kirkwood 22, Mo., wants Railroad Magazine entire '33 and before, good cond., also Baldwin Locos., R&LHS Bulletin on SP; will buy, or give MoP loco pix size 616 in exchange. R. H. HEIDERMANN, 381 Edward St., Burlington, Wis., will buy tts., tickets, passes, train and loco pix from Wis. Cen., C&NW, CM&StP, MLS&W, other Wis. roads prior to 1910. Wants: LS&MS 1875-76 tts. with schedule of Fast Mail.
GEO. HINDS, 1030 Spruce St., Detroit 1, (Mich. Cent. brakeman), will trade single or complete sets of MC Bay Citum Div. to rester for Mail.

brakeman), will trade single or complete sets of MC Bay City Div. tr. orders for U. S. or Canadian loco, train pix, tr. orders, emp. tts.; has also '42 NYC Toledo Termi-nal Dist. emp. tts. to trade. (R)JIM HULSMAN, LV Frt. Sta., Mahanoy City,

Pa., will pay 40c for Apr. '35 Railroad Magazine with LV roster, good cond.

12., will pay be fold and phy. 56 Montelair Ave., Oakland, (*)DICK JENEVEIN, 566 Montelair Ave., Oakland, Calif., sells Calif. elec. and steam pix, 7c ea. New 20 pp. list for dime; Key System Shipyard Ry. tt. for

pp. list for dime; key system Singvara ky. to. for Stamp. C. S. JOHNSON, 237 Orchard St., Elizabeth, N. J., will buy pix or data of D&H locos, rolling stock, rights-of-way, wants pix Schoharie Val. No. 6. Write first. (*)HOWARD E. JOHNSTON, president North Jersey chapter, NRHS, is author of illustrated feature article on "Central Jersey Traction Co.," with roster, in July





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1920 Sunnyside Avenue Dept. 7388, Chicago 40, Ill. 156

'43 issue The Marker, 8 pages, printed on good paper, 15c, obtainable from Matthew Vosseller assoc. editor, 912 South Ave., Plainfield, N. J.
(*)KEN KIDDER, 1948 Pacific Ave., San Francisco, trades negs., size 616, 118 Western short lines, steam or observed.

tradies negs., size ono, no research instrumer, elec.
F. O. KELLEY, 1217 Huntoon St., Topeka, Kan., offers new copy, AT&SF Instructions to Enginemen, 230 pp. illus, \$1 ea. or trade for 616 negs, esp. m.g. D. H. KIRKWOOD, Foxburg, Pa., (B&O gent) wants print or neg. of D&RG loco 150.
JOSEPH LAU, Baltimore, Md., will trade st. car foundars for others or RR tkts. (Editor's note: Street

JOSEPH LAU, Baltimore, Md., will trade st. car transfers for others or RR tkts. (Editor's note: Street address, Joe?

(R)HAROLD LEWIS, 3207 21st St., S. E., Washing-ton, D. C., will buy June, July '34 Railroad Magozine, both copies, 60c.

(R)JACK MACK, P. O. Box 212, East Orange, N. J., wants Aug. '33 Railroad Magazine with DL&W roster; state price. Trades PRR articulated loco pix, size 116,

wants Aug. '33 Railroad Magazine with DL&W roster; state price. Trades PRR articulated loco pix, size 116, for all pix Lackawanna eqpmt. (*)BILL MALCOLM, 140 Sherman Ave. S., Hauilton, Ont., Canada, has size 616 pix Hamilton St. Ry., GRR, LE&N, Kitchener & Waterloo St. Ry., NStC&I, Mont. Tramways, QRL&P local and int., Levis, M&SC to trade or sell for FtDDM&S, ITS, Texas Elec., Can. elec., esp. old Hamilton roads, size 116. Will buy elec. rosters. Pfc. GEO. MEYER, Hq. Co., 131 Inf., Ft. Bradley, Mich., wants portfolio of Pennoyer railroad paintings. TOM MOHR, 5237 N. Moody Ave., Chicago 30, wants loco pix: NYC Mercury; Alton, Abraham Lincoln; GTW 6405, NYNH&H 1400, PRR 3768, size 8x10 or larger; state price.

state price

CARL NEITZEL, Box 156 A, RFD 3, Olympia, Wash., sells size 620 pix of NP, UP, SP locos, 5c ea., or trade; list and sample, 10c; wants size 616 or 620 steam negs., any road.

any road. D. H. NOBLE, 146 Halsey St., Brooklyn, N. Y., will buy rosters, emp. tts., esp. short Eastern pikes; wants back copies, Baldwin Locos. J. R. O'ROURKE, 515 Columbus Ave., Dunkirk, N. Y., has new list NYC, PRR, Erie, NKP, misc. pix (sizes 616, 620), 5c ea. or trade for D&W, WP, same size; will sell 616 size set locos (1100,-04,-06,-07,-09,-10 G-43, 2-8-0) of Dunkirk, Alleg. & Pitts. (now NYC), 25c; wants old SP, PBR pix PRR pix

LAWRENCE PALMER, 26 Chapel St., Auburn, N. Y

LAWRENCE PALMER, 26 Chapel St., Auburn, N. Y., (mailboy at NYC frt. yds.), wants to hear from U. S. or foreign railfans about his age (13). (R)WALTER REDMAN, 8781 Arcadia Ave., Detroit, Mich., wants Jan., Mar. Sept., Nov., Dec., '30 copies *Hailroad Magazine*; also Feb., Apr.-June, Aug., Oct., Dec. '32; Jan., Mar. '33; Feb., Oct. '34; Jan., Aug. '35. Will trade *Railroad Magazine* of Aug. '36, Apr., Ang. '37, Dec. '39, May, Dec. '40, or 5 copies any B&O, C&O, SF emp. mags., for any of above, good cond., or quote cash price. Will by 1890 Off. *Guide*. (*)BILL REDDY, 21 Chamberlain Dr., Buffalo 10, N. Y., will trade Roch., N. Y., trolley-subway tt. for pub. tt. from any elec. Ry. while they last. (R) Mrs. PAUL C. REPPARD Sr., 311 W. Central Ave., Fitzgerald, Ga., widow of AB&C locomotive engi-neer who died Aug. 2. wants to dispose of old copies of *Railroad Magazine* left by her lusband. These are: June '16, and all of 1934 to 1940 inclusive, except Jan.,

neer who died Aug. 2, wants to dispose of old copies of Railroad Magazine left by her husband. These are: June '16, and all of 1934 to 1940 inclusive, except Jan... Mar., June, Sept., '34; Feb., Sept. '35; Dec. '36; June '37; Feb. '40. Make offer for entire lot ol arge number: widow prefers not to sell single copies, except June '16. (*)ERIC SANDERS, 3130 Fetton, San Diego, Calif., will trade set of 9 116 elec. pix. SDER eqpnt. for 9 116 elec. pix (not Calif.) Write first. (R) MELVIN SCHRADER, Lind, Wash., wants to hear from fans age 15; can give info on NP. Will buy old copies Railroad Magazine. (R) BEN SCOTT, Willacoochee, Ga., wants Dec. '38, June '41 Railroad Magazine. Write first. J. W. STOVALL, 915 S. Main St., Roseburg, Ore., will sell emp. tts. of NKP, NYC, SAL, Rdg., SP. Will sell Ry. Loco. Engineering, Dec. '09, June '24; Ry. Re-riew. May '22, FEB. Mar. '23; Loco. Eng. Jour. May '37; Model Craftsman, Nov. '38, Jan. '39; Model Rail-roader June '39; Model Builder. various issues. Pvt. WARREN D. STOWMAN, A.S.N. 33,478,498, Co. M, Camp Murphy, Fla., wants to hear from railfanettes. 215, coal car 216, caboose 517, track, switches, etc. W. J. TRATHEN, 3129 Cotharin, Flimt 5, Mich., has 1898 Interocean Almanac; wants Simmons-Boardman Loco. Encyclopedia, any ed. or steam engine from pop-orn wagon. (*)L, Y. TRIPP, SpT2/c. USNTS Unit H-1. Samp-

corn wagon. (*)L. Y. TRIPP, SpT2/c, USNTS Unit H-1, Samp-son, N. Y., wants to hear from former correspondents

Railroad Camera Club

and fans offering colored p.c. views of elec. and steam lines

lines. (R)NOLAN TUCKER, Box 1016, Rte. 1, Del Pasa Heights, Calif., will buy issues of *Railroad Magazine*, Sept. '35, Sept.-Nov. '38, Apr. '42, Apr. '39, any cond. GEO. W. WALRATH, V-Pres. N. J. Chapter, NRHS, is author of complete illus. history of "The White Line," Jersey City, Hoboken & Patterson St. Ry... in Oct. '43 issue The Marker. Copies 15c ea. from Matthew Vosseler, assoc. ed., 915 South Ave., Plain-field. N. J.

Matthew Vosseler, assoc. ed., 915 South Ave., Plain-field, N. J. MAX WARNER, 150 S. Santa Fe St., Hernet, Calif., will trade SF tr. orders for orders anywhere; wants to hear from OS men on learning telegraphy. ALLAN WHITAKER, 923 Woodward Dr., Charleston 2, W. Va., wants recent ed., *Loco Encyclopedia*, also *Ry. Age* and pix of locos built since '38. J. F. WILLIAMS, RN, 120 Kenneth Rd., Chadwel! Heath, Romford, Essex, England, wants to hear from U. S. and Canadian faus; can exchange info. about British railways. British railways

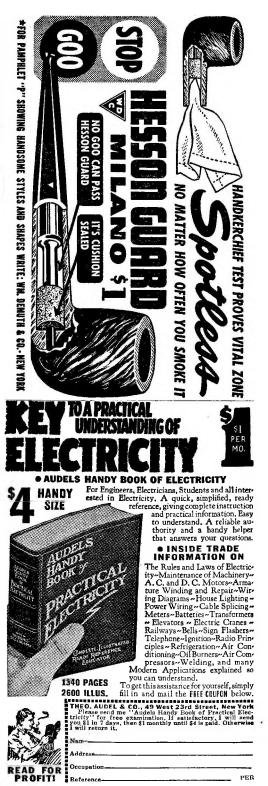
(R)KING WILLIAMS, c/o D. L. Boardman, Middle-ton, Mich., wants copies Railroad Magazine and Traine.

ton, Mich., wants copies Railroad Magazine and Trains.
State price, cond.
GEO. H. WITHAM, Metro. Life Ins. Co.. 1119 Stahlman Bldg., Nashville, Tenn., wants info. on Tennessee Central for history he is writing.
Pvt. LESTER WELCH 37453142 Co. H, 354 Inf., APO
89, Camp Carson, Colo., wants circus RR pix, size 116.
HERBERT WOLTERS, 128 Chestaut St., East Orange, N. J., offers size 616 pix, CN3100, 4100, 6100;
C&A 556; PRR 1588, dull finish, 20c; Erie 5016, Va. 700, Size 1/5/84/4, 10c ca:, sells 616 negs. Soo 494, 2700, Rock Is., 915, 2310, LV 2012, 15c ea., also LMS Royal Scot complete 25c. Wants circus pix since '40. Will trade; write first.

S/Sgt. RUDOLPH ZAC, 94th Gen. Hospital, Camp Berkeley, Tex., will exchange various size pix for auto radiator name plates and emblems. Send list. (*Editor asks: What kinds of pix do you offer, sergeant?*) (*)ROBT. ZINSMEISTER, 3848 East Street, Pitts-burgh 14, wants any size pix or negs., Pitts., Harmony, Butler & Newcastle Rys., Pitts., Mars & Butler Ry.; Butler Rys. (except cars 27-34), and Beaver Val. Tract.

Canadian Streetcar Abandonments

Belleville, Ont	1905
Brandon, Man(?)	1940
Brantford, Ont	1940
Chatham, Ont	1930
Guelph, Ont	193 9
Kingston, Ont	1930
London, Ont	1940
Moncton, N. B.	1931
Moose Jaw, Sask	1928
North Sydney, N. S.	1926
Oshawa, Ont	1939
(Still has freight service)	
Peterboro, Ont.	1927
St. Stephen, N. B.	?
St. Thomas, Ont.	1926
Sarnia, Ont	1931
Sault Ste. Marie, Ont	1941
Sherbrooke, Que	1931
Three Rivers, Que	193 3
Welland, Ont	1930
Windsor, Ont	
	1939
Yarmouth, N. S	1939 1937



Gas on Stomach

When excess stomach acid causes painful, suffocating gas, nour stomach and heartburn, doctors usually prescribe the fastest-acting medicine known for symptomatic reliefmedicines like those in Bell-ans Tablets. No laxative, Bell-ans brings comfort in a jiffy or double your money back on return of bottle to us. 25c everywhere.



Free for Asthma During Winter

If you suffer with those terrible attacks of Asthma when it is cold and damp; if raw, Wintry winds make you choke as if each gasp for breath was the very last; if restful sleep is impossible because of the struggle to breathe: if you feel the disease is slowly wearing your life away, don't fail to send at once to the Frontier Asthma Co. for a free trial of a remarkable method. No matter where you live or whether you have any faith in any remedy under the Sun, send for this free trial. If you have suffered for a lifetime and tried everything you could learn of without relief; even if you are utterly discouraged, do not abandon hope but send today for this free trial. It will cost you nothing. Address

Frontier Asthma Co. 462 Niagara Street, 490-K Frontier Bldg. Buffalo, New York



The 11.69 Express

 \mathbf{D}^{O} YOU want a railway story While you wait for the midnight train?

Well, it's a story I have told before, So I'll tell it once again.

I was only a brakeman at the time, sir, On the New York Midland line, But I shall never forget the mishap To the 11.69.

The train ran upon the rails, sir, And the rails ran upon the ground, The engine was full of steam, sir, And the wheels were going around.

What made the wheels go around? That is more than I can say, But the signal was dead against us And we went right on our way,

Well, after I'd finished my pipe, sir, I strolled out on the line And gazed **on** the tattered wreckage Of the 11.69.

The coaches were all in a heap, sir, Though why I could not tell, And the passengers lying around us Were none of them looking well.

We stumbled across the fireman, I thought that he was dead, For his body and legs were missing And we couldn't find his head.

I picked my way through the wreckage And got to the heart of the smash.I busied myself with the injured And helped myself to their cash.

The doctors and the nurses Were around us by the score And the police were an hour late, sir, As they always been before.

Then two of us lifted the engine, And placed it on the line, So here's your up train down, sir, The 11.69.

-Anonymous.

The Train Delayer Was at Fault

JOSSERAND gives this answer to his train-order problem of last month.

The dispatcher would be very foolish to do other than thank the crew of Extra 5133 West for their inquiry. Under Orders 81 and 82, a lap of authority exists between the two extras, inasmuch as both hold orders to run extra between H and F with no provisions for their meeting; there being nothing to hold Extra 5133 West at F. The Dispatcher should have worded Order No. 82 like this: Eng 5133 run extra A to H and has right over Extra 2477 East A to F take siding not leave F unless Extra 2477 East has arrived and wait at etc.

Had Extra 2477 East not been delayed this situation would not have arisen; however, since trains may be delayed unexpectedly any time, anywhere, orders must be issued so no loopholes exist.

Model Trading Post

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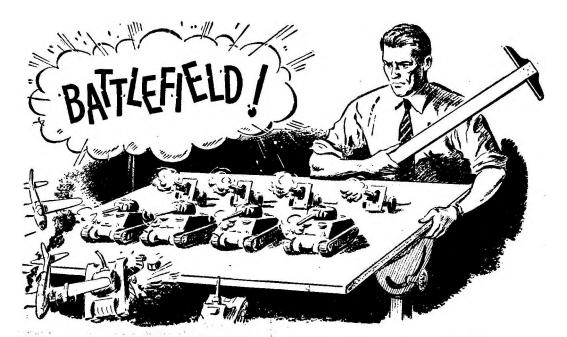


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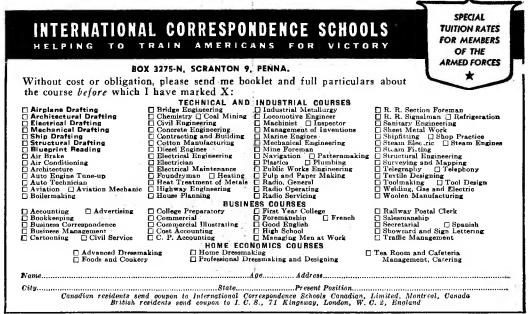


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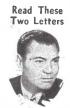
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