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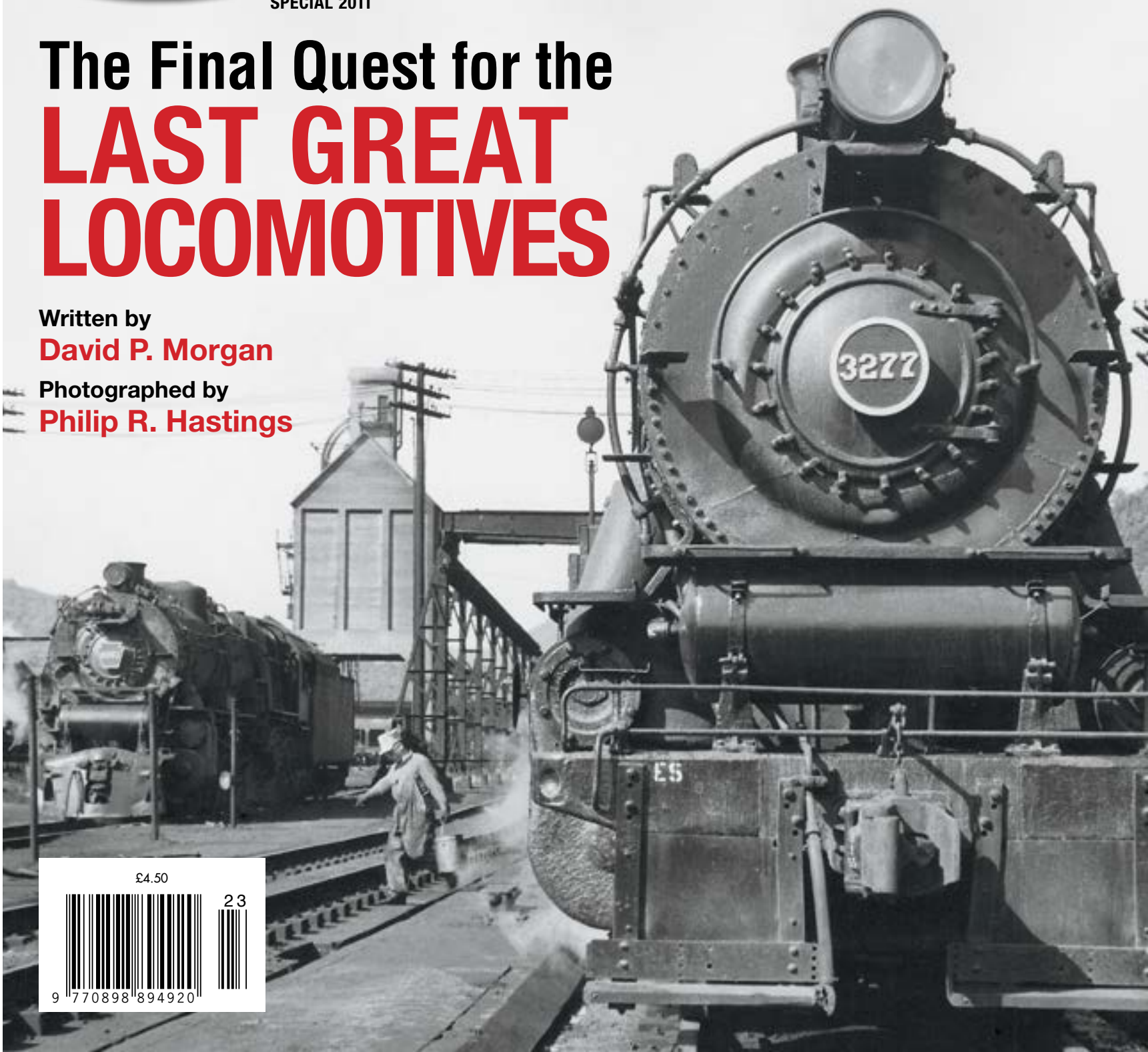

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A15K9K

Pennsy K4's congregate on the New York & Long Branch at Bay Head, N.J.

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VOLUME III: 1955

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Classic Trains MAGAZINE

KALMBACH PUBLISHING CO.

Through the looking glass. Side view mirror of Morgan's Ford captures Hastings and his Rollei as the photographer concentrates on Reading 215 racing PRSL No. 761 near Millville, N.J.

The Stuff of Legend

Somewhere on the back roads of New Jersey, near Vineland on a September 1955 Saturday afternoon, a tan 1953 Ford with Wisconsin tags keeps pace with a short train on the parallel tracks of the Pennsylvania-Reading Seashore Lines. The young man at the wheel of the Ford divides his attention between keeping the car on the road and concentrating on the fat-boilered Reading G-3 Pacific ambling along side. Perched on the back seat, the passenger aims a twin-lens Rolleiflex over the driver's shoulder and frames Reading 215 in the viewfinder.

By all appearance, there's nothing remarkable or out of the ordinary about the homebuilt Reading 4-6-2 and single coach handling the regular midday run of PRSL train 761 to Millville. But the guys in the Ford with out-of-state plates know otherwise. TRAINS magazine editor David Morgan and photographer Philip Hastings know that dieselization has passed the point of no return, and that Reading Company 215, her class, and her kind are on borrowed time. They know that steam's finest hour is over, and that there's a certain urgency and undeniable importance to their mission to find, photograph, and report on not just a changing technology, but a vanishing way of life.

So as Reading 215 whistles for a country crossing, Morgan pushes down on the Ford's accelerator pedal, Hastings pushes the shutter release on the Rollei, and they roar off for Camden, Point Pleasant, and Bay Head, ... and on to Maine, New Hampshire and Vermont, and Canada. In search of steam, they're in the home stretch of a quest that began in Montreal in November 1953, and would wind up there, three trips and nearly two years later, in September 1955.

It's the stuff of legend. Traveling by train, plane, steamship and car ferry; racking up uncounted thousands of miles on the editor's Ford, cranking roll after roll through the doctor's faithful Rollei, and taxing the finances of publisher Al Kalmbach's struggling monthly, Morgan and Hastings chronicled the end of an era in a collaborative work that set a new standard in railroad photojournalism.

First serialized in the pages of TRAINS magazine between April 1954 and August 1957, the 30 Morgan-Hastings stories that comprised a trilogy entitled "In Search of Steam," "Smoke over the Prairies," and "Steam in Indian Summer" have stood the test of time. They've inspired generations of writers and photographers and prompted pilgrimages to such unlikely places as Pillager, Minn., Brigden, Ont., and Mattoon, Ill., to a diamond at Shelby, O., and, of course, to Chipman, and Norton, N.B. For my money — and I doubt that I'm alone on this — they're as good a read now as they were when they rolled off the press some six decades ago.

IN SEARCH OF STEAM marks the third time the collaboration has been published. It's a good bet, too, that this won't be the last.

One of the luxuries of producing an edition such as this is the ability to include previously unpublished images. In doing so, it's also allowed us to correct an oversight that has persisted through previous publications of the work.

To our good fortune, Hastings included Morgan in his subject material throughout their trips. The editor appears in silhouette on the platform at Sherbrooke, Que., in portrait with notebook and CNR 4-6-0 1017 in the roundhouse in Riviere du Loup, Que., and at the wheel of the Ford in hot pursuit of doubleheaded Wabash Moguls near Mt. Sterling, Ill., to cite just a few examples. There are delightful, almost Hitchcock-like DPM appearances, too. He's there, holding a flashbulb to illuminate workers in the DM&IR shops in Two Harbors, Minn., and standing at the foot of the tower stairs in Shelby as the shirtless trainman of NYC Extra 3005 East leans out from the caboose platform to inspect the train. By my count, there are nearly two dozen such DPM appearances.

However, through the entire series, the man behind the camera remains invisible ... until now, that is.

Look again at the image of Reading 215 included here; an image that by all indications Phil neglected to file with the story, and may never have printed. The camera is focused on the G-3 loping along the Seashore Lines toward Millville, but the photographer and his Rollei are framed in the side-view mirror of the Ford. In a single frame, Phil creates a perfectly composed self-portrait of photographer and subject that simultaneously captures the very essence of the legendary Morgan and Hastings search for steam. We'd expect nothing less of the good doctor.

Every genre has its epic, its master work. David Morgan and Philip Hastings' incomparable trilogy is ours.

Greg McDonnell
Editor

STEAM: IT FARES BETTER IN THE FLATLANDS

One look at a diesel's tractive force curve and you'll know why Ohio is still a steam stronghold

The diesel locomotive is possessed of so many economic virtues that it is difficult to assess their relative values. Is it the fact that you can put 1000 miles a day on a diesel? Or is it the enormous savings a railroad reaps when it discards turntables and ash pits and blacksmiths and water towers forever? Perhaps it is the unprecedented work that a diesel squeezes out of each $1 of fuel oil — is that it?

More likely, the answer lies in what a diesel's tractive force curve looks like on a graph. A diesel inherently digs in with great force, then its power tends to diminish rapidly as speed increases. Let us say that a 6000-h.p. four-unit diesel and a 6000-h.p. articulated steam engine both can deliver that drawbar pull at a common speed, maybe 30 mph. Yet, when starting a train the diesel will exert in excess of 200,000 pounds tractive force — or double that of the steam engine.

Is it any wonder, then, that the road freight diesel (specifically, Electro-Motive's famous 5400-h.p. FT) sold first to the mountain roads, to the Santa Fes and Boston & Maines and Rio Grandes. It was, and is, a mountain engine, a tonnage mauler, a locomotive that could grunt.

Conversely, steam has fared best in the flatlands. If the grades are moderate (a 1 per cent climb requires more than six times as much effort to overcome train inertia as level track), a modern steam engine may be able to move all the tonnage that schedules and siding lengths permit, and it follows that a railroad must look beyond dynamometer-car readings for the savings of dieseldom. Chesapeake & Ohio was running 160-car coal trains into Columbus when Electro-Motive was peddling doodlebugs, and as these lines are written Norfolk & Western 2-6-6-4's are rolling toward Lamberts Point with more than 200 hoppers tied behind their auxiliary tanks. Thus it was, in essence, that the Illinois Centrals and the Nickel Plates resisted the diesel so long without financial handicap.

And thus it was that we circled Ohio on our maps. The Buckeye State is not famous for mountains, so it stood a fair chance of remaining a showcase for the steam locomotive.

B&O T-3's 5592 and 5558 accelerating west from Willard, O. — Mount Clare's racy, tireless children of war.

Homemade T-3 Mountains 5592 and 5558 lead westbound Baltimore & Ohio freight past J Tower, Willard, O. Something out of E.S. Dellinger fiction.

For example, Willard, O., site of a classification yard and east end of the Chicago Division, both being the property of Baltimore & Ohio. Strange, in a way, that B&O should figure in our steam search at all. The road began buying road diesels years before any of the other Eastern trunk lines, and by the end of 1955 the company owned 912 diesel units compared with 234 steam locomotives. Profiles made our visit productive, though. In the East B&O is beset with Sand Patch and the West End of the Cumberland Division, so logically it has dieselized from east to west. The flat, branchless Chicago Division remains within the realm of steam.

The stock method of moving tonnage across Ohio, Indiana, and Illinois is to couple up a pair of homemade T-3 class 4-8-2's and take fullest advantage of a 60-mph speed limit. It is a sight to see.

J Tower — a modern flat-roofed brick structure — stands at the west end of Willard Yard, and we arrived there just in time to observe the departure of Chicago-bound freight behind Nos. 5592 and 5558. The first 10 miles west from Willard involve a rise in elevation of approximately 100 feet, nothing spectacular but enough to write a zest into the departure of a train. The T-3 team eased out of the yard, hit the big steel and rock ballast of the double-tracked main, and began leaning into it — gathering speed toward the yard limit board to the insistent, accelerating tempo of two stacks sounding off four times per revolution of 70-inch driving wheels.

It was a sight straight out of E. S. Dellinger fiction.

Santa Fe S-1's on the westbound hump at Willard — enough to conjure up visions of the Alleghenies.

B&O's T-3 is an interesting machine. The road has 40 of them, all rebuilt at Mount Clare Shops, Baltimore, during 1942-1948 from older 4-6-2's and 2-8-2's. As Hastings' photos indicate, a T-3 looks better coming at you than broadside. For improved steaming and accommodation of larger drivers and a four-wheel guide truck, the old boilers were lengthened. This upset the natural contour of the barrel and made of the T-3 — from sandbox forward — an anemic-looking animal indeed. All of which may be excused on grounds that the T-3 was a child of war. She was born when the War Production Board sliced a diesel order from 23 to 9 locomotives, and she was a bargain. To shop the Mikes would have cost $15,000 each and increased the gross tractive effort of the roster by zero. The rebuilds cost $64,000 each and increased cylinder horsepower from 2128 to 2990. Equivalent new power would have cost more than $150,000 apiece.

And a T-3 will perform. I used to admire sitting in the dome of the *Capitol* on evenings when a T-3 would doublehead the diesel units out of Cumberland and up Sand Patch. They appeared to be racy, tireless performers.... And nothing we saw at Willard abused that notion.

Also at Willard were a few S-1 2-10-2's, including one working as a trimmer engine on the hump. Now, there is a handsome mauler. S-1's are big fellows, with 64-inch drivers, offset bells, Delta trailers, vast Vanderbilt tanks, and more sandboxes than a small boy can count. B&O bought 'em — 125 to be precise — like Pennsy bought Decapods, like Central bought Mohawks. Sand

S-1 2-10-2 No. 6174 backs up the hump at Willard, O., with reefers — to B&O what Decapods were to the Pennsy.

Willard: we liked it. B&O T-4 Mountain 5650 — one of 13 R-1 4-8-2's purchased from Boston & Maine in 1947 — moves through the yard to pick up a westbound train. (Right) Brakeman swings aboard. Cab extension and jump seat are features the big Baldwin never had on B&M.

Patch was their forte, and just the sight of the 6174 walking through the retarders at Willard to rescue some misdirected reefers was enough to conjure up visions of long drags with helpers on the rear, shouting across the Alleghenies with the sound that will not be forgotten.

Willard: we liked it.

From Baltimore & Ohio we traveled to Nickel Plate — and in steam that is akin to the difference between night and day, or the donkey and the elephant, or heat and cold.

Bellevue: not in the same esthetic class as Willard, but NKP 2-8-4's, engines even a stockholder could admire, made it worth it.

Nickel Plate at Bellevue, O., at dusk — a storied reputation intact

Unlike B&O, Nickel Plate is a fairly young road, particularly in the sense of its present format. It has no time for history, no time for frills. It is obsessed with one objective: to move freight fast. It has to. NKP is not a heavily industrialized road. What makes the difference between breaking even and a decent profit is the amount of overhead or bridge tonnage that the NKP can solicit and hold onto — and that demands speed. And on NKP that still means one locomotive, the 2-8-4.

This engine is a product of the era when a joint mechanical committee of the Van Sweringen roads (C&O, Erie, Pere Marquette, and NKP) drew up plans for the power and, as a rule, Lima built it. All four roads saw eye to eye with Lima on the 2-8-4. Here was an engine which could run with a well-designed Mike (always a speedster), yet had the evaporative capacity to hold a heavy train at a mile a minute all the way across a division provided the dispatcher was willing.

Grimy NKP 774 shuffles past a Fairbanks Morse switcher and cut of reefers — obsessed with one objective: to move freight fast.

Admirable for purely cash considerations — Nickel Plate No. 37 leaves Bellevue at 5:55 p.m. with S-2 Berkshire 750 in charge of 34 loads, 90 empties and 6,132 tons.

At Bellevue, O., these Berkshires were out in force. The trains they were handling explained why they were still around. No. 37 went west with 34 loads and 90 empties — 6137 tons. No. 38 arrived with 81 loads and 1 empty, 6132 tons. Both had 2-8-4's.

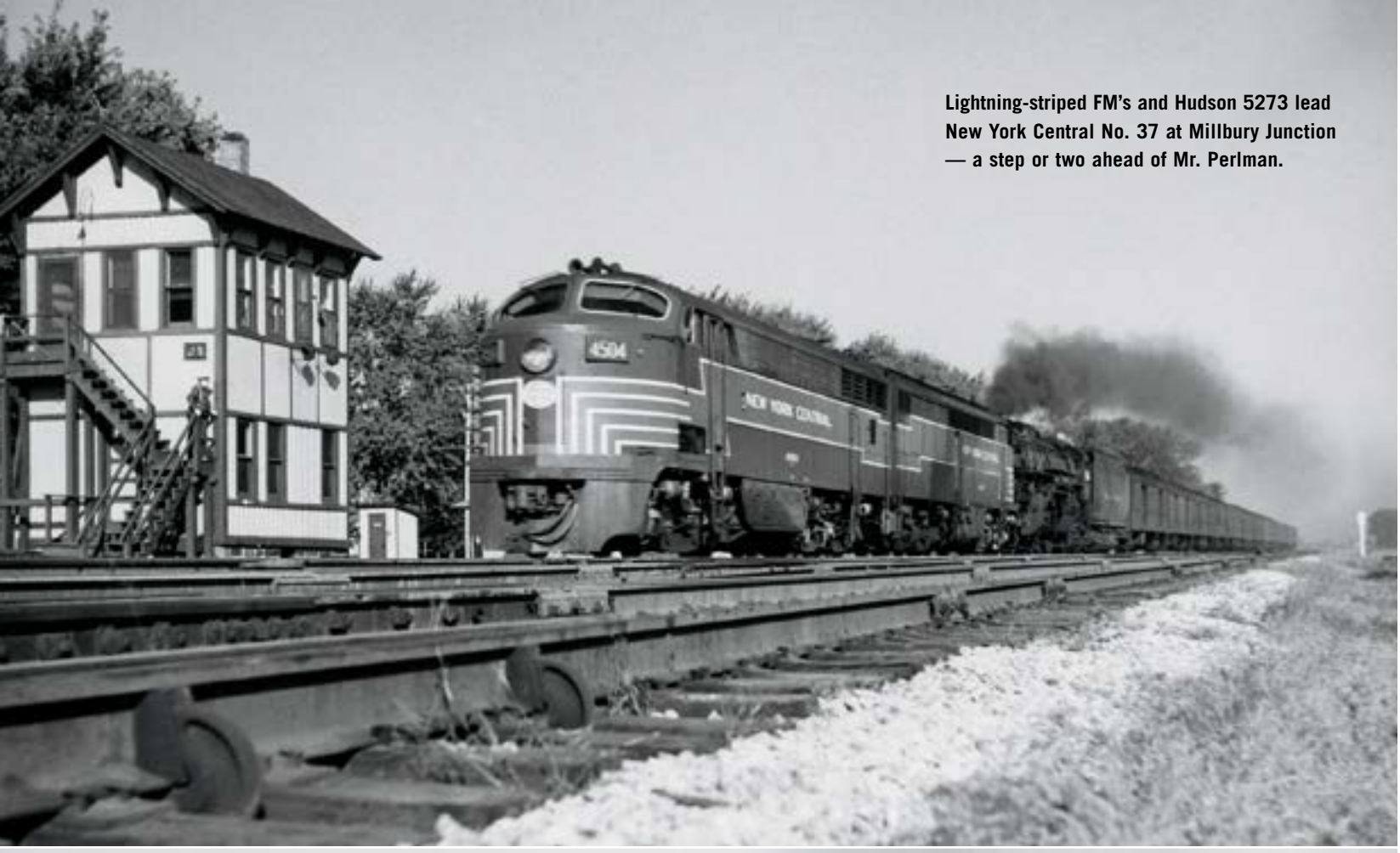
Bellevue itself is not in the same esthetic class as Willard. It is too stark, too utilitarian, too purposely devoid of all but the bare essentials to rank very well as a photogenic layout. In the old days, when all the world was steam, I doubt if we would even have stopped in.... Ah, but the 2-8-4's, standardized or no, made it worthwhile. They poked their astonishing front ends (horizontal-bar pilot, shielded pumps, headlight, Mars light, bell, illuminated numberboards, feedwater heater, and stack — in that order, bottom up) down ladder tracks at dusk, running restlessly about to gather up waiting tonnage and forward it to Fort Wayne and Cleveland, Chicago and Buffalo, intent on keeping intact a storied reputation for speed.

They were engines a stockholder could admire on purely cash considerations just as much as we could like them for other reasons.

And next — only a step or two ahead of Mr. Perlman — we sought out the main line of New York Central.

The track pans for scooping water at speed were gone and much of the multiple track and all of the steam power would soon follow. Messrs. Perlman and Young were building a new New York Central — a dieselized, CTC property complete with electronic car accounting, retarder-hump yards, mechanical reefers, *Xplorers*, fewer passenger trains, and an improved operating ratio.

We arrived Millbury Junction (7½ miles east of Toledo, where the branch to Elyria via Norwalk leaves the main line) just in time. I have no objections to 80 per cent of all this modernism and I'm sure the stockholders have less. But I did want a last look at the old order. It was once a proud and wondrous mechanism for moving freight and passenger trains by the fleet, and Central had kindly provided



Lightning-striped FM's and Hudson 5273 lead New York Central No. 37 at Millbury Junction — a step or two ahead of Mr. Perlman.

A last look at the old order: NYC Hudson 5437 flies through Millbury Junction, O., with westbound mail train No. 257, some 35 minutes ahead of schedule.

us with timecards and letters of introduction to inspect it one last time.

Steam on freight, said the operator at the junction, was a rarity. Lack of track pans stretched the water plugs out too far for an engine to make it from one to the next with any tonnage worth the mention.

Passenger, yes. The first we saw was No. 32, an eastbound mail train that whipped into view under a canopy of air-horn talk. On the point was a pair of Fairbanks-Morse passenger cab units (one a C-Line, the other an older "Erie-built") leading Hudson 5273. The mismated diesels leading a weary 4-6-4 with an impossibly big 4-10-0 pedestal-type tank on her somehow symbolized the age of transition and, by way of understatement, set the stage for the event of the morning: mail and express train X-78.

X-78 — a collection of only nine head-end cars and deadhead coaches — came bounding along with a big S, Niagara No. 6023. A straight, simple tube of a boiler with elephant ears and a 2-inch-high stack, beating eastward with the Baker hooked up.

What can happen inside of a mere decade! Just 10 years prior to that morning the Niagara was, in many respects, the steam locomotive of the world. She was the culmination of all the brains and tests and results that had gone into and come out of Central's super Pacifics, B&A Berkshires, several variations of 4-6-4, and multi-refined Mohawks. Ever since the 4-4-0 there had been compromise; an engine was inherently suited to freight or passenger work. But in 1945 Alco erased such compromise with No. 6000, the biggest engine on the property — indeed, virtually the biggest Central could ever take.

Here was an 80-inch 4-8-4 with a tremendous capacity to generate steam plus the transmission to spread that power over a wide range of speed. Additionally, Alco designed the Niagara for continuous running.

Alas, the Niagara was ideal by the specifications of an age that had been quietly put to death out in La Grange, Ill. All of a sudden on Central, performance at the drawbar was no longer the prime consideration. A pair of 2000-h.p. cab units appeared on the *Century* and they not only equaled the S-1's 25,000-30,000 miles per month but they did it without track pans and ashpans and Alemite guns and coaling docks — and they did it year in and year out. Which explains why the 4-8-4 we watched in 1955 was a rarity, even though she was still capable of singlehandedly tackling any schedule in Central's timetable with ease.

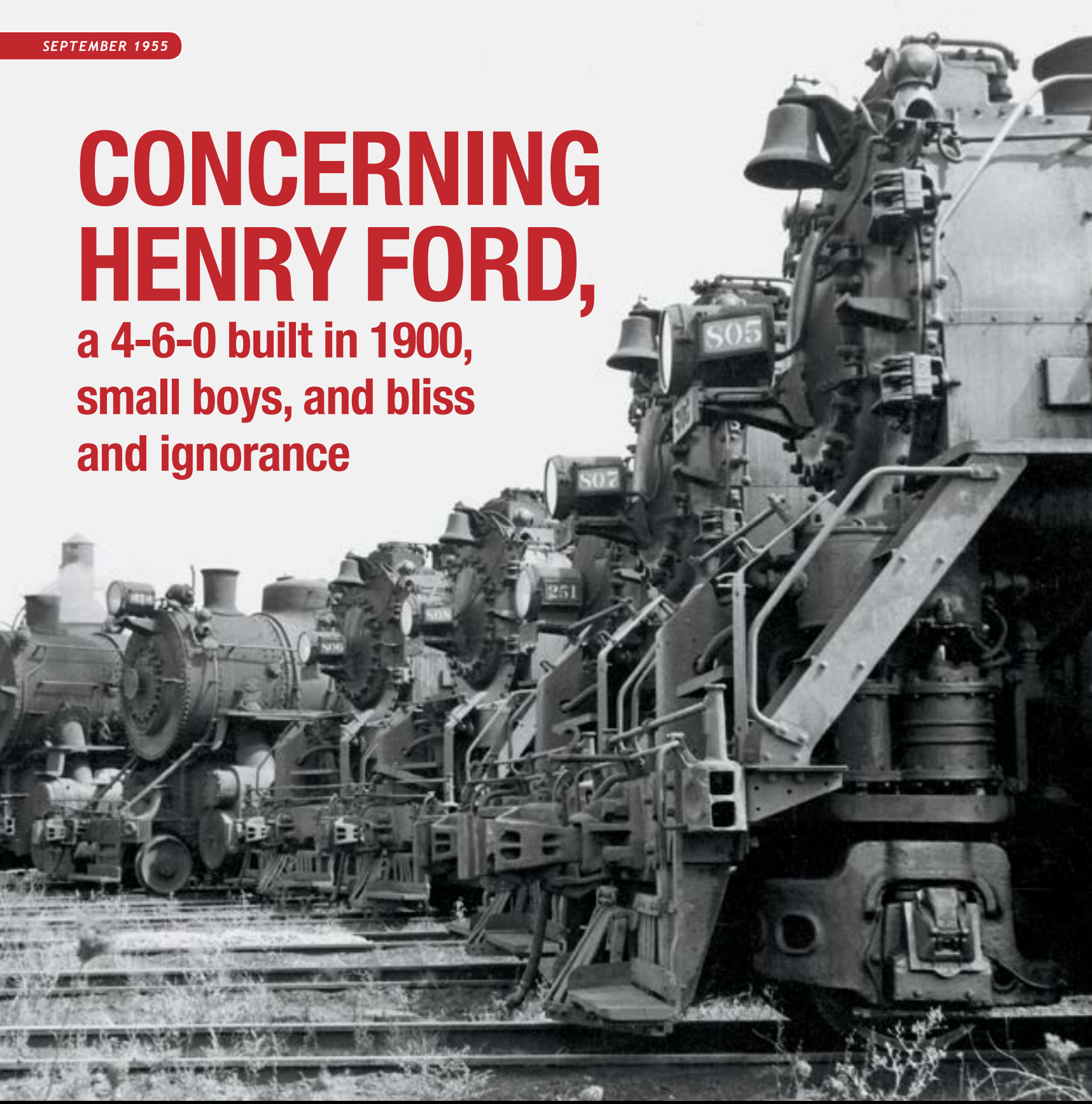
Perhaps it is just as well that Central's

Niagara 6023 rambling past with X-78; an apologies-not-necessary finis.

long and illustrious line of steam locomotives wound up with the S-1. Because of clearances, any further steam development would have had to be in the form of length — most likely a poppet-valve duplex-drive. That, in turn, might have duplicated Pennsylvania's unhappy T1 experience. For the sake of history, surely it was better as it was — to write finis with a real honest-to-gosh, no-holds-barred, apologies-not-necessary engine. X-78 had an engine like that.

CONCERNING HENRY FORD,

a 4-6-0 built in 1900, small boys, and bliss and ignorance



TRAINS' peripatetic patrons of the steam locomotive look for reminders of the Model T magnate, then cross the international boundary to dwell on scenes that have vanished from the U.S.A.

Every so often a rank outsider shows up beside the right of way, declares that railroad men are a bunch of old fogies who have only themselves to blame for the mess they're in, buys into the business, and proceeds to demonstrate — with varying results — how things should be done.

In our time the gadfly was Robert R. Young. I say *was* because although Mr. Young got off the mark with a great deal of flag waving, his later pronouncements on the subject tended to make him one of the boys.

In the 1920's the skeptic was Henry Ford. In the summer of 1920 the Model T magnate became owner and president of 455 miles of jerkwater railroad between Detroit and the Ohio River. For the next nine years the Detroit, Toledo & Ironton was virtually a plant facility of the monarchy whose mass production turned the automobile from a rich man's novelty into everyman's necessity. Ford, a man with definite and quotable ideas on every subject from world peace to square dancing, naturally had opinions on railroading. To activate them, he took a direct and personal interest in the affairs of DT&I, the result being an involuntary courtship such as the industry has not known — before or since.

As it developed, Mr. Ford's ideas delighted the press and public, alienated organized labor, and rankled management. Much of the furor was anything but intentional on the automaker's part. Like all inventors, he was preoccupied with ideas — ideas on anything, and therefore railroading too. He also liked to discuss these ideas, more by way of thinking out loud than by deliberate attack upon men or institutions.

So it was with DT&I. Henry Ford steamed onto the railroad horizon with ideas. Rates were too high, cars too heavy, schedules too slow; overtime was an incentive for waste. Unions had no place in the picture and stockholders were unproductive dividend spenders. Ford declared himself against lawyers, dirt, inefficiency, and work on Sunday.

Thus DT&I was Fordized. The legal staff was fired, engines went to River Rouge for overhaul, the Brotherhoods were dismissed. Innovation followed innovation: a 60-mile cutoff was built to shorten the mileage into Detroit ... rails were purchased from Belgium ... motor-generator electric locomotives — the first — were built to take 22,000-volt A.C. off the trolley and turn it into 600-volt D.C. for traction ... smoking was taboo ... passes were abolished ... pay went up ... passenger trains ran on time. The operating ratio fell and gross revenues, if not net, went up. Surrounding all was a continuous barrage of opinion. The traditionalists sought to prove that only the huge traffic of the Ford Motor Company jacked up DT&I's traffic; the Sunday supplements sought to convince the public that more Government was needed to cure the railroad problem; the Brotherhoods sought to accuse Ford of paternalism.

Ford himself was above and beyond the hubbub. He was running a railroad the only way he knew how — his way.

But, for better or for worse, you can't run a railroad the way you build an automobile. The ICC frowned when Ford began cutting rates without

DT&I: within air-horn distance of total dieselization.

Line-up of DT&I power around the turntable at Flat Rock, Mich. A whisper of steam.

Here and there a trace of smoke or a whisper steam — DT&I Mikado 807 and 0-8-0 251 face the turntable at Flat Rock, Mich.

regard for regulatory red tape, and the industry admiration and co-operation that Ford perhaps naively expected was not forthcoming. Worse yet, Ford lost interest. DT&I was no longer fun. So in 1929 it went — for five times its purchase price and in the pink of condition — to the Pennroad Corporation, a Pennsy affiliate. In 1955 it was still very much in the Philadelphia family, being owned by Pennsy and the Pennsy-controlled Wabash. Indeed, President David M. Smucker was the gentleman who had the misfortune of being in charge of the Long Island during its accidents in 1950.

So much for Henry Ford. When Hastings and I entered DT&I property at its Flat Rock (Mich.) yard we were anxious to locate the remnants of steam left on what had been a roster of rare interest. Even though Ford himself acquired very few new engines (only the electrics and six Lima 0-8-0's), he left his stamp on existing power. It came out of River Rouge with embossed, nickel-plated numbers and heralds; Russian iron jacketing; illuminated footboards; brass trim; aluminum cab floors; and deep, cushioned seats.

Following Ford, DT&I purchased under Pennroad its first engines with trailing trucks — first a group of Berkshires, later a set of similar but lighter Mikes (one of the few times, incidentally, that a road has backtracked in wheel arrangements). These 2-8-4's and 2-8-2's all were extraordinarily handsome locomotives, just what one would have expected from Lima (whose plant was on-line for DT&I).

Lastly, a few Pennsy engines got on the roster — 2-8-0's and, while passenger service lasted, some Atlantics.

Evidence in hand indicated that DT&I had, Geep by Geep, penetrated to within air-horn distance of total dieselization, so we were unprepared for Flat Rock. Facing the turntable and roundhouse were no less than seven

We located history less than 100 miles from downtown Detroit — just a short car ferry ride across the St. Clair River to Ontario, and NYC's St. Clair Subdivision.

steam engines while a couple more sat on a nearby track. Here and there a trace of smoke or a whisper of steam told of fire on the grates and a vertical needle beneath the steam gauge glass.

There was an ex-Pennsylvania H10 2-8-0 (Pittsburgh 1910), members of the 0-8-0 family purchased by the Ford regime, and — most pleasing of all to the eye — several 800-series Mikes. Embossed numbers and lettering, too, though not shiny.

If we had timed our visit two days later (it was the Sunday before Labor Day), an engine or two might have ventured out on the road, but as it was we were content to browse over the roster at our leisure. We were also just in time. Today's DT&I is steamless, and the newest hood units have their road numbers painted instead of

No. 1290 puffs west over Ontario farmlands near Oil City — alien to the implications.

Two young lads at Brigden supervise activities of NYC 1290 — Robert R. Young as the Wizard of Oz.

NYC 1290 (left), a graduate of MCRR's St. Thomas, Ont., shops in July 1900, works westward on the light iron of the St. Clair Subdivision. At Brigden, Ont. (right), Ten-Wheeler 1290 plies NYC's branch line — precious little modernization.

embossed. Here and there the diesels may drum across a rail made in Belgium, but to all outward appearances Mr. Ford never set foot on the property. Strangely, the influence of the man who created a fortune out of internal combustion died when the fires went out.

Those who are wont to mourn the cessation of some moving or colorful phase of railroading might dwell on the fact that there are 790,144 miles of railroad in the world, and somewhere there is an operating example of virtually every link in the vast evolution between George Stephenson and now. Link-and-pin couplers threaten the fingers of brakemen in a Georgia swamp ... the odd, hurried exhaust of the Shay echoes down the wooded slopes of the Sierra ... English workmen create a deafening din beneath the roofs of Gorton as they rivet together Beyer-Garratts ... slabs of wood are chucked into the hungry maw of fireboxes deep in Brazil ... and in India trains operate over track varying in gauge from 2 feet to 5 feet 6 inches. History remains in practice as well as in print.

The summer of 1955 we located history less than 100 miles from downtown Detroit. The stage was the 66.38-mile St. Clair Subdivision of NYC's Michigan Central between St. Thomas and Courtright, Ont., a single-track branch which supports a freight train each way every other day. We had Central's word for it that the tonnage was moved by the oldest steam locomotives on the roster, a pair of F-82 class Ten-Wheelers.

Employees and young observers gather on the station platform as Ten-Wheeler 1290 and the every-other-day Courtright-St. Thomas train call at Brigden.

F-82 4-6-0 No. 1290 and caboose pause at Brigden, Ont. — tangible and exciting.

A billow of black smoke over the flat farmlands of Ontario a few miles east of Oil City marked, upon closer inspection, No. 1290 headed west with an auxiliary tank, a brace of hoppers, a steel RPO-express car used to maintain the express contract, and a wooden caboose of unmistakable NYC lineage. Puffing sedately along, her wooden pilot nudging the grass that grew higher than the rails, No. 1290 was alien to the implications of the corporate title stenciled across her tanks. One train each 24 hours in train-order territory propelled by a 73-ton steam engine is hardly what springs to mind at the mention of NEW YORK CENTRAL, with or without Robert R. Young.

And yet there she was in late afternoon, tangible and exciting.

Central's F-82's, Nos. 1290 and 1291, were constructed at the St. Thomas shops in July and November 1900 respectively, and precious little modernization has marred their appearance since. Here are slide valves and 64-inch driving wheels and a 50½-inch stack ... and no stoker or power reverse or feedwater heater or roller bearings or sealed-beam headlight or superheating or other such influences of modernism.

The 4-6-0 we encountered was workaday and puritan in the traditions of an age which took a strong back and a No. 5 scoop for granted and which was more concerned with initial cost than with gadgetry.

At Brigden, Ont., where the 4-6-0 paused to set off her cars of crushed rock, a pair of very small boys came to trackside to watch, and the worn grass where they stood gave notice that this

was a daily habit. I rather think that this train was the only one they had ever seen, that they were — to quote Hastings — "fortunate beyond their comprehension."

For 100 years or so, boys — small and grown up — lived in a mechanical age of continuous novelty and intrigue. Surely the steam locomotive dominated that age, but there were also the Mack truck and the Curtiss Condor and the oil derrick — and Tom Swift and the Chrysler Building and the *Titanic* and so much else. Then, or so it seems to me, science became too complex. The mystery of wireless communication forecast such monotony and in 1955 the push-button automatic transmission typified it. I suspect that today's freshman tends to be interested in rocket research for the pay check it offers the engineering grad whereas years ago the farmer's son thought the railroad was paying him for pleasure when it marked him up on the extra board as a fireman.

The two lads at Brigden, so absorbed in the exposed and comprehensible elements of the 1290, had no way of knowing it, but they were living on borrowed time in a never-never land, with Robert R. Young unconsciously serving as the Wizard of Oz.

Labor Day 1955 ... and our luck remained incredibly good. We began to nurse the illusion that the diesel had never been as we paced Central's oldest steam engine, and what we came upon a few miles east at Glencoe, Ont., did nothing to undermine that feeling.

Picture a farm road near dusk in September ... a silvered grade crossing flasher with metal crossbucks ... and a rural tranquility suddenly knifed by a distant whistle and a faint gray of smoke. The well-ballasted iron was the Detroit-Toronto main of Canadian Pacific, and bearing down on us was G3g Pacific No. 2400, a recess-headlighted, streamstyle engine carrying green, hitting all of 70 mph, and leading 11 cars. She screamed past in a drama of sight and sound that,

Rural tranquility suddenly knifed — CPR G3g Pacific 2400 screams past a Glencoe, Ont., grade crossing with an 11-car eastbound.

No. 16 glides into Glencoe behind CNR 4-8-4 6259: "Passengers and allied services."

even while we looked, was difficult to believe. Standard Railroading!

And there was more to come before the sun set. Two miles down the road was the parallel main of Canadian National and minutes after our arrival a CNR 4-8-2 showed up with local 83.

The crowd remained after the local chuffed off into a setting sun and a glance at the arrivals-and-departures board explained why: Train 16, a limited on the Detroit-Toronto-Montreal run, was due — and, indeed, overdue.

Some train, too. No. 16 has virtually no counterpart in the U. S. It came rolling in, 16 cars long, behind standard Northern 6259, and the consist was a physical definition of the statistical term "passengers and allied services." There were four head-end cars, including an express reefer, RPO, express, and baggage; there followed coaches, a parlor car, a diner, and sleepers. Heavy, more or less unstreamlined, long, behind steam.

Now, in the U. S. we operate more than 10,000 daily passenger trains and probably 1500 of them run 200 miles or more. Yet take up a copy of the *Official Guide* and show me the U. S. equivalent of CNR No. 16. Norfolk & Western uses streamlined power ... Pennsy's handful of active K4's are restricted to commuters ... and Espee's Lima 4-8-4's have been bumped off the *Starlight*.

We were the only surprised and impressed persons on that main platform at Glencoe, and doubtless the happiest, as a doughty CNR 4-8-4 got under way for Toronto.

Bliss, thy name isn't necessarily ignorance! ■

A Story of Small, Elderly Engines

A time for questions: How do short lines survive? What does an old timer think? And who can solve the mystery of exhaust?

Everything about a railroad cries BIG!" You could buy five $10,000 Lincoln Continentals for the money that it costs, in material alone, to build a mile of heavy-duty track. There are trains rolling today that weigh as much as a fully loaded Liberty ship. And once on a Christmas Eve the Pennsy moved enough people between Philadelphia and Washington to populate Youngstown, O.

The fact that the track structure permits a railroad to couple many cars behind one power unit means that the more tonnage there is available, the more efficient the mechanism is. The big cost is track, yards, signals, tunnels, shops, and so forth, and that cost remains — whether trains operate or not. So a railroad is mass transportation; it thrives on mass carloadings and it sometimes dies without them.

And then ... then there is the exception which proves the rule: the short line. It steams forth into that vacuum in which the economists say a railroad cannot live, where all the rules point out that the load is too small and the haul too short for a railroad to escape the torch. This is the 5-per cent zone — 338 little roads each grossing less than 3 million dollars a year in 1955. Somehow these Class 2 roads survive. Perhaps an industry owns one to cut its freight bill, maybe the ingenuity of an old-timer has squeezed the Mogul through another ICC inspection, possibly the back roads don't lend themselves to truck competition.

Such an improbable property is Dansville & Mount Morris, 8 miles of 60- or 90-pound rail extending from a Lackawanna interchange at Groveland, N. Y., down the valley of the Canaseraga Creek to its namesake Dansville.

Nothing about D&MM is very big.

It owns 2 locomotives.

It has 2 stockholders.

It has 15 employees.

Net income in 1954 was about enough to buy a Ford, and in 1955 there wasn't any.

Yet Dansville & Mount Morris is no youngster. It was chartered four years after the Civil War and opened in 1872 as a child of Erie. The road got

Dansville & Mount Morris 4-6-0 No. 304 — on a very light fire.

Dansville & Mount Morris roster: 1908-vintage Mogul No. 565 came from the Lackawanna, Ten-Wheeler No. 304 was built by Brooks in 1905 for Nickel Plate.


565

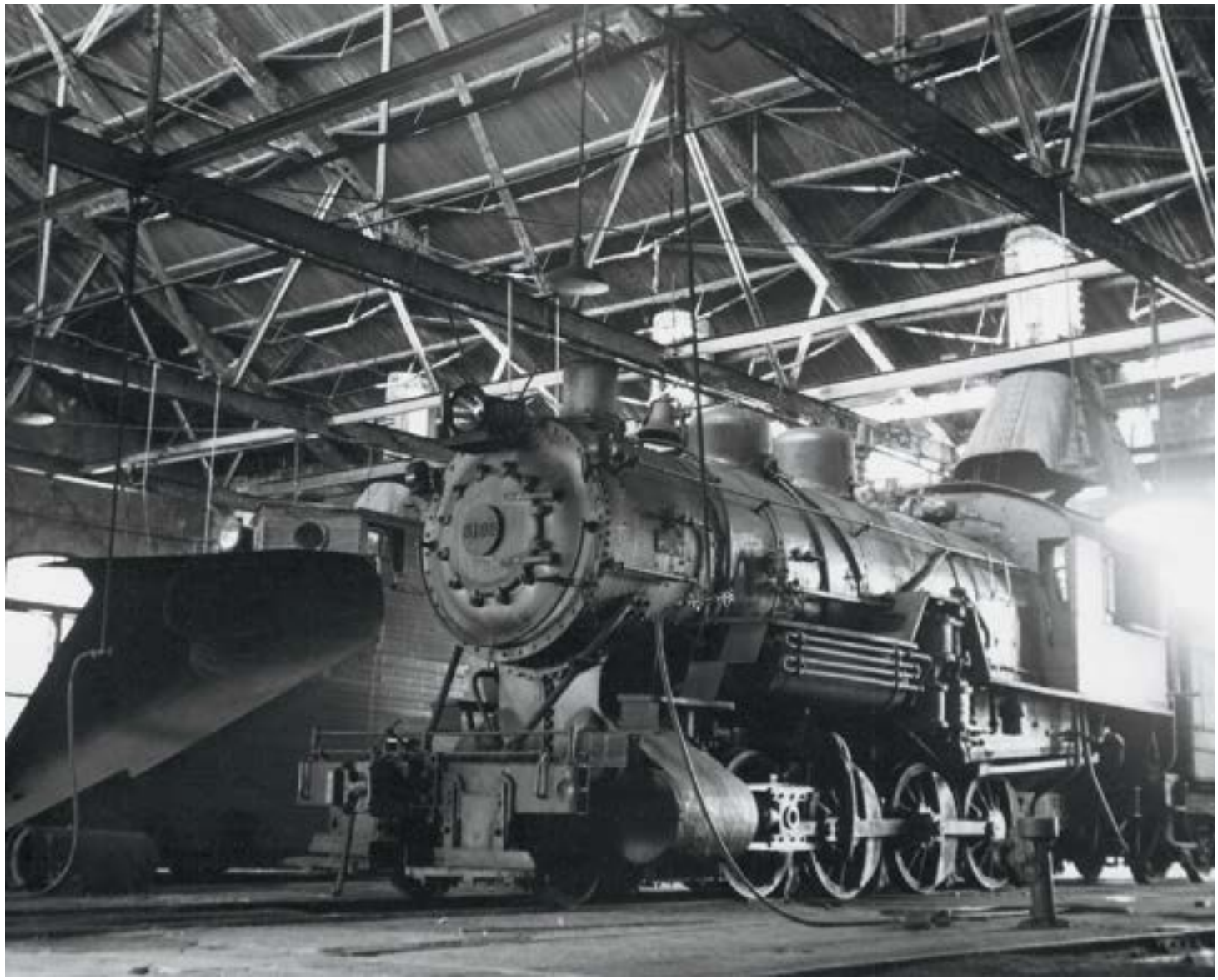
D&MM uses each engine alternately for a year, and overhauls the other one in the meantime. We found ex-DL&W 565 under repair outside the road's Dansville, N.Y., enginehouse.

its present name in 1891, promptly defaulted on some bond coupons, and relaxed into a receivership that endured from 1894 to 1927. Yet from 1937 to the time of our visit, D&MM paid dividends.

The only reason that I can offer — for the dividends, anyway — is that a sizable manufacturer of marine boilers is located on-line in Dansville. This was the railroad that we came upon in our search for steam. Unfortunately for our hopes of action photography, D&MM had taken advantage of the short line's Golden Rule: If there are no cars to haul, don't fire up the engine. Instead, the road's two steam locomotives were cold, spotted at the collection of ancient frame buildings that serve as shops at Dansville. The older machine was the 304, a 4-6-0 that Brooks built in 1905 for the Nickel Plate and which had come to D&MM via service on Akron, Canton & Youngstown. A light Ten-Wheeler, with an odd stack, homemade flanger pilot, large numbers, and tiny lettering. Nearby and under repair (D&MM uses each engine alternately for a year, over-hauls the other one in the meantime) was the 565, an ex-Lackawanna 2-6-0 built by American Locomotive in 1908.

The fact that both engines enjoy a reputation for steaming well on a very light fire is offered as the cause for a 100 per cent steam short line. And yet, steam aside, it was difficult on that sunny morning in Dansville to contemplate how a pair of locomotives and 9 miles of track up the valley could generate enough cash to pay 15 people and still leave enough for a couple of stockholders after the treasurer had settled with the coal company.

Shop men tend to No. 565 — One of these days I'm going back to Dansville.



Old Buffalo & Susquehanna shop at Galeton, Pa. — from 200 men to 30.

One of these days I'm going back to Dansville and ask. It must be quite a story. On a short line it always is.

Of course, there are good reasons why the short line survives where the Class 1 operator would throw in the towel. The big fellow can't always afford the grass-roots supervision and salesmanship that is the strength of the small road. Standard Brotherhood wages and rules prevail. And for an engine to be shopped, it must be returned to a home base, often several hundred miles distant.

A case in point was the onetime Buffalo & Susquehanna, our next port of call. Once upon a time B&S was a property of some moment, operating 400 route-miles in New York and northern Pennsylvania. Born in 1885, the railroad eventually ran from Lake Erie southeast toward the Alleghenies, winding up in lumber and coal country and having every intention of building on to Pittsburgh. There were stiff grades, even a switchback, but there was traffic to compensate, and eventually there were such graces as Atlantics, Pullman parlor cars, and a regal slogan ("The Grand Scenic Route").

Then solvency vanished almost as abruptly as it had arrived. There was a receiver appointed in 1910; then a reorganization came in 1913. The Buffalo link was junked for World War I scrap prices, the plans for extensions and betterments remained just plans, and in 1932 Baltimore & Ohio bought up B&S as it prepared for the ICC's master consolidation plan.

In 1942 a flood washed away forever much track south of Galeton, Pa., and with it a connection with B&O home rails. After that, some 97 miles of one-time B&S meandered from Addison to Galeton and beyond to Wellsville, N. Y., a wishbone-shaped orphan up in the corner of B&O's map which was managed officially as the Wellsville and Addison subdivisions of the parent's Buffalo Division. Original B&S power, little 2-8-0's with inverted steam chests, continued to tackle the hills, although

Rugged 2-8-0's that sounded tight and solid — they were real Dapper Dans, these E-60 class specimens.

the graceful 4-4-2 with which they had once shared track finally left with the local for the last time.

In 1956 the orphan returned to the shortline status which had spawned it in the first place. That remarkable organization, the H. E. Salzberg Company, bought the 97-mile wishbone from B&O for $250,000, promptly dubbed it the Wellsville, Addison & Galeton, and scrapped the steam power in favor of a collection of secondhand diesel units. The Salzberg people achieved fame of sorts back in the 1930's by acting as junkers for the little lines that couldn't make it, notably the Sandy River 2-foot-gauge empire. Then the firm decided that, in certain situations at least, short lines offered more profit on the hoof instead of on the block. By 1955 the Salzberg interests controlled such varied properties as Unadilla Valley (the New York dairyland road made famous by *Fortune*), a segment of the old Missouri & Arkansas, and a pair of Iowa interurbans: Des Moines & Central Iowa; and Ft. Dodge, Des Moines & Southern.

When we came upon the onetime B&S the sale to Salzberg had not yet been consumated, and the road, except for its lack of passenger service, looked much as it had for years on end. At Galeton, Pa., once the headquarters of B&S and still the site of its shops, an old-timer looked across the engine terminal and figured that $250,000 was a mighty cheap price for such a railroad. He worried aloud about the failings of absentee management, and he thought darkly of future prospects.

Regardless of whether he was right or wrong, he had earned the right to frown at 1955. He could remember when 200 men repaired and serviced the engines at Galeton; now there were just 30. He could remember passenger trains and parlor cars and Schenectady Atlantics; now there was just a coach or two repainted a bright red and coupled into the work train outside. He could remember independence; now there was ownership from Baltimore, soon to be ownership from New York.

I was sorry for this old shop worker who had taken time out to explain his 2-8-0's to a pair of outlanders who only dropped by for photos and would probably never pass this way again. Who were we to understand the robust railroad that he had seen fall upon hard times? Who were we to suggest that the disposition of Buffalo & Susquehanna was not unique, that other railroads in other states had died when all the timber had been cut and the mine veins worked out?

Talking with the old fellow made me wonder how many men had gone to work in 1910, say, as 18-year-olds, had signed on the payroll when all the world was young, railroads were the unchallenged giant, and the extra board was always active. Suppose one had signed up with North Western, had sweated out seniority for a regular run on a *City* streamliner, then had suddenly seen the limiteds disappear from the timecard? Or, conversely, how

B&O E-60 2-8-0 3135 poses at Galeton, Pa. (left), sister 3127 charges along the Genesee River south of Wellsvile, N.Y.

do the men of Pacific Great Eastern feel today, having worried out the long, lonesome, penniless years, to be rewarded finally by line extensions, heavy traffic, diesel locomotives, even RDC's?

After a few minutes' talk with a railroad man you can usually discover whether or not his road is the one he envisioned as a youth. The UP men tell of how the little power was replaced by Mallets, then 4-12-2's, finally Big Boys and diesels and Big Blows. My B&S guide could only show me through the big square enginehouse that had been the erecting shop before they tore the roundhouse down — and tell me how 200 men had labored where now there were only 30.

For us, however, the old B&S in twilight was a joy to behold. The action highlight was provided by a freight under way from Wellsville to Galeton, a train in the charge of E-60 class 2-8-0 No. 3127 (Brooks 1905). The small Consolidation came charging along at the timecard speed limit of 30 mph, a restriction enforced as much by the terrain as by the printed word.

At Pusher Siding the crew elected to double the hill, proceeding on up to Cutler Summit — more than 2000 feet above sea level — with just the first eight loads.

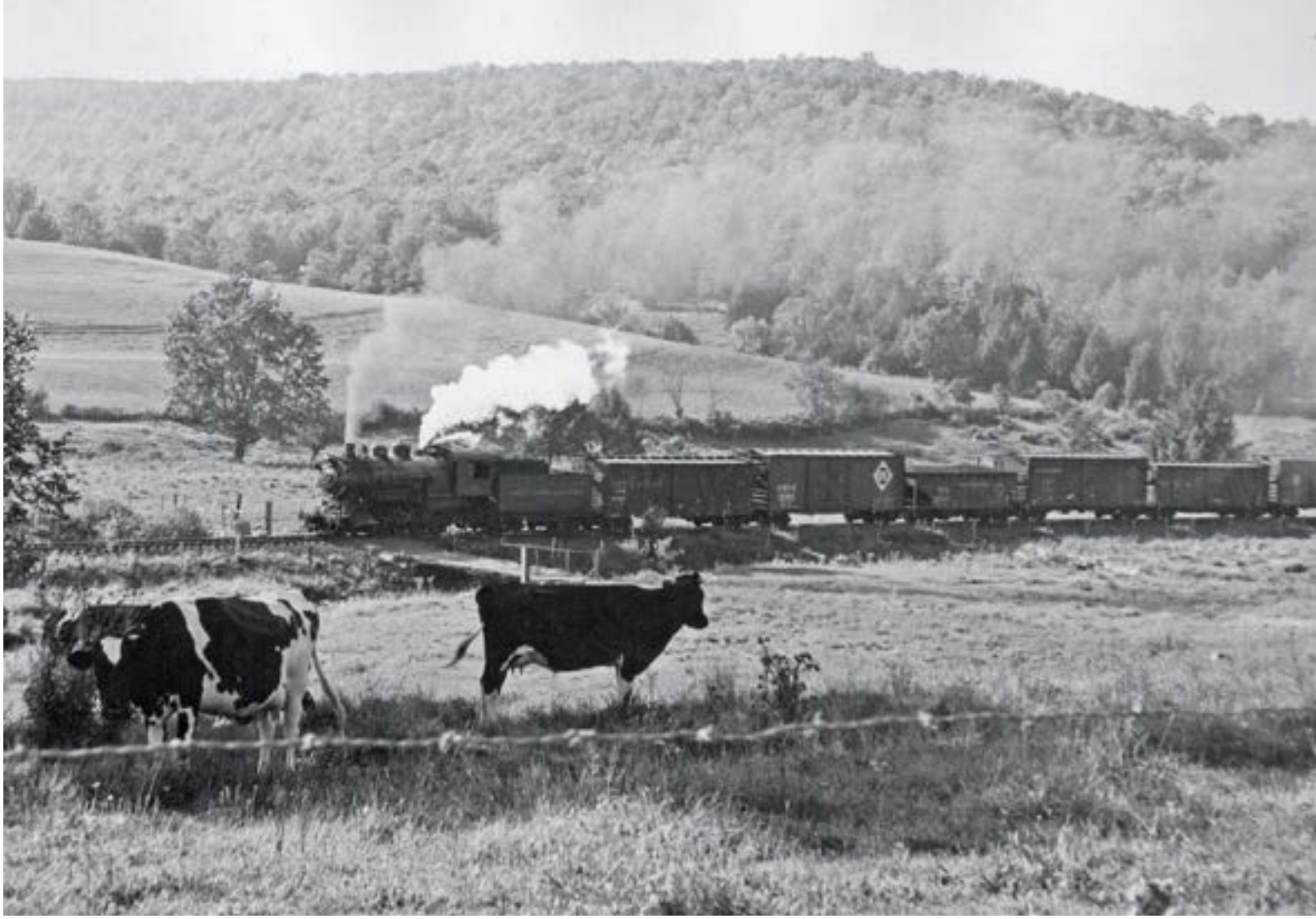
Beyond and on the other side of the mountain at Galeton, there was time in late afternoon for a longer look at specimens of the E-60 class. They were real Dapper Dans — just 185,000 pounds of engine weight, high-mounted boilers with plenty of see-through air space above diminutive 52-inch drivers, Stephenson gear, a good state of maintenance.

They sounded tight and solid.

Which reminds me ... which of us is ready to step forward and say that, sight unseen, he can correctly judge a steam locomotive's size by the sound of its exhaust? Naturally I do not mean the exceptions....

I recall a Chesapeake & Ohio Mike working out of Louisville that had a funny little hiccup in her talk, a sort of locomotive asthma condition, if you will.... And who is not prepared to enter an Espee engine terminal and, blindfolded, isolate an AC-class articulated. Just the rhythmic, alternating breathing of those smokebox-mounted air pumps is a dead giveaway.... Three-cylinder engines always give themselves away. They're forever trying to get ahead of themselves, and one exhaust beat stumbles over the heels of another in its excitement to get up the nozzle and out the stack into fresh air. Indiana Harbor Belt 0-8-0's, L&N's 1999, a UP 9000 — they can't proceed half a mile without betraying that middle main rod and what it does.... Here and there — providing

Doubling the hill at Pusher Siding on the B&O — restricted by terrain as well as word.



B&O No. 3127 rambles along near West Bingham, Pa., at 30 mph — the old B&S in twilight was a joy to behold.

No. 3127 takes the first cut up to Cutler Summit — the right to frown at 1955.

you're familiar with the property — a distinctive exhaust shows up. Canadian National 4-8-4's are mushy, so much so that one expects foaming water to gush up the stack at any moment. Yet certain old Canadian Pacific 4-6-2's crack off with the ear impact of a high-powered rifle.

But these are exceptions.

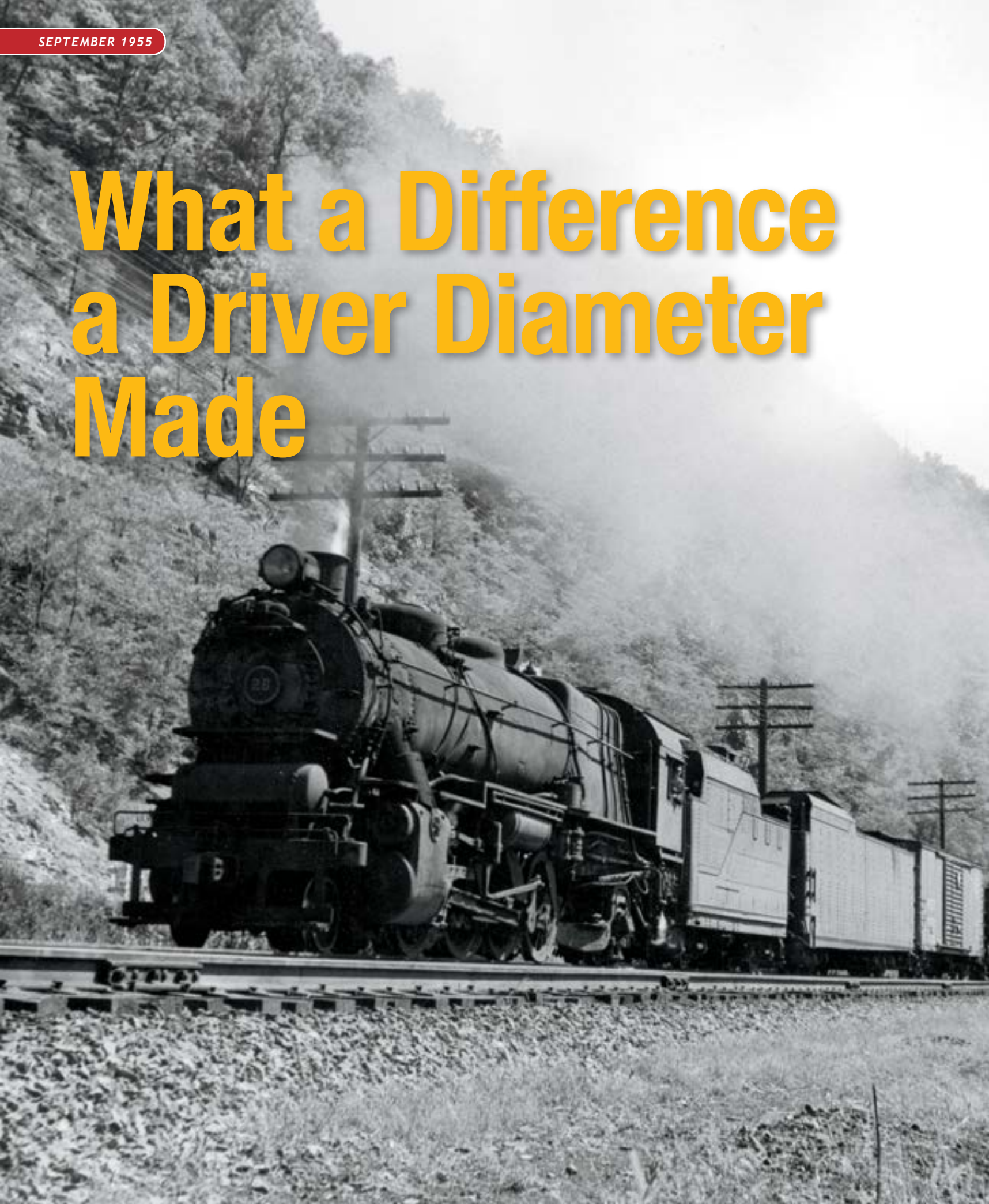
I mean the average locomotive in steam.

I admit that I'd be at a loss to tell one from another on the basis of sound alone. I once heard, from across a ridge, a ferocious bark there that lent all the implications of a big Mike digging into too much tonnage and somehow getting away with it. Not so. It was a gravel pit saddletanker — and only four drivers' worth of that.

And, I have stood close by a Pennsy I1 Decapod as it began to help a sister behind move out with 90 cars and 9000 tons of ore. Loud? Yes. Earth-shaking? You mean it. More than other engines? I doubt it. I've heard light USRA 2-8-2's take off like that, even 4-6-0's with sharp valve settings.

Haven't you?

What a Difference a Driver Diameter Made



Maybe the natives were aware, but most onlookers would never have figured that boiler on the Pennsy 2-8-2 also made steam for the most famous Pacific in the world

Just for the moment, let's forget the fact that all the engravings that surround these sentences show Pennsy power with a capital B for Belpaire. Instead, let me ask if you ever saw Southern Railway in steam. Southern owned, hands down, the most gorgeous machines that ever put water on the boil. Boilers and tanks were dressed up in a mirror finish of apple green, with cylinders and domes and cabs all lined out in gold. Cab roofs were red, and sometimes so was the glass behind the numbers in the headlight. Tires and running boards? White. Smokebox? Graphite. To believe it, to know what a steam locomotive looked like in such colors, you had to be there ... in Atlanta, say, when engines changed on the *Ponce de Leon*, when a long Mountain came backing down the platform with the Negro fireman leaning out to relay the switchman's lantern gyrations.

She was clean (how seldom the steam engine is — or was), with just a faint film of oil on the running gear and apparently none on the jacket — a great, live, businesslike lady musing through her turbogenerator, peering one-eyed into the night ahead, just standing with a style that didn't need exhaust or motion to capture the heart.

Did you ... did you ever see Southern in steam? Were you ever there?

Hold on, say you from many thousands of easy chairs. No, I never saw Southern — but where were you, Morgan, when NP No. 1 dug in at Livingston and, all sanded rail and roaring blowers and overcast of steam, went charging up the 1.8 to Bozeman Pass with 18 cars behind and a Pacific leading a Northern on the point? Were you there, shivering and entranced, when Santa Fe unleashed the *Fast Mail* across the freezing plains of Colorado, the big Baldwin ahead putting the needle on one-oh-oh and holding it there? And did you hold down the left-hand seatbox of a Rutland Ten-Wheeler when the engineer, outraged at a timetable deficit, pounded over the knobs at 40 and went banging, clashing, tearing, crusading through the vales at a gait no speedometer could ever do justice to?

True it is, then, that for those of us persuaded that the steam engine is a remembered, memorable thing, we all have specific examples in mind. You like low-slung engines; I don't. I think the world of Southern green; you may prefer Wabash blue. So it goes — which brings up the point: What a difference a detail makes.

Tanks, for example. Big engine, big tank. The classic example is the original, unstreamlined GS-1 of Southern Pacific, the locomotive that introduced the 4-8-4 wheel arrangement to Espee in 1930. These early 4400's (and 700's on T&NO) trailed Vanderbilt tanks that rode on Commonwealth six-wheel trucks. One complemented and completed the other. But in World War II the GS-1 blueprint found its way onto Central of Georgia, which had Lima produce a version with an odd feedwater heater and, worse yet, a stubby eight-wheel tender. This ... *this* was a GS-1?

Pennsy Extra 26 West heads for dieselized country with an extra tank. Methodicalness instead of rakishness.

Morning mist reveals smoke and steam of a dozen simmering steamers in Renovo, Pa. — only an occasional diesel slipping through the haze, an Alco FA cab-booster in this instance, to spoil the illusion that this was 1940 and steam was supreme in the Bucktail Mountains.

Or consider Chesapeake & Ohio's 490's which, as F-19 Pacifics were ferocious-looking beasts with all the guts hung on the front end (Elesco heater up top, air pumps in the middle, a headlight on the pilot beam); yet rebuilt as Hudsons they had all the sedateness of a Pere Marquette 4-6-2, which indeed they resembled.

So a feedwater heater here and a tank there can and does make all the difference.

Just the size of a driving wheel can do the trick, the classic examples being the Pennsylvania's K4 and L1 classes (which is where we return to the title and the pictures of this story). Both the 4-6-2 and the 2-8-2 were introduced in the same year, 1914, to reduce double-heading over the same district, Altoona-Pittsburgh. Both engines employed the identical boiler, trailing truck, and other components. Over the years, more than 400 K4's appeared and nearly 600 L1's were built.

Sisters they were, then, and yet the mention of "L1" will bring a question to the mind of the man who instantly knows the meaning of "K4." Is it because the Pacific held down the glamour runs? Partly, perhaps, but I submit that the answer lies in the fact that the K4 has an 80-inch driver while the L1 wheel is 62 inches. Just that 1½ feet makes all the difference. A K4 is a high-mounted, rakish brute of a passenger engine, her every line a witness to urgency and motion ... and an L1 is a methodical tonnage engine — no more, no less.

Renovo prepares L1 8426 for steam supply duty at Sunnyside — in the Bucktails, a good temporary future.

We had occasion to ponder these matters as we drove down the upper West Branch of the Susquehanna River Valley and into Renovo, Pa., a railroad shop town on the Pennsylvania's Harrisburg-Williamsport-Buffalo line. Now, Renovo isn't a big town — just 3751 population — but it breathes railroading. Laid out in a narrow aisle between the river and the walls of the Bucktail Mountains, Renovo has all the essentials of the typical division point — depot, roundhouse, coaling stage, icing platform, yard, and so forth — plus a steam locomotive shop. To a degree, the shop *is* Renovo. When employment fell off during 1954, the town was pretty quiet. When we came upon Renovo a splurge in steam repairs had put a sizable number of men back on the payroll, and the temporary future looked good. ("Temporary" because Renovo is one of those towns frowned upon by the technological revolution wrought by the diesel.)

Traffic was up, and around the engine terminal a score of engines were in steam. An L1 stood on the ready track, her smoke mingling with that from Mountain types and Decapods. ... In the house a pair of men struggled with block and tackle to remove an I1's main rod.... Over in the shop a foreman prepared to rewheel an L1 at 1 p.m.... And outside, overalled workers crawled over a freshly painted Mike that had been equipped for oil-burning and would go to New York's Sunnyside Yard for stationary steam supply service.

The sight and sound — and smell — of Renovo was good. Only an occasional diesel slipped through the haze to spoil the illusion that this was 1940 and steam was supreme.

On the ready track stood an unusual combination: L1 Mike No. 26 with her

Hostler and friend in Renovo engine terminal — the sight and sound and smell, was all good.

Doctor's orders chalked on her steam chest, I1sa 2-10-0 No. 4230 undergoes running repairs in the roundhouse.

Ready for re-wheeling, L1 1429 waits in the wings while workers prepare her trailing truck.

own eight-wheel tank plus a 12-wheel tender (off an M1 4-8-2) for auxiliary water. The Mike was called to take an extra west down the low-grade freight line to Brady, Pa., a district which Pennsy had dieselized to the extent of removing water plugs.

Just the number of the double-tanked 2-8-2 was interesting to me. It's not every day one locates a Pennsy engine with three digits, much less two. Of course, a railroad that operated nearly 8000 locomotives in World War I (and still had 4337 steam engines around on the eve of World War II) cannot simplify such things like a Monon; but that still leaves open the way in which Pennsy once numbered its power. I like to think that down in old Broad Street, Philadelphia, there stood an old top hat on its lid (or a goldfish bowl, if you insist) and that therein lay all the vacant or unused numbers on the roster. When a new engine left the works, I like to think that someone just reached into the hat, withdrew a number, and called Altoona.

How else does one account for it all? For example, Hastings and I stood watching an L1 Mike, a class that numbered approximately 580 engines in its prime. Yet the L1's ranged in the roster from No. 2 (Baldwin 1916) to 8636 (Lima 1917)! Now and then, especially in the later years, a solid block of numbers was allocated to a specific class; 5400-5474 were Baldwin K4's built in 1927, for example. But more often than not, such was not the case, the proof being that on the Pennsy the class meant everything. How different from Santa Fe, which had no alphabetical distinctions and relied purely on series — like the 3700's and 5000's and 2900's.

No. 26 slipped off into the yard, coupled into her train, pumped up the air, and departed as Extra 26 West. Pounding along the Susquehanna with empty B&O hoppers in her wake, she made a warming sight — unmistakably Pennsylvania and all right for all that.

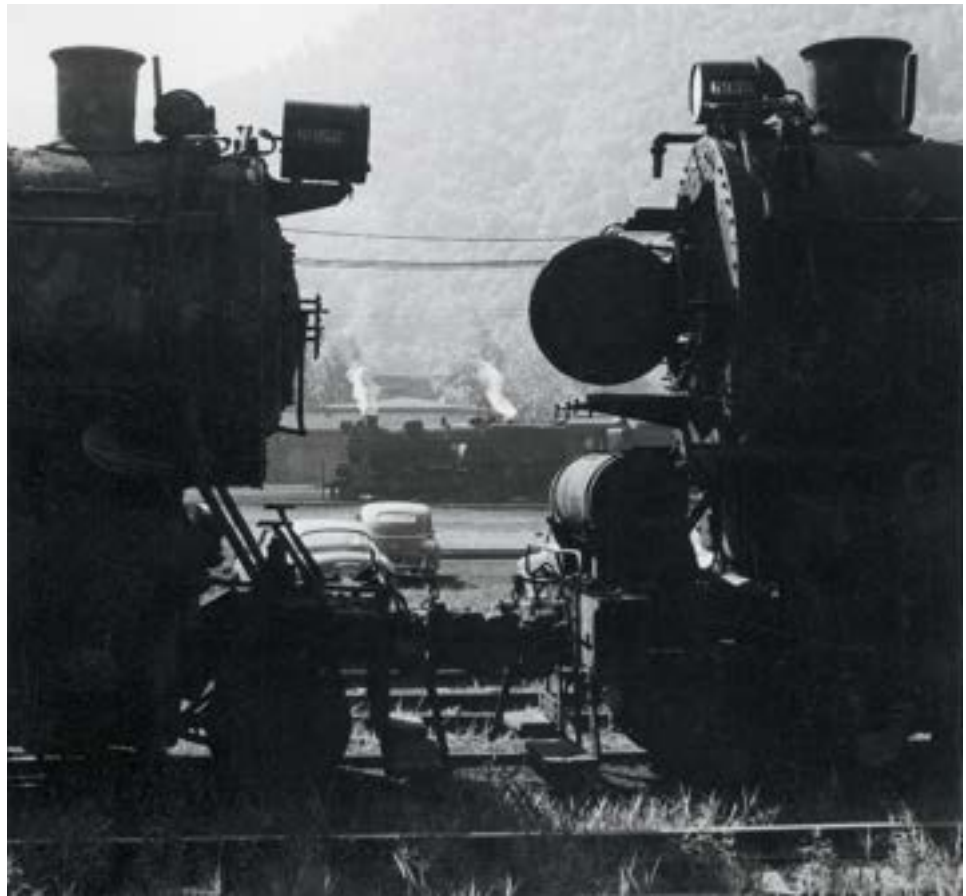
I admired the impertinence of the 26's whistle. It was a banshee, sounding much like an amplified version of one of those peanut roaster pips that were mounted on the little stationary steam engine toys that got so much water and oil on the living room carpet at Christmastime. And yet for all of its

Shop men struggle with block and tackle to remove an I1's main rod.

quaintness, the whistle carried far, echoed long amongst the hills, and sounded lusty and impatient.

We paced the extra to Driftwood, where it swung off the main and proceeded downstate toward the mines.

One more point, please, and we'll leave the Pennsylvania alone for a chapter or so. It is this: Why do certain locomotive enthusiasts, who are otherwise dedicated to the proposition that cinders and smoke and steam are fine chemistry, turn red in rage at the mention of Pennsy? To be sure, any big



Framed by less fortunate sisters — H9 2-8-0 5052 and M1 4-8-2 6933 — L1 3277 simmers on the shop track.

Baldwin sharknose looks on as L1 No. 26, called to take an extra west down the low-grade freight line to Brady, Pa., is readied for the road.

operation, from Cunard to General Motors to the GOP, is bound to create critics, who for reasons sound or silly resent it. Yet I discount this reason. Again, a big road naturally buys blocks of standardized power; who else but Pennsy could order 75 big Pacifies at a shot? And yet, I discount this reason, too. The heart of the opposition lies in Pennsy's unorthodoxy.

Consider just two elements of the typical Pennsy locomotive: its high headlight mounting and its Belpaire boiler. As far as we Americans are concerned, both items automatically date a steam engine as at least a World War I era machine, more likely earlier. My old home road — Louisville & Nashville — was turning out home-made Consolidations with Belpaire boilers as early as 1883; and the headlight carried high near the stack was universal for years.

Both items left the American scene

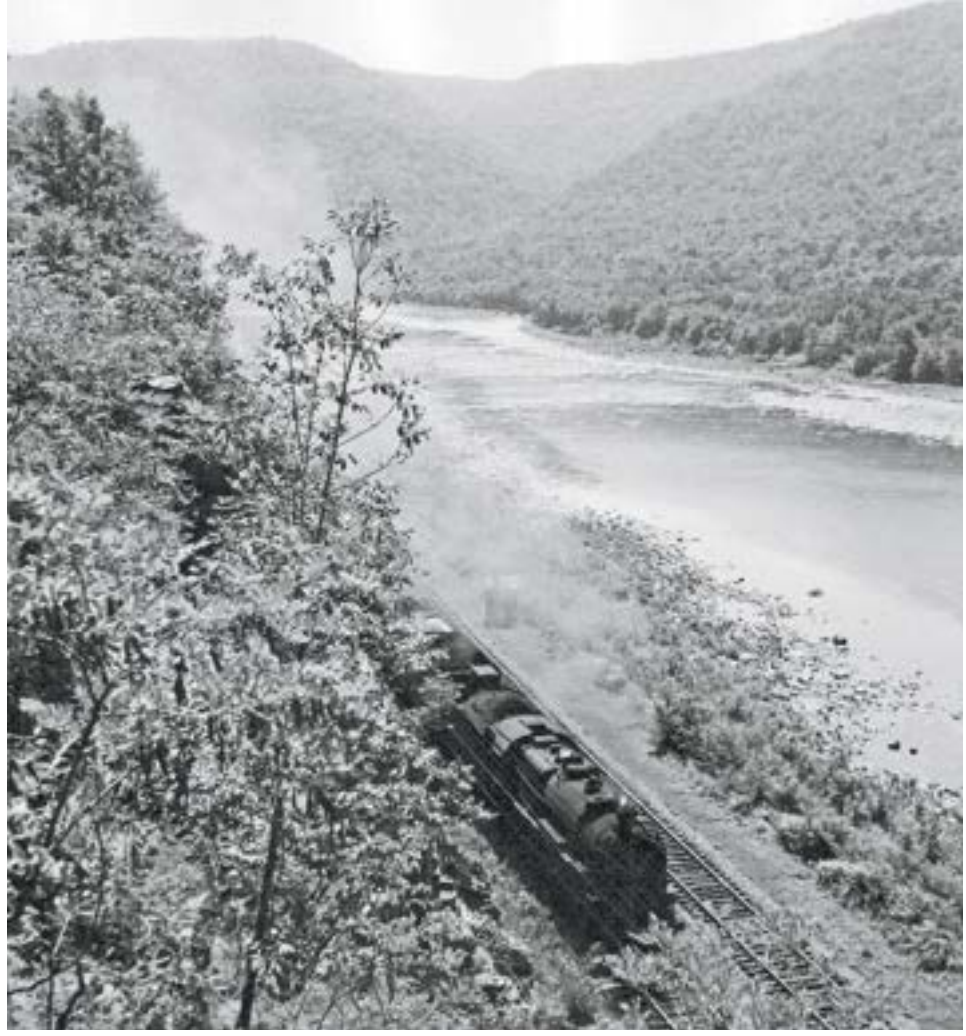
Pennsy Extra 26 West pounds along the Susquehanna River — memories of water and oil on the living room carpet.

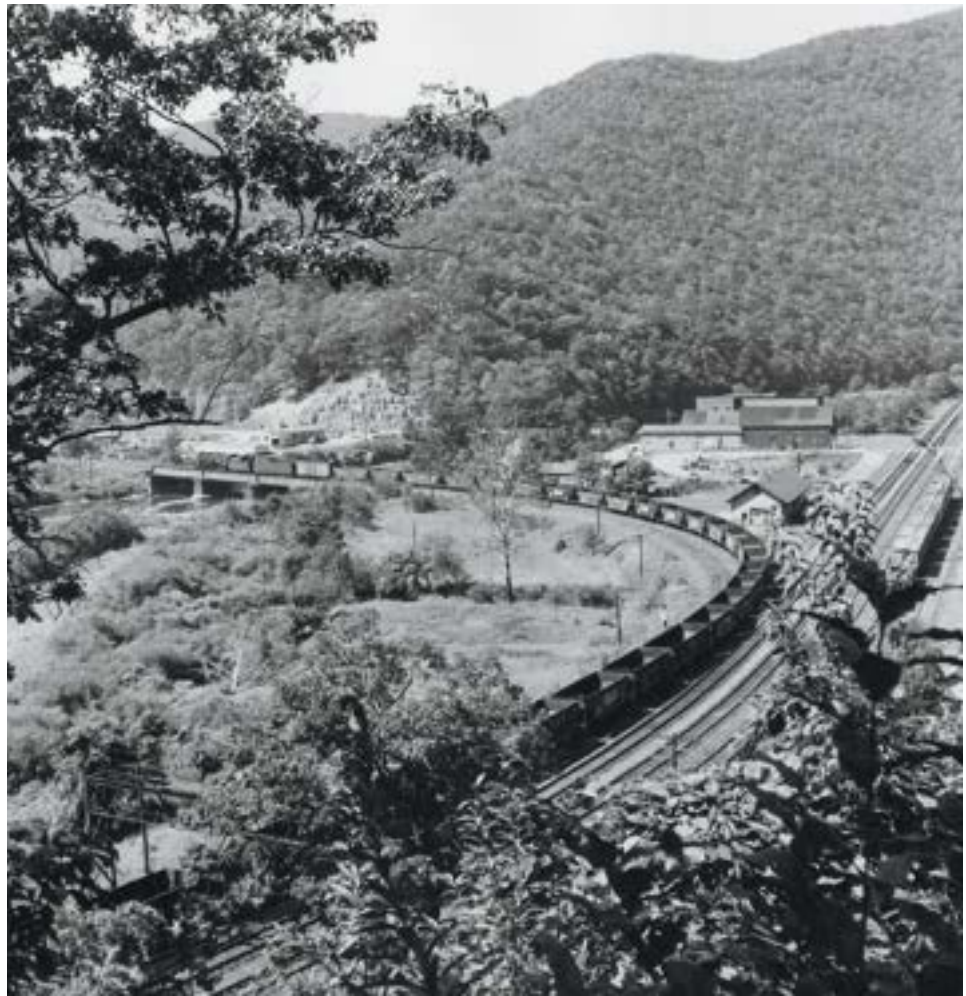
(except on Great Northern, which clung to the Belpaire boiler, and on a few roads which now and then placed the headlight high) — but not the Pennsy. Year after year, decade after decade, Pennsy kept building power to the contrary. And I think these people who dislike the road never quite forgave it for this esthetic isolationism.

Oh, there were other details, too. When the Hudson and the 4-8-4 were the talk of the land, when the four-wheel trailing truck had fully proven its worth — then Pennsy ordered 75 more K4's to a design laid down in 1914. When the others wrote off the Decapod as too many drivers or too slow or not enough firebox, Pennsy installed the ponderous I1. When the crowd seized upon the booster and the feedwater heater, Pennsy looked the other way. There was, in these locomotive decisions, the old way, the modern way, and the Altoona way.

For what it's worth, please count my ballot in the middle. I take sides with neither the faction that resents Pennsy nor the more sizable fringe that considers not much of import took place in locomotive improvement after the E6 Atlantic. I admire Pennsy power, perhaps as much for its faults as its proven virtues. The unorthodoxy pleases me. The banshee wail ... the Belpaire ... the incredible cylinder saddle dimensions of an M1 ... the saucy look of the smallest 0-4-0 shifter. This power wrote a tremendous chapter in the book of the American steam locomotive. I think of it, now as then, as brute power — with stamina and guts and loud talk and ... well, with all the traits that we so often ascribe to locomotives that simply did not possess them.

One man's opinion, of course. ■

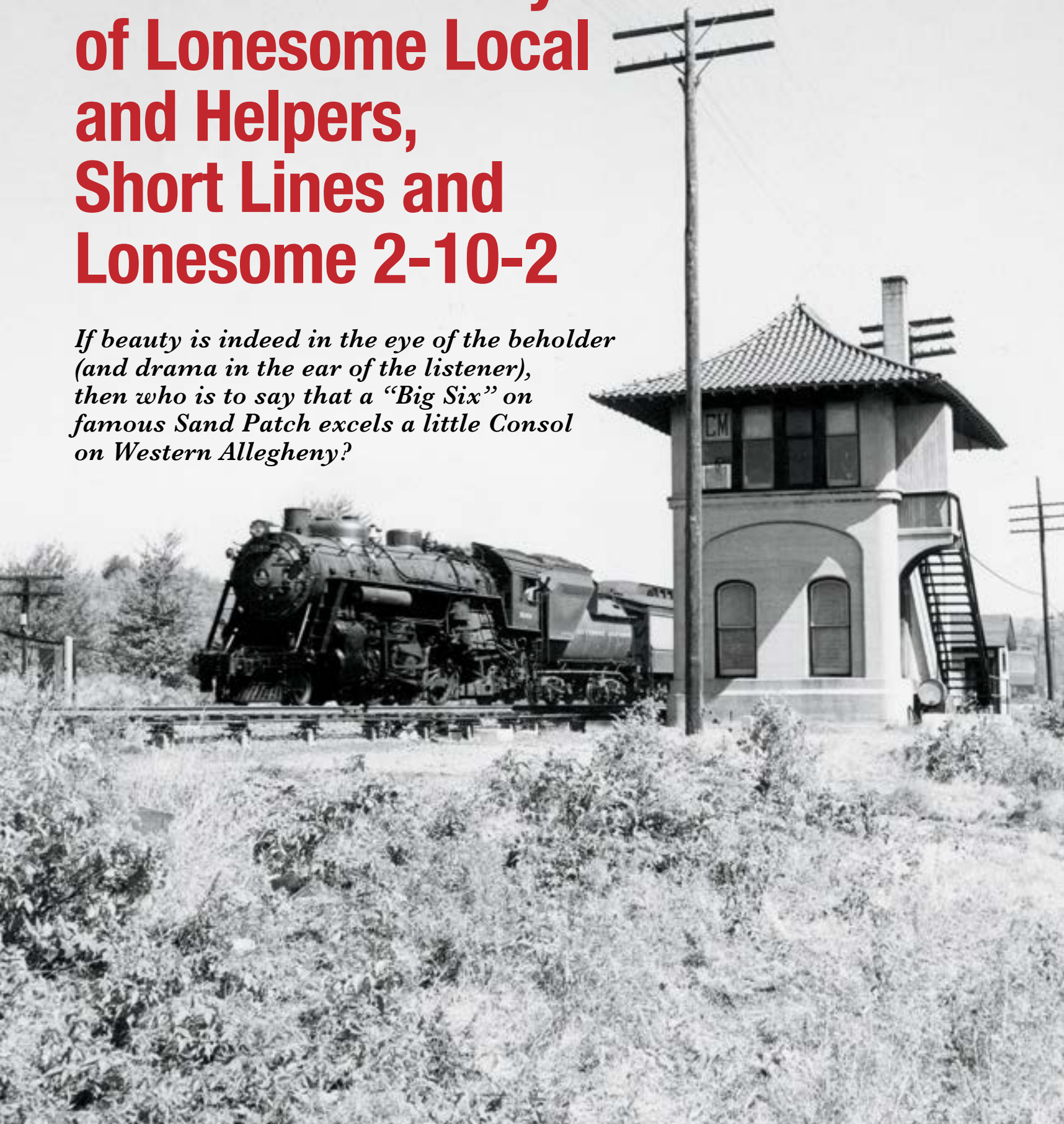




At Driftwood, Pa., Extra 26 West leaves the main line with an extra tank — one man casts his ballot in the middle.

A Chance-Medley of Lonesome Local and Helpers, Short Lines and Lonesome 2-10-2

If beauty is indeed in the eye of the beholder (and drama in the ear of the listener), then who is to say that a "Big Six" on famous Sand Patch excels a little Consol on Western Allegheny?



Baltimore & Ohio train No. 252 swings past CM Tower near Du Bois, Pa. Still 1500 pages in the Guide — but no goodies.

We are living in an age when the paved highway, and to a lesser extent the airline, are doing more than just nibbling at passenger-train revenues. Occasionally they are swallowing them up altogether. I am alarmed to discover that a host of my favorite trains are missing from the pulp pages of the *Official Guide*. I can no longer slip back to the diner parlor-observation for bacon crisp and eggs over as a black Pacific eases the *Hustler* out of Dallas in a cloud of booster steam. Louisville & Nashville's No. 1, 16 cars strong and double-headed in the war, is living on borrowed time as a nameless local. The *Pacemaker* is no longer all-coach and neither is the *Trail Blazer*. And whatever happened to the *Jeffersonian*? The all-Pullman splendor of the seasonal *Orange Blossom Special* (and what a name that was!) has gone with the wind, and so have the Monon's night train and Piedmont's interurbans and the Southern to St. Louis.

Western Allegheny H10 86 and caboose at Kaylor — the portholes meant Pennsy.

The *Guide* itself looks about as good (it's held to approximately 1500 pages ever since the war), but so does an empty icebox from the outside. The shelves are there, but the goodies are gone.

And thus it is today on the Buffalo, Rochester & Pittsburgh, long an independent, but B&O owned and operated since the depression, now void of passenger trains. Once upon a time, as late as 1930, the 284.7-mile Pittsburgh-Buffalo line, for example,

WA No. 85 scales hoppers at Queen Junction, Pa. — the H10's didn't know any better.

supported two through trains each way and four intermediate locals. There were 12-section drawing-room Pullmans, observation-parlor cars, and diners. As a boy, I traveled on trains like those. Dad and I set up the camp stools on the rear platform, talked to the carman as he clambered over the brass railing to pull down the communication cord for an air test, then pulled out the Hamilton to see if we could clock off a mile in 60 seconds. Diners with cinder screens and circulating, wooden-paddle fans ... sleepers with green curtains and dark, varnished woodwork ... coaches with high-backed, reversible green-plush seats — and steam on the head end. BR&P must have been like this before Detroit and Greyhound and the CAB got their talons into it.

Hastings and I caught a glimpse of

Two engines, 13 cars at Kaylor, Pa. — Western Allegheny looks and acts like Pennsy.

the old magic when we camped at CM Tower, a stucco, peaked- and slate-roofed structure just outside the shop town of Du Bois, Pa. Daytime local No. 252 on the Pittsburgh-Buffalo run — now discontinued — was due by C&M Junction at 1:36 p.m. A lovely, deep, steamboat of a whistle heralded its approach and 252 hove into view with a Vanderbilt-tanked Pacific, four cars, and seemingly no passengers. The P-6, one of 15 more or less light USRA 4-6-2's built by Baldwin in 1922, was clean, and she swung past us with all of the confidence and bravado of a *Capitol* or a *Shenandoah* ... as if she had a drumhead sign on the tail car, maybe even President Simpson's business wagon on the rear.

And she was on time. Need I add that? Baltimore & Ohio is the most on time railroad I have ever encountered. I like to hold down a chair immediately behind the air horns and in the forward lounge of No. 5 out of Washington when it's half an hour late leaving, maybe 15 minutes off the card at Cumberland, dead on time at Connellsville. Or to encounter B&O at junction after junction, small town after small town, always O.T. It takes discipline to run a railroad like that — to run anything like that.

No. 85 spots cars for weighing — major occupation is moving coal and limestone.

Late that afternoon we came upon Western Allegheny, a 20.6-mile short line (it was once more than double that size) that looks and acts like a branch of Pennsy and is indeed completely controlled by the big road. Pennsy even has permission (dated February 12, 1926) to build connections with WA, but this never took place. WA's only connection is Bessemer & Lake Erie at Queen Junction, Pa. From there it wanders east down 2 per cent grades, through one 600-foot tunnel, and across high steel bridges to Dewey, which is almost on the Allegheny River but not quite.

Western Allegheny's major occupation is moving coal and limestone from a U. S. Steel subsidiary at Kaylor, Pa., to the B&LE. What makes this job of more than passing interest is that the grade requires helper engines and all of WA's four locomotives are ex-Pennsy H10 2-8-0's. The train we encountered was moving east out of Kaylor with 13 cars of limestone and coal and a caboose, with No. 85 pulling and No. 87 pushing.

Just the train looked unusual. The cars themselves were those big brown 180,000-pound-capacity B&LE hoppers,

Western Allegheny in action — battleships with clasp brakes, H10's fore and aft.

all rivets and length and bulk and clasp brakes (a shoe on each side of each wheel) — real battleships of cars. Behind was a small, outside-framed box car rebuilt with a tiny bay window for caboose service. The portholes stamped it as strictly a Pennsy product.

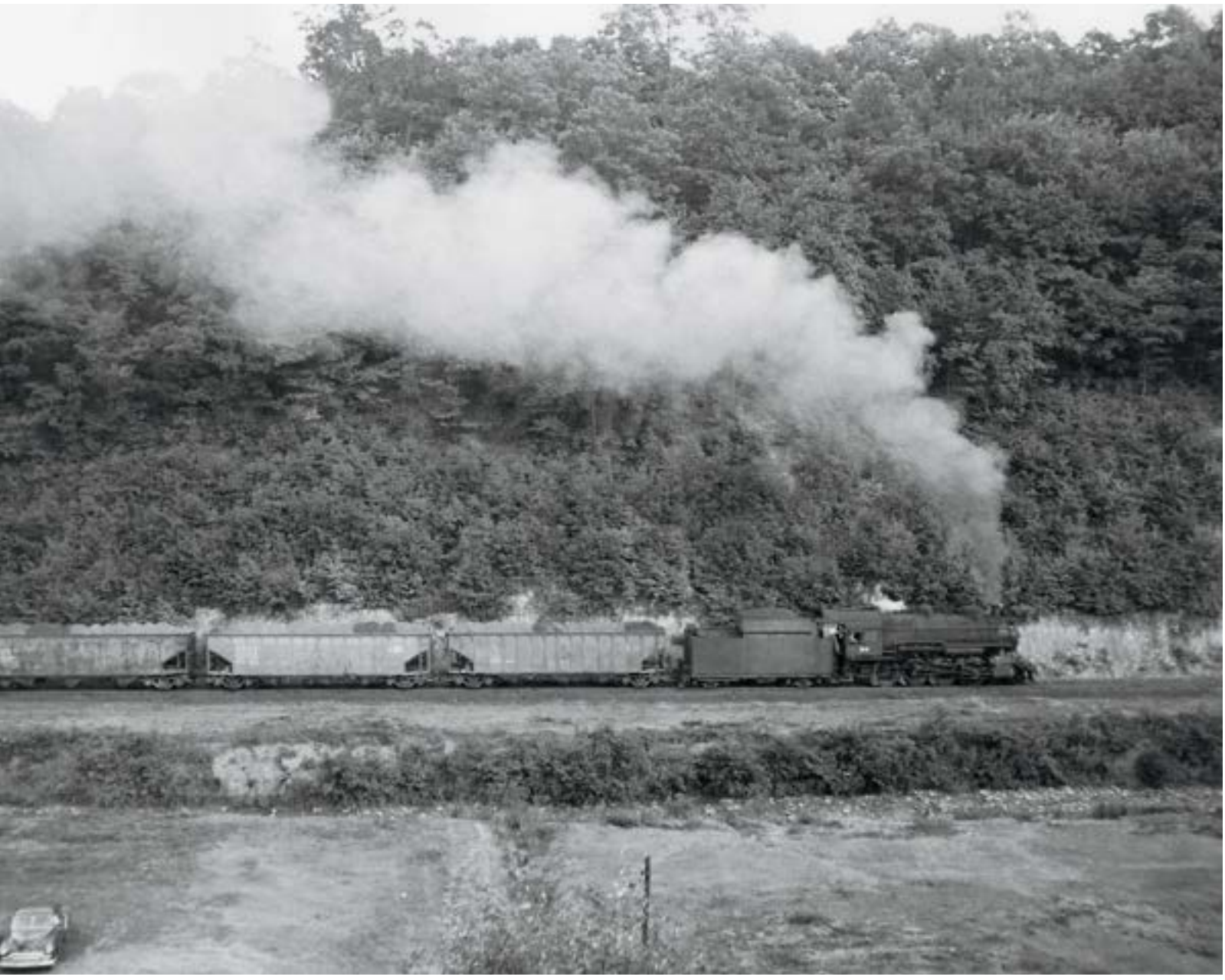
Surrounded by doughty H10's, this assemblage got under way and blasted off into the gathering dusk and the Pennsylvania hills.

We think we can — we think we can — we think we ...

Data plates on the H10's indicated that they had been built in World War I and before, but they didn't know any better, so the last we saw of the limestone it was being shoved across the scale track up at Queen Junction — and for Western Allegheny another day was done.

From one short line we passed to another, the Castleman River — which occupies a space just 3 inches by ½ inch in the *Official Guide*. Now, the CR operates 13 miles down its namesake river from Bittinger, Md., to a connection with Baltimore & Ohio at Worth, Pa. I am told that the little road once operated a geared locomotive (I like to think that it was a Heisler), but as of 1955 the equipment of Castleman River consisted of a 2-8-0 and a caboose, both leased from B&O and so lettered.

The Consolidation was E-60 class No. 3105, a onetime Buffalo & Susquehanna machine turned out by Brooks in January 1905. On the day that we came through the engine was not in use, unfortunately, but was parked on the main line behind a general store at Grantsville, Md. Nearby a few bearded Amish men were unloading



flour sacks from a box car, just the touch to complete a rural scene of abiding and infectious tranquility.

If action was absent from the Castleman River, why it was very much in evidence on Sand Patch — the famous grade that lifts Baltimore & Ohio's New York-Chicago main line over the Alleghenies to a summit of 2467 feet above tidewater.

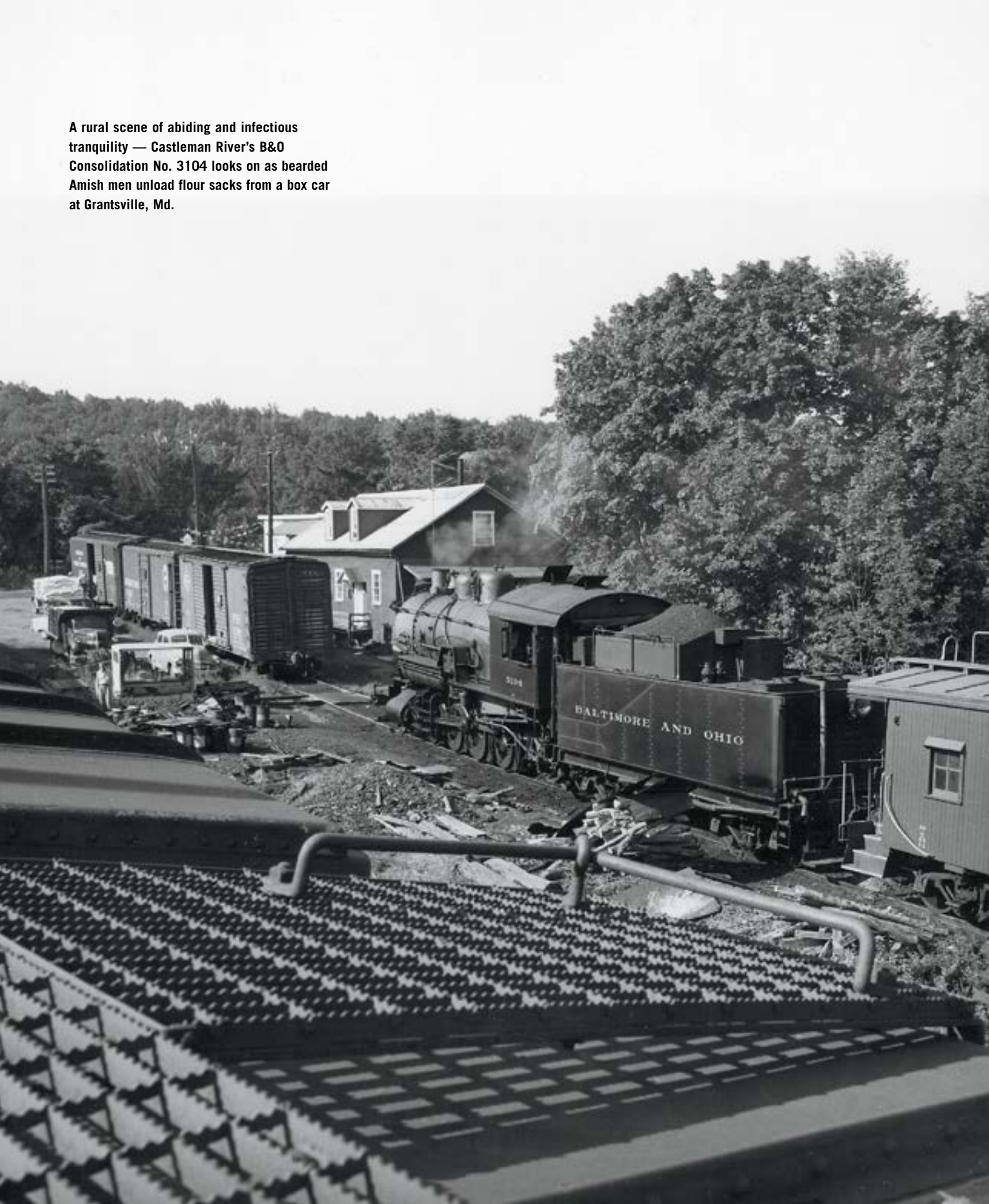
Sand Patch! If for no other reason, the grade would hold a secure footing in railroad history because it was the cause and proving ground for America's first Mallet, the Alco 0-6-6-0 of 1904. *Old Maud* — rocking, puffing, pounding up Sand Patch with the news that boilers could get bigger without equal length and rigidity in frames.

And then there were those odd B&O Mountains, long and lanky T's and a T-1 and a T-2 — some homemade at Mount Clare, one with a watertube firebox — rolling the *Capitol* up and over before Daniel Willard got the word on dieseldom.

Many, many steam engines, experimental and standardized, all digging in on Sand Patch. To B&O it was and is a phrase that means what Donner means to Espee, Gallitzin to Pennsy, Sherman to Union Pacific.

Sand Patch ... no single class of Baltimore & Ohio power, diesels included, know it better or have battled it more diligently than the "Big Sixes" ... B&O's S-1 class 2-10-2's. Alone, an S-1 is rated at 1600 tons west up Sand Patch, 2350 tons east — which, on 64-inch drivers, means a lot of loud stack talk and flexed main rods. We came to Garrett, a town and a tower at about the 1600-foot level on the west slope, in search of EM-1 2-8-8-4's, but the operator reported that the articulateds had gone west at night and would return under cover of darkness as well. But if no 2-8-8-4's

A rural scene of abiding and infectious tranquility — Castleman River's B&O Consolidation No. 3104 looks on as bearded Amish men unload flour sacks from a box car at Grantsville, Md.



Leased B&O No. 3104 on Castleman River — just 3 inches by ½ in the *Official Guide.*

were around, there was a solitary 2-10-2: S-1 6105. The Santa Fe-type was shoving hard on the bay-window caboose of an eastbound coal drag headed by a pair of GP9's.

Up through Confluence and Rockwood and into Garrett rolled the coal, finally pausing just above GA Tower so that the Geeps could fill out the train with more coal. Indeed, so much coal that a three-unit road diesel showed up to assist the 2-10-2 in moving the tonnage on up to Sand Patch. Five diesels plus an S-1, maybe 12,000 h.p., chanting and snorting and grinding out tractive effort.

Well, Sand Patch was dieselized not long after our visit. When the gray ballast was cleaned the next time, it would stay clean. The rains gradually bleached the soot-blackened tunnel portals. And the water plugs vanished along with the special instructions about how to move engines with their side rods down. Look well at these photos: the 6105 is one of the last of the locomotives that burned the tonnage they helped to haul.

Helper crew confers with GA Tower operator.

Perhaps it's not such a bad way for the steam engine to go ... by giving an assist here and there to the new order. After all, how many roads dieselized without looking back — and how many, in the manner of Rock Island and Chesapeake & Ohio and Milwaukee, how many were obliged to pull a few Mikes out of storage to heat a canning plant or pull a work train or help the diesels across a temporary traffic peak? Looked at from a strictly sentimental point of view, I think we have appreciated the steam locomotive all the more after it has spent a session in storage.

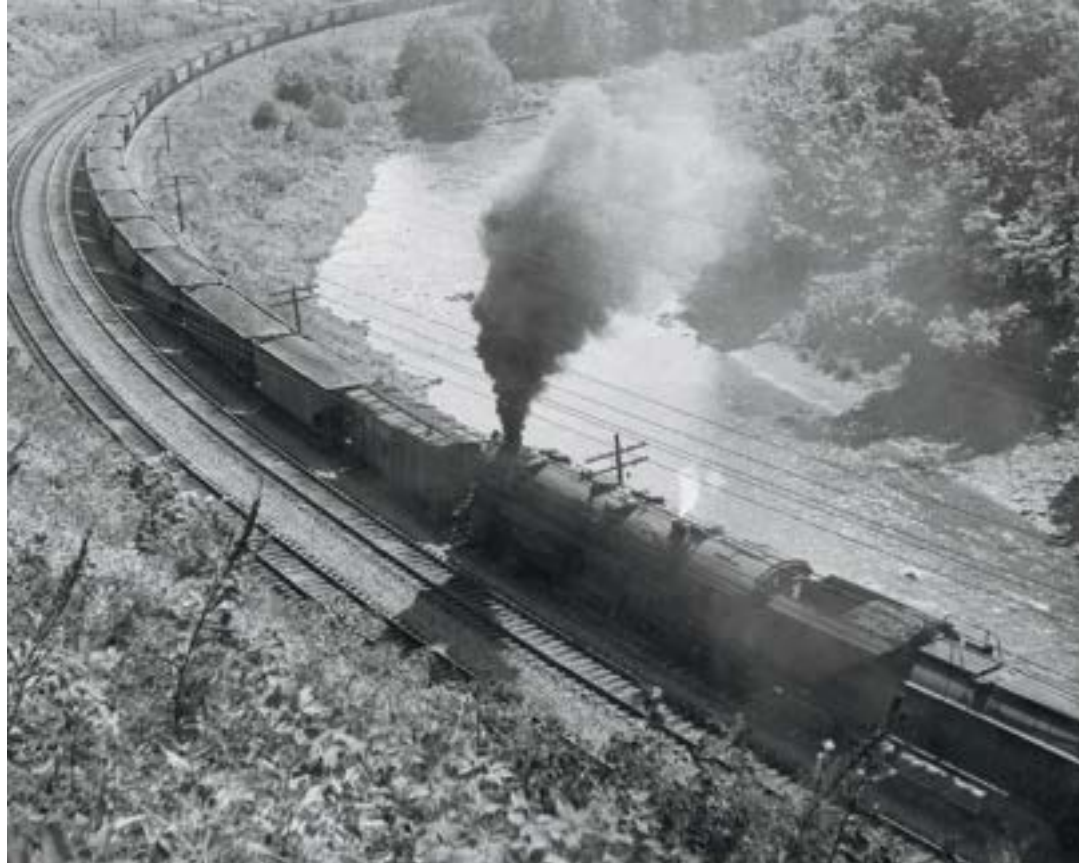
For example, when Burlington was obliged to fire up a few 4-8-4's for work out of Chicago in 1956 when the Colorado sugar beet rush ran the diesel supply too low, why local on-line newspapers carried feature copy on the event, and photographers converged on the Q from near and far. During the season that the big O-5's were talking it up through Aurora, I had occasion to mention the matter to Burlington President Harry Murphy. For a minute or two he briefed me

Baltimore & Ohio Sand Patch helper, S-1 6105 — Mr. Murphy knows all too well.

on the relative economics of retiring steam power and keeping enough around to protect traffic peaks.

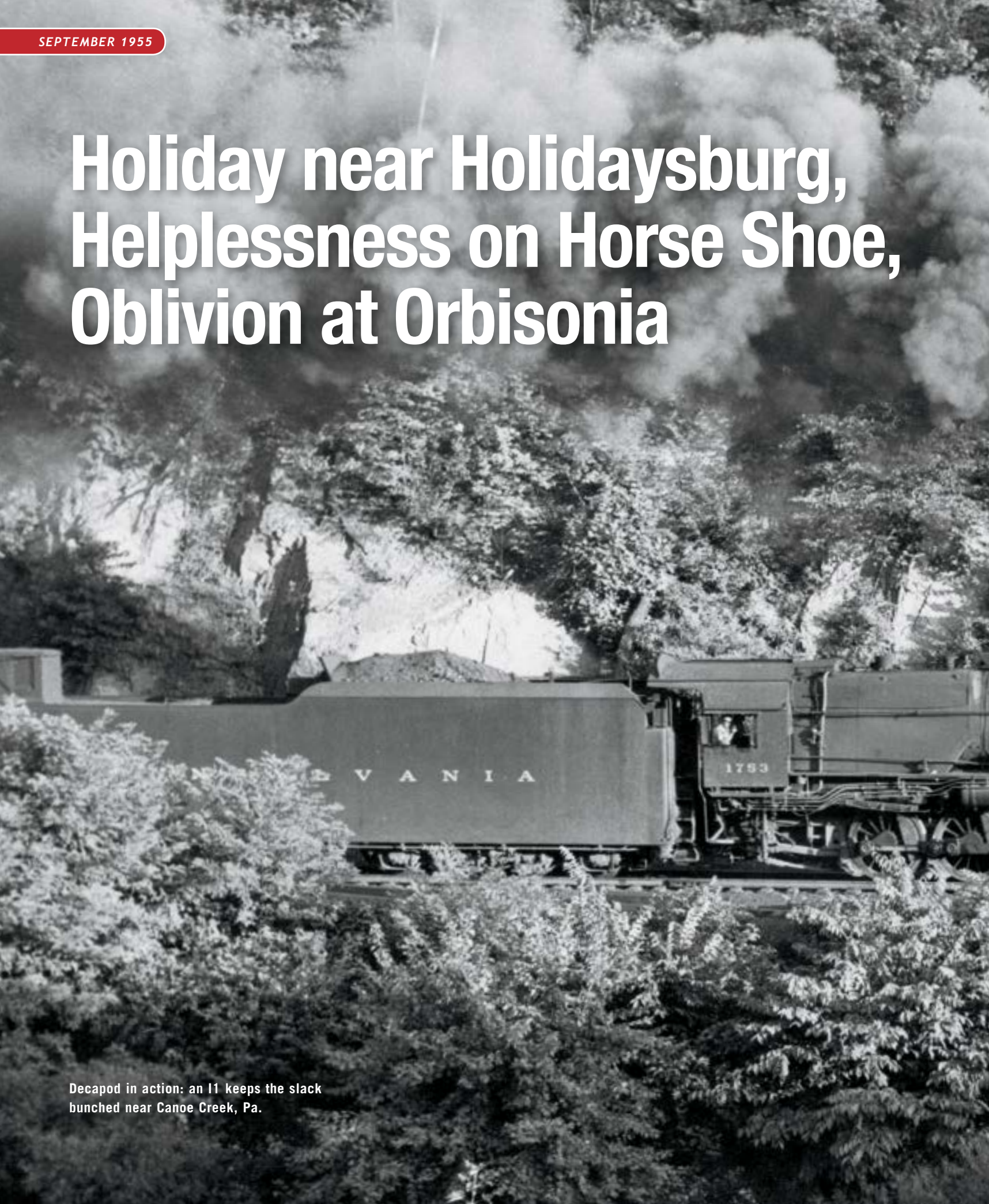
And then he dismissed the statistics and asked how I liked their exhaust. And he confided (I trust I'm not talking out of school) that he and his wife admired to sit in the garden of their Aurora home and hear the 4-8-4's sound off.

Of course, I thought. You, Mr. Murphy, know the diesel much too well not to like the way an O-5 talks up. You know all the diesel's many, many virtues — its return on investment, tonnage ratings, mileage capacities. And why air horns are no substitute in the heart for superheated steam working inside 28 x 30-inch cylinders.

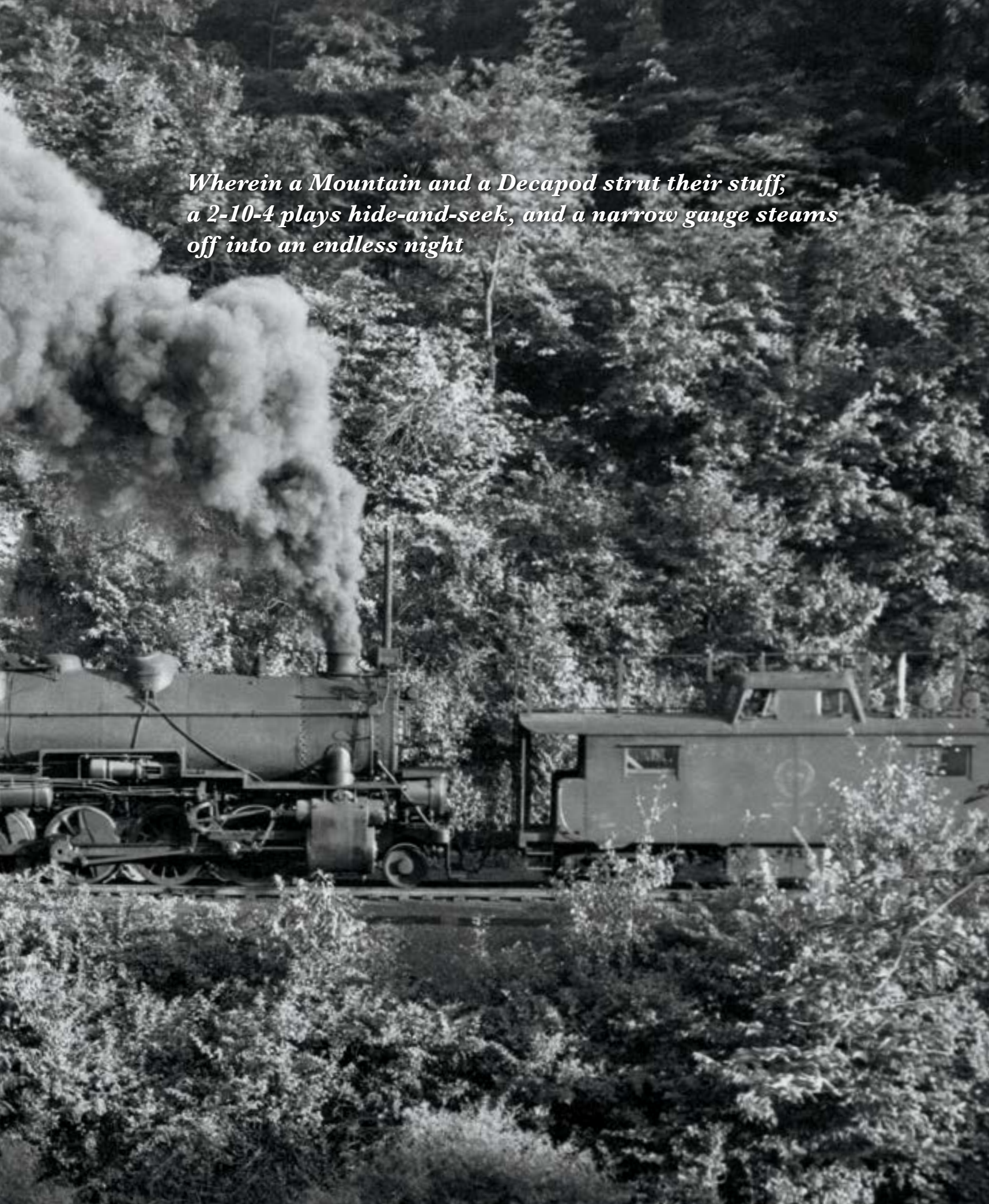


Perhaps it's not such a bad way for the steam engine to go — B&O 2-10-2 6105 assists F units and eastbound coal over Sand Patch.

Holiday near Holidaysburg, Helplessness on Horse Shoe, Oblivion at Orbisonia



Decapod in action: an I1 keeps the slack bunched near Canoe Creek, Pa.



Wherein a Mountain and a Decapod strut their stuff, a 2-10-4 plays hide-and-seek, and a narrow gauge steams off into an endless night

Action in Alexandria, Pa. Pennsy M1 Mountain 6894 leads westbound ore up the Juniata River Valley with an assist from I1 Decapod 1753.

If locomotives may be likened unto animals, I would like to nominate the Pennsylvania's fat, waddling monster of a 2-10-0, the I1, as the hippopotamus of motive power. The simile is apt, I think, because a hippo is not only a heavy creature (he weighs at least 3 and maybe 4 tons) but agile on his short, thick legs. He's ordinarily of good humor but changes character into a tough fighter on demand; in old age he may attack out of pure cussedness.

So, hail to the hippo — the I1. Like the huge amphibious creature of Africa, the I1 is obsolete, living in ever smaller numbers on borrowed time. The diesel didn't date the I1. Indeed, there are engine critics who argue that the massive 2-10-0 was something less than ideal when introduced in 1916 and certainly never warranted duplication by the hundreds during the 1920's. They argue that it is expecting too much of 69.89 square feet of grate area to warm up 4590 square feet of evaporative heating surface, and that in any event an I1's 30½ x 32-inch cylinders can take much more steam than the boiler is capable of producing except during a short-term, low-speed effort.

The men who maintain and operate the I1 give one the heavy-handed impression that they wouldn't call for a strike vote if total dieselization came about tomorrow morning or, failing that, if more modern J1 2-10-4's took over the remaining steam assignments. I1 parts are ponderous, tough to take down and reassemble. The main rod, for example, is 11 feet 1½ inches long and more than 8½ inches thick at the crankpin. And in my ignorance I once asked, "How does an I1 ride?" and received the only answer: "It doesn't!"

Riding the tail end of a hippo weighing 193 tons and exerting up to

Hail the hippo. Plodding, waddling, shoving forward, doing what she does so well, so good naturedly, I1 1753 shoves hard on the cabin car of the westbound ore train.

96,026 pounds of tractive effort through five pairs of 62-inch drivers was, perhaps, as close as one could have come to the dear, dirty, all but dead days of he-man railroading.

And yet even the I1's severest critics will cheerfully admit that the Decapod was a workhorse of an engine, a gutty machine that would have acquitted itself nobly if it had done else than hold down the helper jobs up to Gallitzin until the diesel came. As far as esthetics go, one does not need to qualify as a critic to love an I1. What a locomotive! Fat, stubby, beer-barrels of air reservoirs parked way out on the pilot beam ... an extended Wagon Top boiler with Belpaire firebox, reaching its peak at the steam dome (essentially an L1 Mike boiler with higher pressure) ... an angular, almost afterthought of a cab ... a splendid Worthington open-type feedwater heater hung on the left side — all in all, almost 50 feet of most compact, anything-but-handsome yet not ugly engine.

For verification I would direct your attention to these pages, which depict an encounter we had with a westbound freight moving over the Hollidaysburg & Petersburg Branch, which is Pennsy's bypass line around Altoona. Plodding west came an ore train, an M1 4-8-2 on the front and an I1 2-10-0 tied in behind the cabin car. Pulling and pushing, they came puffing up the bank of the Juniata River. The Mountain aside for the moment (and let's return to that subject sometime!), I will say simply that the hippo was doing what she does so well, just plodding, waddling, shoving forward, good naturedly going about those duties which her designer had in mind back in 1916 when he sat down to the drawing board and wondered,

(Both pages) Headed by EMDs, St. Louis hotshot on Track 4 overtakes J1 2-10-4 6427, the only steam engine dispatched west from Altoona in daylight. The writer comes off better than the photographer.

with ink and T-square, how to get more dig out of a Mike's boiler.

Ah, but we had not come to Altoona for branchline activity. We had come, at the editor's insistence, to see — what else? — Horse Shoe. And not just Horse Shoe itself, but steam on Horse Shoe — that great cinder-laden arc which Pennsy describes on the steep wall of the Alleghenies as it seeks to outwit gravity in the eternal fight to reach Pittsburgh and the West beyond.

The steam we hoped to see was unfortunately not the steam which really endeared the Curve to so many camp followers of the Pennsy. In the Indian summer of 1955 the I1 was absent from the Big Hill of Pennsy.

The 2-10-0's had shoved and heaved and bellowed for approximately a generation, which is not bad longevity for an engine on a main line as busy and as demanding as Pennsy over the Alleghenies. Gone, too, were the indomitable K4 Pacifics, charging up the slope, sometimes three at a time, with the great old names behind — *Gotham* and *Manhattan* and *Red Arrow* and *Broadway*. No slipping drivers of duplexes or cinders raining from fat-stacked 4-8-2's.

No, the engine our intelligence said was due west by Horse Shoe just after noon was the 6427, a J1 2-10-4 taking 122 empty hoppers back to the mines and making it up to the summit with an assist from 3000 General Motors diesel horsepower.

Now, a J1 is a mighty fine piece of steam motive power — on Pennsy or on Chesapeake & Ohio, where the design was given birth as Chessie's T-1. She is the very expression of Lima's high-horsepower gospel: a free steaming boiler, 121.7 square feet of grate area to keep it hot, and 69-inch drivers to get a roll on without tearing up the iron or making the crew eat off mantelpieces for a week. Just about the tractive effort of an I1 — but the difference between night and day (or specifically, between World Wars I and II) in efficiency.

We reached the Curve well ahead of time, met a Pennsy policeman, climbed the stairs to the trackside park, and ducked around the fence to find a fresh location for what was surely going to be — if planning and money and travel and equipment could make the difference — a fine farewell photograph. The weather was perfect — a bright, clear day, alive with all the cheerful sorrow of summer putting on a good show on the eve of abdication to the drudgery of winter. For a vantage spot Hastings tackled first the wall of Kittanning Point itself, had to discard it because of dense undergrowth which made climbing impossible — at least within the time limits allowed us. Having thus had to surrender the bottom or toe of the Horse Shoe, we tried the south side of the Curve and

Valve motion of East Broad Top's Three-Spot — in deepest twilight ... for good.

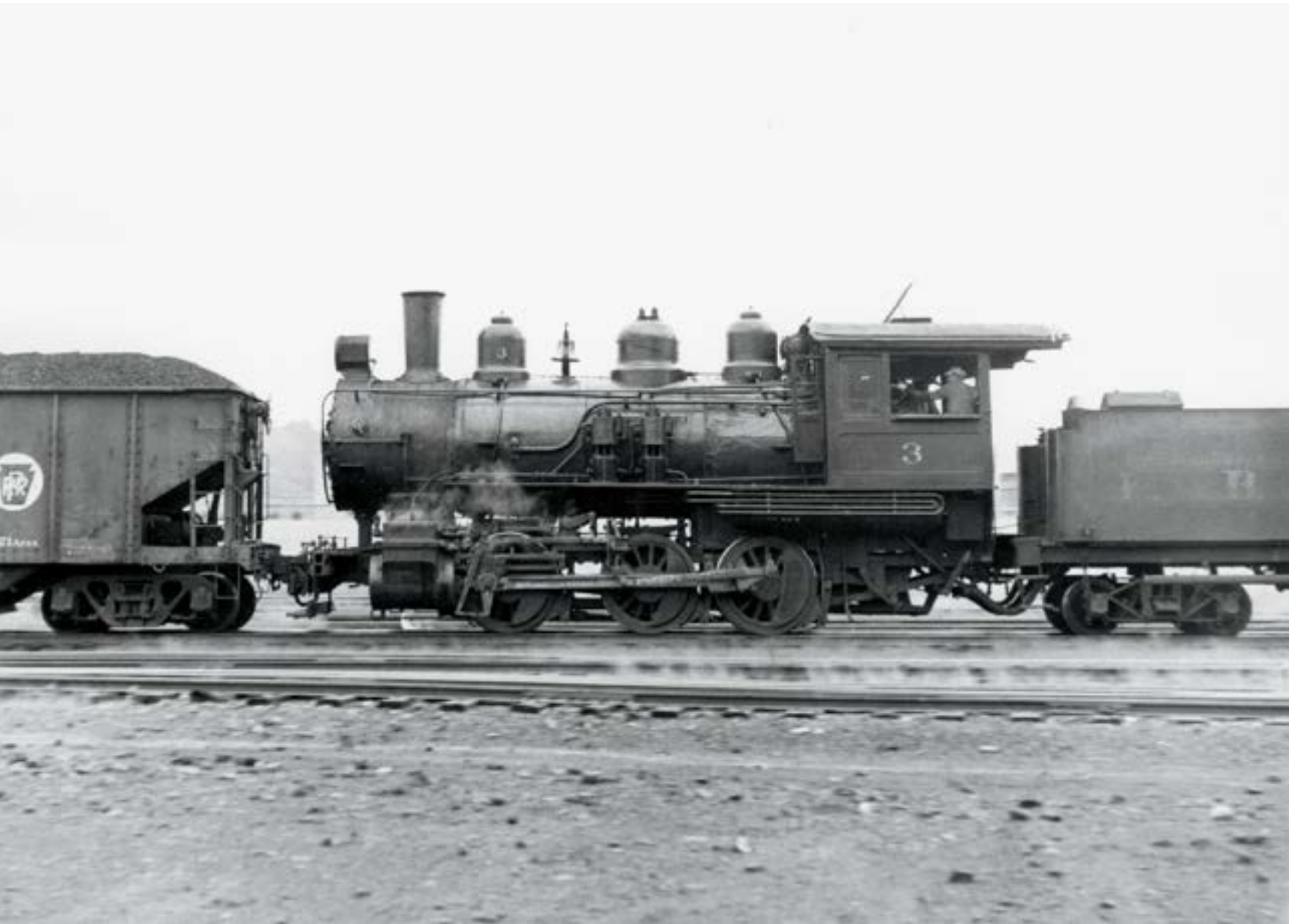
located — as I think the photos show — a good angle for photography.

Incidentally, it is upon an occasion such as this that the writer comes off considerably better than the man with the camera. The steam locomotive is, at best, a difficult creature to chronicle, in word or photo, but where the writer can imagine or visualize or capture by word, the photographer must actually carry his camera — to the tank of a Camelback doing 65, into a servicing pit, through the fog of steam laid down by open cylinder cocks.

So it was on Horse Shoe as Hastings balanced himself precariously, and a smoke column toward the east told of our oncoming 2-10-4. Slowly she lifted her empties up the 1.74 per cent, riding track No. 3 of a four-track main. She came to the Curve, swung partway around the 9-degree bend, and, for cause unexplained, stopped. The head brakeman swung off the tank and walked back a car length or two ... and then, with the drone of distant diesels, the moment of truth was upon us: A merchandiser was climbing the Alleghenies, too, and coming up No. 4, the outside iron!

The F7's on the St. Louis hotshot overtook the standing J1, then snarled by our mountainside location — and at that moment the 2-10-4

Standard gauge Three-Spot shuffles hoppers — working for the last common-carrier narrow gauge railroad east of the Mississippi.



Mikes at dusk in Orbisonia, Pa. — the grip is death itself.

EBT Mikado No. 16 takes water at Orbisonia — a last, lingering look.

whistled off and came blasting up to where we were, all but her boiler top effectively sealed from the camera by passing reefers on No. 4 track.

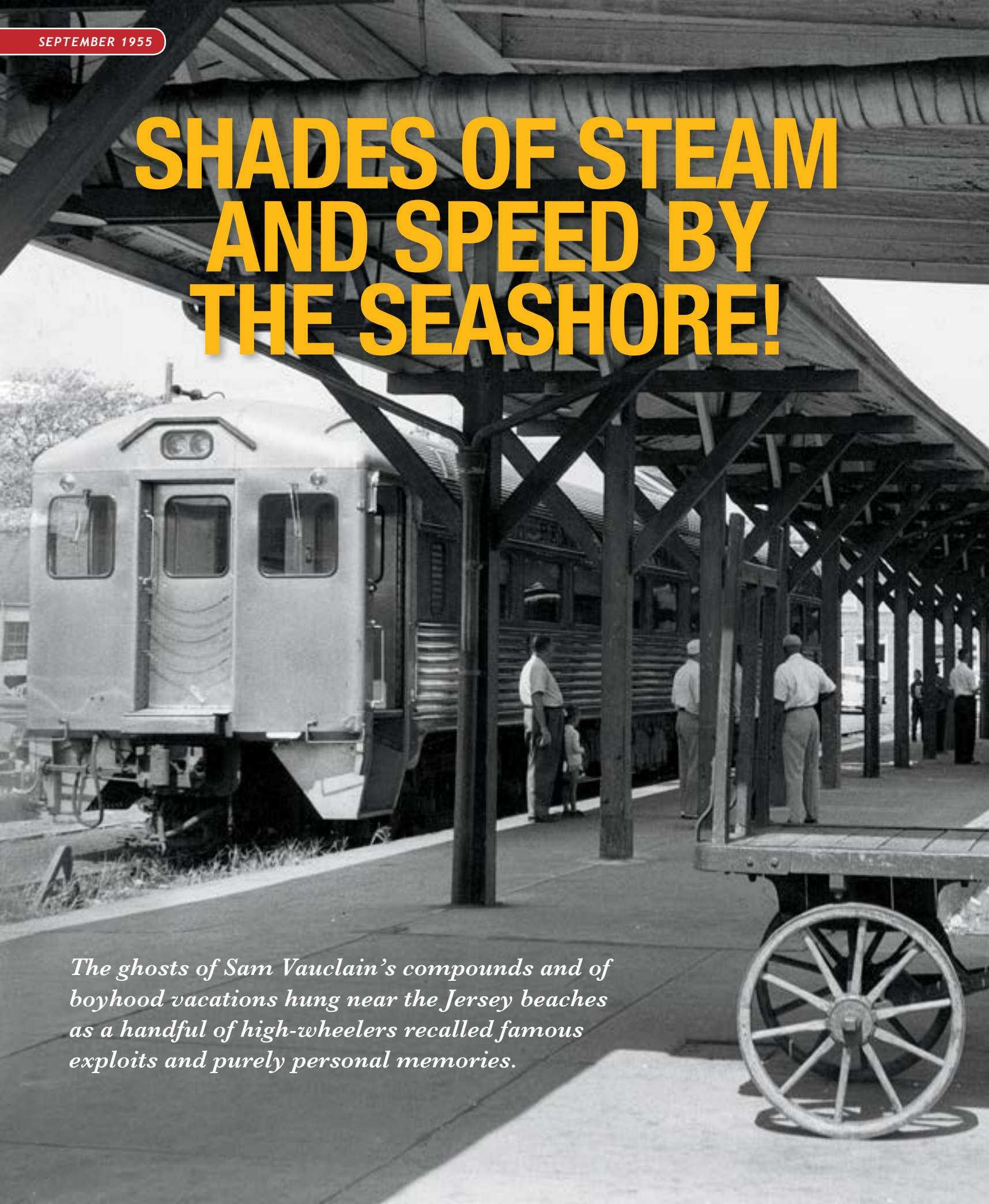
Helplessness itself. And with her passage went the only steam engine Altoona had scheduled west during daylight hours. All of which is why the photos reproduced in this installment are not what the doctor ordered.

On Horse Shoe, traffic density had ruined advance spadework, but there would be more steam on more sunny days. But down the road at Orbisonia, Pa., we came upon a steam operation that was in deepest twilight — for good. East Broad Top — the last common-carrier narrow-gauge railroad left east of the Mississippi — was in its death throes. Today it is defunct, the victim of declining anthracite revenues such as had rocked the finances of bigger properties like Lackawanna and Lehigh Valley. Except for EBT, coal was life itself.

We looked in at Mt. Union — where EBT interchanged with Pennsy — and watched standard-gauge 0-6-0 No. 3 shuffle hoppers out of the coal transfer plant. Then we went on to Orbisonia, site of the company shops, for a last, lingering look at the genuine articles: 36-inch-gauge Baldwin 2-8-2's 16 and 17. Long wooden pilots aside, they were still modern examples of little power, although built in 1916 and 1918 respectively. Piston valves, superheaters, power reverses, steel cabs — details of modernity lacked by many a big brother still in steam today. And as for size ... why, that's a quality of narrow gauge which only asserts itself when you're fresh from the outside, larger world. Stay within the n.g. domain a few days, even hours, and it becomes as important, as self-respecting as any railroad operation anywhere.

It was Friday afternoon — late afternoon, at that — and behind the stub switches and amongst the ancient buildings Mikes 16 and 17 were being bedded down until Monday. For us, they were being prepared for the long, endless night. Alas, when big-time railroading is in a squeeze, the grip is death itself upon the fringe — the narrow gauge, the steam, the traction, upon so much of the precious and the noble. ■

SHADES OF STEAM AND SPEED BY THE SEASHORE!



The ghosts of Sam Vauclain's compounds and of boyhood vacations hung near the Jersey beaches as a handful of high-wheelers recalled famous exploits and purely personal memories.

Portrait of a speedster. Lindbergh was out selecting a site for an Air Force Academy. I wondered if he knew about the 460.

It is the English railway writer C. Hamilton Ellis who has dwelled at length and with profit on the analogy between boyhood vacations and our gathering love for locomotives. I think he has something there. Certainly there is nothing in my own memory to disprove it.

A voyage to New York on the old Ocean Steamship Company? Why, that meant going down to Macon, Ga., on the mixed and boarding a Central of Georgia boat train for Savannah. And one year we journeyed to Florida on the *Flamingo*, with all of the excitement of an open observation car and a change of engines at Albany and a first encounter with the wonderful world of the lower berth. Even a motor trip across Indiana and into Michigan is remembered for the glimpse it gave of the dying Indiana

The shiny and the gritty: an RDC and an E6 at Cape May, N.J.

Pennsy E6 Atlantic 460, the "Lindbergh engine," and crew wait together at Tuckahoe, N.J. She made a laughingstock of aviation progress.

Railroad and for the questions it raised ("Dad, why does New York Central have such squat cupolas on its cabooses?").

Vacations were wonderful, not alone for the beach or the lake or the freedom from school, but for the railroads observed and the locomotives heard. Suddenly, gloriously, a Belpaire-boilered engine wasn't just a page pored over in *Railway Wonders of the World* but the actual steaming machine herself, banshee whistle and all; and the timetable names filled with drama and importance — Elkhart and Crestline, St. Augustine and Corbin — materialized with all of the expected track and smoke and noise that one had been led to expect.

But perhaps I strain your patience. Personal recollections, however sublime to the teller, are soon tedious to the

listener. Let me tell of just one other experience, one that pertains directly to the illustration on pages 64-65, and then we will hurry along to other and more universal subjects.

The vacation I mean took place before the war, in the twilight of that depression decade when railroading lay suspended in a vacuum of enforced economy. The engine, the trains, the line never changed from year to year. As a boy, I got the impression that they never would, and before the illusion was broken there came a vacation on the Atlantic at Cape May, N. J.

Cape May ... stub end of a Pennsylvania-Reading Seashore Lines branch and a place to see trains. Each evening, a half hour or so after supper, a train arrived from Camden and in a few minutes another one departed for the city. The inbound express was always propelled by what I still consider one of the handsomest locomotives built, a Reading Camelback Atlantic. What a machine: tall, with enormously large driving wheels (some of them had a diameter of 86 inches), a smart Reading smokebox, and of course that wide Wootten firebox bringing up the rear. Yes, handsome was the adjective, at least in terms of overall balance. (I sometimes think that an artist who didn't know anything about engines but much about design integrity would have admired such an engine more than a conventional locomotive.)

I rejoiced in such a machine; there was always one more question to ask the fireman who hung out over the gangway chains: Why was the cab in the middle? Why were there two fire doors? Was it difficult to fire?

The other train usually rated a Pennsy E6 Atlantic (although I once saw it depart on a rainy evening with a Reading G-2 Pacific), and that — as any boy who could read knew — was also a remarkable speedster. Not that it necessarily looked fast. The Camelback held honors there; there was no doubting how fast those drivers could turn. No, the little E6 was deceptively chunky, like a K4 somehow painfully

We found solace at Tuckahoe, N. J., in the shape of Pennsy E6 Atlantic 460 ... and in K4 No. 5414 arriving with a tardy connection from Philadelphia.

Working train 761 to Millville on an Indian Summer Saturday, Reading G-3 Pacific No. 215 struts through Vineland, N.J., with a single PRSL coach.

squeezed together at the expense of a pair of driving wheels. The low tank didn't help, either. Still, the E6 had long before earned her reputation, so in her case, too, a vacation meant direct access to the famous.

All this was many years ago. It has been quite a time since Reading cut up its last center-cab 4-4-2 and since Pennsylvania-Reading Seashore Lines began replacing steam power with Baldwin hood units. Cape May seemed far away and long ago until I noticed one day that we were only a few miles away from the seaside resort. Accordingly, I persuaded Hastings to accompany me into Cape May for a quick look around ... and there, as his photos indicate, boyhood returned. True, a Budd RDC was in town, looking like something no boy dreamed of in prewar times; but the small frame depot stood as always and there was even an E6 Atlantic in steam! Come, come, I thought; the automobiles are new on the street outside, the beach attire is much more abbreviated, the station paint seems changed, and certainly the yard looks smaller. Yet the E6 steams quietly as always, with her Tuscan red P70 coaches behind. Perhaps one can recall the past, at least to the extent of a summer day in 1938 ... in Cape May.

Enough of such things. I promised to write of universal affairs — for instance, speed. Once upon a time, when speed was synonymous with steam and the English had had the blue ribbon so long that they almost thought they held permanent title to it, the Jersey swamps and meadows between the Delaware River and the Atlantic Ocean became the pride of the entire U.S. Here raced the Atlantic City Railroad, and in particular, engine No. 1027 — Sam Vauclain's great four-cylinder compound. The job of the 1450-h.p. (at 70 mph) Camelback 4-4-2 was to cover the 55½ miles from Camden to Atlantic City

Pennsylvania-Reading Seashore Lines partners meet at Broadway station in Camden, N.J., as Pennsy B6 0-6-0 4183 encounters Reading G-3, PRSL 215 and train 756 from Millville.

in 50 minutes, and when the ferry was late from Philadelphia, in less time than that. In a climactic series of 52 trips run off during July and August of 1897 No. 1027 never made the run in more than 49¼ minutes and once managed it in 46½ minutes, a start-to-stop average of 71.6 mph. At times the speed was way up in the 90's, well over 100 on at least one august occasion. Thus, in 1897, the speed crown came to the U.S.

Hastings and I might have mourned the circumstances that precluded putting No. 1027 on film (she was rebuilt as a simple engine, finally scrapped in 1927), but we found solace at Tuckahoe, N. J., in the shape of Pennsy E6 Atlantic 460. The Lindbergh Special engine, the 4-4-2 that sped from Washington to Manhattan Transfer, 216 miles in 175 minutes. That was in 1927. By developing the films of Lindy's triumphal return in a specially equipped baggage car en route, Pennsy put its newsreels on Broadway before those sent by plane — thanks to the 460.

At Tuckahoe she stood, coupled to a single combine, waiting to be off on a plug run to Ocean City once the mainline connection from Philadelphia showed up. The veteran, built in August 1914, looked dirty and tired, and the fireman — well aware of her history — admitted that though she steamed well, she rode intolerably rough. Certainly she was in no condition to repeat her exploit of almost 30 years ago.

I wondered idly if Lindbergh knew, or what he would have said if he had, that an instrumental link in his legend's publication still steamed about. I think he was helping the Air Force select an academy site at the time and would probably have received news of the

Chasing the ghosts of compounds and camelbacks? Reading 215 hurries through Camden, N.J., with PRSL passengers.

New York & Long Branch steam action at Point Pleasant, N.J. — coming up: a fresh and uninformed generation. (Left) All sharp angles and brute power — elements of the K4 at Bay Head Junction, N.J.

460 with polite disinterest. After all, his flight had been made to promote aviation progress, while the E6 — on one afternoon in 1927 — made laughingstock of it.

Our next quarry was the Pennsylvania's K4 Pacific, a number of which were reported still in daily action on the New York & Long Branch between South Amboy and Bay Head Junction, N. J. As we camped one afternoon in Point Pleasant and watched the big jobs roll past with commuters and amateur beachcombers, I was moved to contemplate the astonishing durability of the beast. Here was an example of an obsolete form of motive power — not a recent example, either, but a design dating back in essence to 1914. Ancient she was, with

Edaville passenger train ready to depart from South Carver, Mass., station — in times past, a mile a minute. (Left) Reflections of Edaville — a railroad, not a toy.

more than 40 years' worth of technological progress in steam and its successors gathered in between that design date and the September day we trainwatched in Point Pleasant.

Still, the K4 has not been an easy engine to replace on New York & Long Branch. I do not mean in fuel economy or maintenance cost per mile but in performance. NY&LB's job during rush hours is to roll 10 or more coaches between stations only 5 or 3 or less than 2 miles apart, and the K4, though never engineered for such work, can do it and do it well. It means a constant series of stops, rapid acceleration, more stops, and a K4 turns in a militant performance that has baffled more than one diesel replacement. She's a grand sight at trackside, all sharp angles and brute power, suddenly coming to life and walking away under a sharp, confident, almost smug exhaust ... no taking of slack, no slipping, no sluggishness.

Among those who revel in locomotive esthetics, the most oft-heard complaints about K4's are "It's not a beautiful engine" or "She's ugly." Odd, perhaps, but I never thought about the K4 in a comparative sense, not as one would compare a Southern Ps-4 Pacific with one of the big Erie engines, say. Or with an Espee P-13. No, the K4 is simply Pennsy, which is to say unique and alone and isolated. One either admires engines put together with such a religious disdain for what anybody else did, or one does not. I do.

I suppose that there are old timers who pity youngsters like me because I wasn't around when, for example, Mr. Vauclain's compounds were racing for Atlantic City, or the original Alco Mallet went pounding up Sand Patch, or the woods were filled with narrow-gauge and geared locomotives. I realize now what they mean because I see a fresh and uninformed generation coming up that will never know what a K4 was like, at least under steam.

They have my pity.

Switching now from the mighty to the miniature, mark well the illustration herein of Edaville No. 7, the tiny 2-foot-gauge Baldwin 2-4-4T that steams still on that operating restoration of Maine narrow gauge up in the cranberry country of Massachusetts. Edaville is the idea and the work of the late Ellis D. Atwood, a cranberry plantation owner of South Carver, Mass., who not only mourned the loss of Sandy River, Monson, Bridgton & Harrison, et. al., but did something about it. He threw a loop of track around his main reservoir (a lake for all practical purposes, scenic too) and scoured Maine for engines and cars to operate on it. Edaville — under the direction of railfan F. Nelson Blount — is a gem, a cindery, whistling, one-lesson course in just how small a railroad could get and still remain a railroad and not a toy.

No. 7, for instance ... 35 tons' worth of utterly delightful mechanism with all-but-invisible drivers hidden inside outside frames and exposed, gyrating counterbalances and Walschaerts gear — complete with headlight, bell, whistle, air pump, and enough guts to make (in times past if not on Edaville) a clean mile a minute.

Hastings took photos and I rode around, and but for the mundane and inflexible stuff of which magazine deadlines and medical practices are made, I dare say that the doctor and I would still be there. It's not every day that one encounters a legitimate steam locomotive that he can lean over and look down at. Certainly not a K4, say.

STEAM ... AT SEA LEVEL AND 6288 FEET UP

Wherein TRAINS pays final respects to the beetle-browed power of Grand Trunk and takes a chilly ride into the clouds ahead of a snorting bone-shaker of a geared 0-2-2-0

CNR U-1-b Mountain 6017 (above) on a misty morning in Portland, Me. At left, Grand Trunk No. 17 crosses swing bridge at mouth of Back Creek Cove, Me. Do not pass up — except under unavoidable circumstances.

Grand Trunk ... *there* is a corporate name rich in history. It bespeaks a main line, a highway of vast commerce, not just a railroad but *the* railroad. Today, of course, the name is dry with antiquity, for the buried years have taken with them the allure and secret of such titles.

"Orient," for instance — recall that one? Remember when Jim Hill was rushing toward the Pacific with things on his mind other than the tall timber that grew on the slopes of the Cascades, when Orient meant rice and silk imports, and exports of machinery and manufactures? Why, Arthur Stilwell got so excited about that prospect he called his short cut from the wheat fields to the ocean the Kansas City, Mexico & Orient. Ah, yes, that was a name to intrigue an investor, to loosen the purse strings.

How many "Pacifics" are there, with prefixes ranging from Southern to Northern and including "Duluth, Winnipeg &" and "Quanah, Acme &"? In days of old a name had a larger purpose than mere description of route. It had to do that — and be euphonious and intriguing and bold. St. Louis-

Waiting for No. 17, engineman on Lewiston mixed looks over his pre-World War I Mike at Danville Jct., Me.

San Francisco ... Seaboard Air Line ... Cincinnati, New Orleans & Texas Pacific. Hindsight shows that on many an occasion investors would have done well to sink their coin in more conservative titles, the shorter the better — such as Pennsylvania.

Thus Grand Trunk, Canada's first major railway and a property so large that it could ignore even an international boundary and think and build in terms of a transcontinental from the port of Portland, Me., clear to the blue Pacific. GT lived up to its name, all right, and beyond it to the point that it collapsed into the hands of the government and, in 1921, Canadian National. Yet the name "Grand Trunk" clung to those 165 miles of single track from the border and down across Maine to Portland. Technically, this piece of railroad reports to the Interstate Commerce Commission as "Canadian National Lines in New England," but at the time of our visit the old familiar name still appeared on locomotive tanks and in the speech of lineside residents.

On a gray, misty morning we came upon Grand Trunk at its passenger terminal in Portland, Me. At that time GT was awaiting diesel replacements

Connection at Danville Junction, Me., — like the *Lark* in San Jose ...

for its steam roster. Which is to say that we got in under the wire and that the engine waiting to forward daily-except-Sunday local No. 17 toward Montreal sighed instead of idled. She was the 6017, a "50 per cent" (*i.e.*, 50,000-pounds-tractive-effort) U-1-b Mountain type from the ranks of parent Canadian National.

Just a word, if you will, about this 4-8-2. She was an interesting 4-8-2 on at least three counts: (1) Any steam locomotive is interesting, particularly today; (2) the 6017 had those custom Canadian lines — obviously North American, yet definitely not U.S.A.; and (3) she was symbolic of the birth pangs of nationalization. Just after World War I the fledgling CNR was caught up in something akin to the vise in which British Railways finds itself today — holding at bay those critics who decry public ownership at any cost, and simultaneously appeasing the hand clappers who expect miracles of government. CNR had to assume the debt of its ancestors, win and merge divided employee loyalties, and — unlike most "nationals" — come to grips with solid, solvent competition in the form of Canadian Pacific.

Locomotives were not the least issue involved. The canted CNR herald was splashed across the tanks of an enormous variety of engines. There were Grand Trunk tankers and USRA 2-10-2's, wee Intercolonial Pacifics, scores of small Americans and Ten-Wheelers and Moguls — all types of locomotives, indeed too many types, mostly too small. Facing CNR was the formidable task of engineering universal power — dual-purpose engines that could range freely across the con-

tinent hauling longer trains on faster schedules at less cost.

In retrospect, Canadian National acquitted itself nobly. Perhaps more for publicity than for performance, it flung a few crumbs to the press and public in the form of two pioneer diesel-electric road units and five tall-drivered Hudsons. And at the same time — the end of the 1920's — CNR invested in a batch of 57-inch-drivered 2-10-2's that had "drag engine" written all over them when it might better have emulated CPR's success with Selkirk 2-10-4's. But most of the money went for versatile Mountains and Northerns, free-steaming jobs with drivers of liberal dimension and lenient axle loading.

The engine we watched in Portland, the 6017, was one of the first — a Canadian Locomotive Company product of 1923. Actually, she was not a heavy engine. With an engine weight of 355,570 pounds, the 6017 rode the scales at little more than a light USRA 4-8-2 and less than a New York Central Hudson. Yet she concealed this fact — nay, she Eliza Doolittled her inadequacy of specification into an appearance of tremendous power and ferocity by merely doting on details.

Such as what? Well, first and foremost, an Elesco feedwater heater lending what Al Kalmbach once cited as the overbearing "John L. Lewis brow" and giving to a locomotive, I think, that look of concentration that a frown gives you or me. Outboard bearings on the engine truck lent a touch of excitement, too — somewhat the same racy leaning-into-it appearance the same design gave the nearby 4-8-2's of Central Vermont and the Milwaukee Road F-6 Hudsons. Add an offset bell behind the steam dome, a Delta trailing truck, an all-weather Pullman cab, and a big 12-wheel tank, and you have quite a hunk of 4-8-2.

Canadian National followed the same tremendous pattern on all of its early 4-8-4's, the aforementioned 2-10-2's, and certain Mikes. More modern power may have been cleaned up in overall design, but it lost the huge look. Unfortunately, too.

Living on borrowed time — lowly mixed for Lewiston makes its connection with No. 17. You can't find a fairer scene in railroading.

The 6017 had very little to be ferocious about that September morning ... just a bit of head-end revenue, a coach, and a parlor car on a leisurely schedule (9 hours 50 minutes for 294.9 miles) to Montreal. At 8:20 am. she eased off, sauntered along Portland's waterfront, eased onto the low trestle and swing bridge across the mouth of Back Cove, then struck out across Maine for the Dominion. Hastings and I were, sad to relate, roadbound. I would have enjoyed riding No. 17, otherwise. The sight of smoke drifting back past coach window glass is a rare, rare thing these days — much too rare to pass up except under the most unavoidable conditions. Say, an important appointment.

Which we had — up the pike at Danville Junction. There, standing in the clear and in weeds, was a gentle Baldwin Mike of pre-World War I construction, the 3432. Coupled behind was a graceful, wooden-sheathed, 12-wheel combine. That constituted the mixed-train connection for Lewiston, Me., 7½ miles distant.

Like the steam engine that hauled it, this schedule was living on borrowed time; today you ride a bus.

Study Hastings' photographic evidence of this connection at Danville Junction — the waiting mixed, the mainline train comin' round the bend, passengers and bystanders moving up as the 4-8-2 comes striding in with all of the authority of the *Lark* in San Jose. As late as World War II this kind of activity happened all over the U. S. and Canada in scores of remote and unremarked junctions. But nostalgia, even purest Americana, is no match for rising costs and authors of annual reports.

After all, you can't make any coin running a Mike, a combine, and a full crew 7½ miles with four or five patrons and a box or two of express, just as you can't find a fairer scene in railroading than Danville Junction as haughty No. 17 steams in to make connection with the lowly mixed for Lewiston.

Some wise man has said that the fundamental of layman concern for the railroad is not the steam locomotive nor the metropolitan terminus nor even the romance of the names stenciled on 744,000 box cars, but the very basic fact of the flanged wheel upon the steel rail. I like that, for it accounts for a parallel in marginal interest in such mechanisms as the subway and the el and in those electrified narrow gauges that go threading a labyrinth underground to where coal is dug. It also allows for the 900-series streetcars that once rocked along down Preston Street in Louisville and for the unheralded industrials that seclude themselves behind the locked gates and smoky smelters of industry.

Also the cog railway, of course — that tourist oddity which discards the rulebook of ordinary adhesion-type railroading and really goes uphill, sometimes at the astounding rate of more than a foot up for each 36 inches ahead. The one up Pikes Peak disposed of its delightful little Baldwins in favor of buslike diesels before I got a chance to purchase a ticket, and as a consequence I did not. But when Hastings noted that our steam safari led near Mount Washington, N. H., and that the summit could be reached by steam locomotion, I was happy to sample this unique brand of flanges (and cogs) on steel rails.

Just to refresh your memory, Mount Washington is the highest peak in the northeastern U. S.; a member of the Presidential Range, Washington rises to a summit of 6293 feet. The Mount Washington Railway was opened on July 3, 1869, and except for cessations of service in both World Wars, it has operated continuously ever since.

Take my word for it — the ride up is quite an experience.

It is slow ... the 3¼-mile journey requires approximately 70 minutes.

It is cold ... summit temperature has never exceeded 74 degrees and in September the climate stifles any argument the visitor might make about the claim that the thermometer once sank to 49 below.

It is — well, cindery ... Mount Washington Railway needs air con-

Passenger's view of Engine 4 climbing Jacob's Ladder. Like Electro-Motive needs blacksmiths.

ditioning like Electro-Motive needs blacksmiths, thus quite a bit of the ton of coal burned on each ascent seeps inside the coach.

It is noisy ... each engine has four cylinders turning over tricycle-size driving-wheels-plus-cogs, and at 2½ mph the thunder is "Mallets in the Rockies" — and then some, not to mention the vibration.

It is disarming, not to say outright frightening .... I was aware that Mount Washington Railway had suffered only a single passenger fatality since 1869, that engine and coach are equipped with several braking devices, and that any passenger climbing 3760 feet in 3½ miles in anything is apt to ponder the consequences regardless of the odds against them — and yet that one fatality had been a member of the press, hadn't he?

It is eccentric ... the gauge is 4 feet 7 inches, the grade hits 36.6 per cent, the view is extraordinary.

Finally, it is very difficult to adequately describe. With a great deal of huffing and puffing, engine No. 4 — *Base Station* — comes roaring up to the depot at a snail's pace, pushing an open-platform, 48-seat coach; passengers troop aboard; and you're off.

I was first impressed by the engine, an 0-2-2-0 that looked something like a mobile sawmill power plant with a silver smokebox and a huge cab to mark its calling. The boiler slanted at 10 degrees, which gave the little fellow a perpetual appearance of kneeling, and the locomotive trailed a ridiculous little four-wheel tender.

And a harder working engine never held a fire on her grates. Once under way the coach shakes and vibrates as No. 4 literally noses against the car (there are no couplers) and furiously cogs her way upgrade — at 2½ mph

Engineer oils around Engine No. 4 after taking water at Waumbeck Tank, N.H. In the distance, another train climbs the mountain.

Approaching Waumbeck Tank, N.H. — 3¼ miles, 70 minutes.

when the grade is easy and at 1.75 when it is not. The way it feels, the view ... oh, well, go there this summer or next and see, or rather feel, Mount Washington for yourself. There are scores of incidental memories to be earned — watching the crew throw two switches and move seven pieces of track each time the train takes siding to clear the main ... leaning way out over hardly anything at all on Jacob's Ladder (Ophir Trestles on Rio Grande Southern were the only real equivalent for that in my book) ... feeling the engine at stops steam mightily, shove the coach forward a mite, then roll back and joggle to a stop on the brake. Brother! ... The feeling at summit of divorce from the cares of the world, indeed, from the world itself.

Anyway, I've ridden it and I'm glad. That's one more railroad to be crossed off my list. I suppose any confirmed train-watcher has such a list. A ride on a 4-8-4, a reservation on the *Century*, the sight of a Shay ...

Now that "cog railway" is secured, I'm off — in planning if not in practice — to ride that Beyer-Garratt in South Africa, to see the bipolars marching over the Bitter Roots, to walk that loop track under Grand Central.

Where are you bound? ■

Meet at the Cog's Skyline siding, 5800 feet above sea level.

THANK HEAVEN FOR QUARRIES AND SAWMILLS!

Long after the diesel had virtually drained New England of mainline steam power, we found little saddletankers slyly puttering about in the backyard of industry. We didn't complain.

I don't know where the rumor started — maybe it developed back in witch-burning times or perhaps when radio discovered town-hall meetings — but the word got around that New England was conservative, cautious, almost stuffy. 'Tain't so, especially in railroading. Hudsons, Berkshires, and 2-10-4's were being purchased by the gross for Yankee consumption when many roads elsewhere couldn't see beyond the end of their USRA smokebox. New England had a streamliner in 1935 and diesel freighters by 1941. It was the first region to virtually complete dieselization, and later it possessed more new low-slung lightweights (not to mention RDC's) than the rest of the country put together.

This may be shrewdness, but it's not stuffiness; the proof is that we almost ran out of steam. We were obliged to skip most Class 1 roads, even short lines, and beat the bushes for such marginal items as the industrials and the operating Edaville museum.

Not that this was necessarily bad. The steam locomotive constructed for private industrial use is usually interesting on at least two counts. First, the engine is as simple and as accessible as possible, for most of them have no recourse to huge back shops and not infrequently the man who opens the throttle also doubles as fireman and master mechanic-boilermaker. Second, an industrial comes in a thousand different varieties to protect against contingencies that most common carriers never face. For instance, ultrashort wheelbases to take factory curves that threaten the equilibrium of 50-foot box cars ... spark arresters and water hoses to see that what hauls the logs doesn't also set the forest afire ... gears to produce the dig that frustrates rods ... saddletanks to improve adhesion and omit the nonrevenue burden of a tender ... axle loadings tailored for rolling mills and gravel pits.

Two such engines steamed up the sky over Lincoln, N. H., a sawmill town of less than 1000 population. These machines, both saddletankers, belong to the Franconia Paper Company but the "EB&L" lettered on their tank flanks denotes East Branch & Lincoln — which is more colorful and rather historic. Years ago EB&L operated 20 miles or so of logging trackage up the east side of Big Coolidge Mountain along the East Branch of the Pemigewasset River. Alas, those woods have been logged out, and today the wood for the mill is either trucked in or arrives via Boston & Maine. The sole function of the two tankers is to putter about a mile or so of mill yard, shifting sawdust and pulp, and box cars of paper.

The old lady is No. 5, a 51-year-old Baldwin of the passing rare 2-4-2T wheel arrangement. She has spent all of her life around Lincoln, in the woods or alongside the mill, and she owes a measure of her longevity to an even older sister 2-4-2T which was cannibalized to keep her steaming.

The kid is No. 3, a Porter 0-4-0T of 1917 which EB&L obtained from the Watertown (Mass.) Arsenal in 1945.

I am sorry to add the postscript that No. 5 may be nearing the end. A reader of TRAINS magazine wrote me that EB&L had looked into diesels and rejected them because of their cost. But No. 5, he went on, must be overhauled or replaced soon, since she suffers from numerous leaks and a set of flat pony wheels. My memory of a morning spent watching this veteran shuffle around causes me to add that if you have any spare 2-4-2T parts, mention same to EB&L. I will be obliged.

Not far from EB&L we found Clark's Trading Post at North Woodstock, N. H., where two native sons of the area operate a souvenir store and an exhibit of trained black bears and Husky dogs. The connection with steam is that the Clark brothers are keenly aware of the log railroading that went on in the surrounding mountains. To express their interest they have purchased, moved, repainted, and mounted a pair of ex-EB&L locomotives on the Post.

Shay No. 5 dates back to 1919; Climax No. 6 was assembled in 1921.

The Clarks have a deep enthusiasm for geared steam locomotives, and I

Sectional anatomy of EB&L's Three-Spot — she was the kid of the outfit, turned out by Porter as recently as 1917.

East Branch & Lincoln 2-4-2T No. 5 (at left) and sister 0-4-0T No. 3 greet the morning sun.

Portrait of East Branch & Lincoln's motive power mainstay — for her they cannibalized an elder sister.

fear business may have been neglected in the souvenir shop that day as we mused over the traits of the quick exhaust jobs ... the rough riding of a Climax and the high center of gravity of a Heisler — yes, and the telltale mark of a road operating Shays: a line of lubricant paralleling the track left by the grease cups of the one sided engines, gears, and shaft.

The Clarks' Shay is old and weary, but the Climax spent most of her commercial life in storage and is in good mechanical condition. Perhaps some day the brothers will extend the rails, dose her inverted cylinders and Walschaerts motion with oil, and lay a fire upon her grates. I hope so. She would make a fine spectacle in steam, furiously pumping away at an underslung shaft, trundling along on interurbanlike trucks, helping to recreate that day when the woods of New Hampshire were full of smoke and snappy stack talk.

Rock of Ages" is a fine old hymn — and the name of a corporation devoted to the production of tombstone and memorial granite — and (because of the aforementioned corporation) synonymous with steam.

Atop Barre Mountain the Rock of Ages Corporation removes chunks of granite from a vast pit with derricks which lower the slabs to waiting flats. Rock of Ages' private switching road spots empties and removes loads, interchanging with Montpelier & Barre. M&B, in turn, eases the stone down a 6 per cent grade and through a switchback to the finishing plants in Barre, Vt. M&B, which recently salvaged these strategic miles of the defunct Barre & Chelsea, employs GE 70-ton diesels, but the quarry itself still relies on steam — one 0-6-0 and a pair of ex-B&C 0-6-2T's.

The tender engine is a Baldwin, apparently built new for McKeesport

The kid is No. 3, a Porter 0-4-0T of 1917 which EB&L obtained from the Watertown (Mass.) Arsenal in 1945.

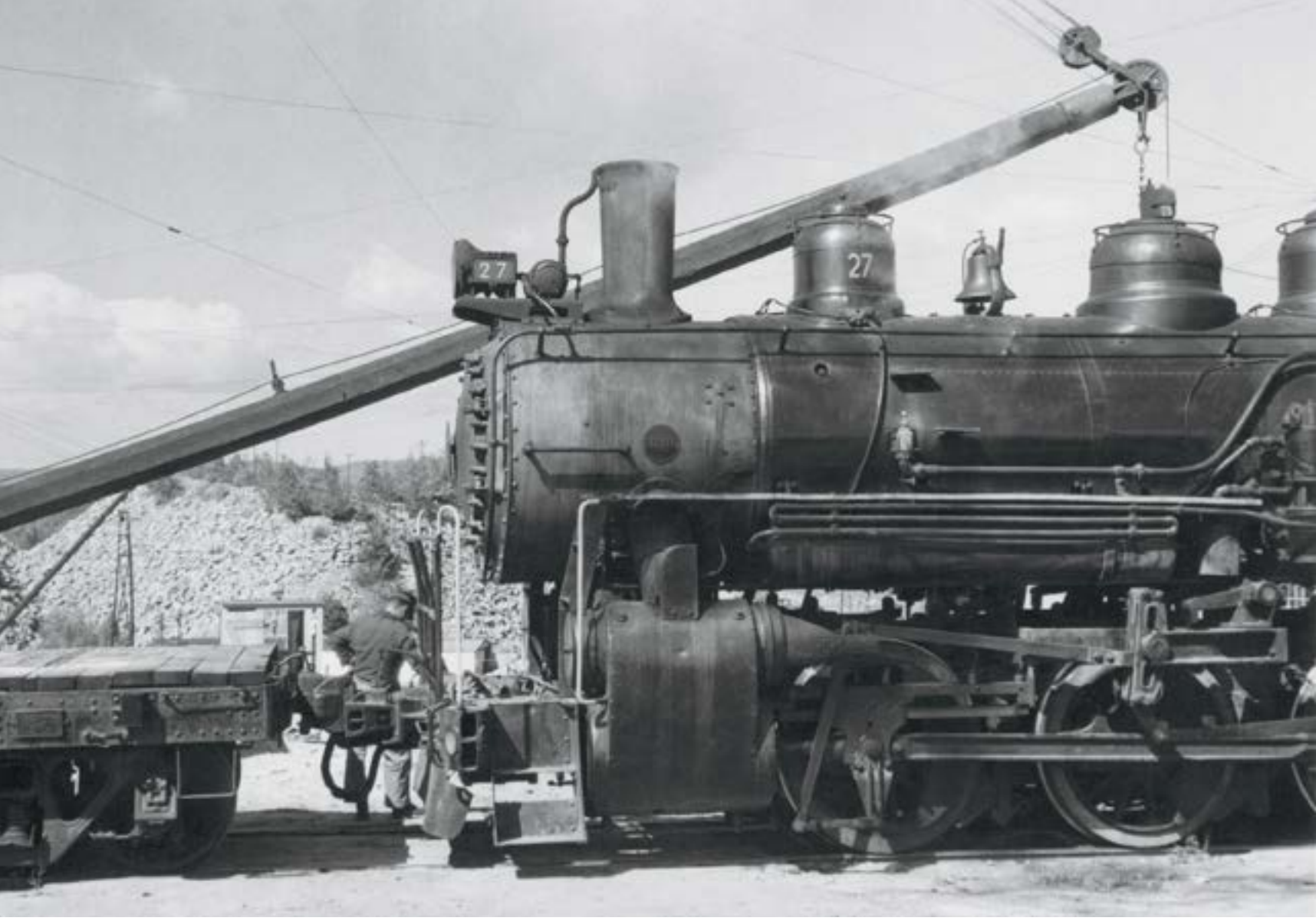
Connecting, a U. S. Steel switching road in McKeesport, Pa. She was sold to the now-dieselized St. Johnsbury & Lamoille County and resold to Rock of Ages to replace a failing 0-6-0 of Maine Central ancestry.

Any McKeesport Connecting personnel listening in will be pleased to hear that we found their offspring in the pink of shape, full of spirit, and with a glossy black boiler jacket complemented by yellow handrails and white driver tires.

The saddletankers were, of course, right at home, having just exchanged nomenclature but never surroundings. They chuffed about in a businesslike manner, pausing only to replenish their modest fuel and water supplies (2 tons of coal, 2000 gallons in the saddletank).

The diesel, I mused, had been responsible for unusual emphasis in the realm of steam locomotive appreciation. Once upon a time, when steam was supreme and we could pick and choose, the train-watchers and the photographers gravitated to a handful of choice arenas — to Cajon to hear Santa Fe's 3700's, to the Hudson River for the *Century* at dusk, to the extraordinary narrow-gauge trackage.

Climax geared locomotive No. 6 preserved at Clark's Trading Post — trundling along on interurban-type trucks.



Rock of Ages 0-6-0 No. 27 noses a flat car for loading with granite blocks — pleasing to McKeesport Connecting personnel.

Many and many an engine spent her life without moving into a view finder or within hearing of a sound tape. The industrials were particularly neglected, partly because of their inaccessibility but mainly because the mills and quarries and forests possessed many standardized little pots seldom noted for esthetics or cleanliness.

But in the mid-1950's the ignored proved intriguing. Nickel Plate, once scorned for its handful of wheel arrangements and spartan Berkshires, enjoyed belated camera worship.... The far west end of Baltimore & Ohio across the flat farms of Ohio and Indiana received the attention of a fan trip pounding by with a rebuilt 4-8-2.... The K4, once so universal as to be dismissed with a shrug, became the Easterner's last touch with varnish behind cinders, and the status of the big job on New York & Long Branch and Pennsylvania-Reading Seashore Lines became a concern for earnest conversations with roundhouse foremen in Camden and Bay Head Junction.... The grapevines of the West crackled with telegraphic dispatch whenever Espee's narrow-gauge diesel conked out and was replaced by a 4-6-0.... And even notoriously unsentimental smoke inspectors took pity upon a little 0-6-0 approaching retirement.

Thus the neglected industrial locomotive — those in steam that were left — discovered herself the object of affection as the faithful came to the back yard of Franconia Paper and the pit of Rock of Ages.

I am all for this new emphasis. And, speaking personally, I wish I had spent a bit more time in the corners before the diesel forced the issue.

Those massive Indiana Harbor Belt three-cylinder 0-8-0's, complete with Elesco feedwater heaters and tank boosters ... how was it at trackside when they dug in with a drag?

And Weyerhaeuser Timber ... what a sight to witness one of its articulated saddletankers nosing through the woods and across the tall trestles.

Do you recall the photo (Figure 16.35, page 1034 of the 1941 *Locomotive Cyclopedia*) of Dick Construction Company's Vulcan "duplex steam

Central Vermont 504 works the Barre Branch; a long afternoon's look at an 0-8-0 to compliment memory of CV's 2-10-4's. At right, Rock of Ages Corporation 0-6-2T No. 5 fills her bunker — improve adhesion, omit the burden.

locomotive" ... essentially a boiler-cab-coal bunker mounted on a flatcar frame which, in turn, rode over a pair of swivel 0-4-0 engines complete with safety chains? What extraordinary photo possibilities that creature had!

Alas, we must now be content with what we find the diesel has yet to supersede. For example: Central Vermont 0-8-0 No. 504 picking up an empty B&O hopper on the 10-mile Barre Branch from Montpelier Junction. Even here glances are deceptive. Note the tank with its odd coal bunker — slim-waisted to permit the hogger back-up visibility, flared out at the top for extra capacity. Also the jaunty front end, with a vertical bell hanger and an offset headlight. And the generous cab (bigger, I think, than some N&W Mallets).

CV is steamless today, and I'm happy that my memory of its 2-10-4's is complemented by a long afternoon's look at one of its switchers. She was a pleasing sight, strolling through the Vermont countryside.

LOOK UP BROTHER — SHE'S STEAM!

TRAINS concludes a lingering look at steam and finds, among other things, Montreal commuters not even glancing up from their newspapers as crossheads and main rods reciprocate by

A substantial number of train-watchers are convinced that they were born 20 years too late, and no doubt 99.7 per cent of trolley enthusiasts are so disturbed with their birth dates. We who admire the railroad like to think of it in monopoly dress, when the competition was in kind instead of unkind, when Atchison common was but one of many stocks that brokers recommended for widows' portfolios, and when steam's only rival — the electric locomotive — figured more in Tom Swift fiction than in management thinking.

Corporate bigness in any field today is not the unashamed spectacle that it was in railroading as late as 1929. The aluminum collosi, the automobile makers, the aircraft factories are more discreet; bigness is translated into scholarships and living standards by the institutional ad and the p.r. agency, and the news magazines delight in making regular fellows out of those earning $100,000 and more per annum.

Not so in the railroad age. Then bigness was its own excuse, and the expression of it was the edifice of a station, the extra-fare Pullman limited,

Commuter and his propulsion on Canadian Pacific at Dorval, Que. "Breathes there a man with soul so dead ..."

and the inaccessible president. In those days the small-town agent ranked with the mayor, dining-car good will ran in ratio to its losses, and the introduction of a Hudson rated editorial mention in the *New York Times*.

Perhaps the steam locomotive personified those powerful decades better than we knew. The classic calendar, for instance, depicted a Pacific of immense proportions simply hurling herself down a four-track main, a gigantic mechanism to scare children, awe adults, and hush the gods. The big, solid, 12-wheel, 12-section, drawing-room sleepers that followed in her wake were all but lost to view in smoke and dust, the general impression being of man just barely taming the elements of fire and steam.

Today's diesel is, by contrast, the model citizen. No soot, no cinders, no billowing clouds of black, no crying whistle — and no water tanks, coaling stages, or erecting halls to mark its home in the American silhouette. It is, in cab unit or hood, streamlined or

Central Vermont meet — N-5-a Consolidation No. 462 and milk train 212 encounter CNR FA1's with time freight at Bolton, Vt. Call it "in the clear for modernism."

functional, quite in keeping with contemporary architecture and styling. Whereas steam shouted for attention by the very nature of the beast, diesels blend and balance.

All of which is why I was happy that our search for steam wound to a close in Canada. In appearance, at least, the railroading of the Dominion captures the flavor of monopoly times to a degree long absent in the States. Canadian railroading is beset by all the traditional aches and pains — truckers, commuters, inad-

Central Vermont 0-8-0 No. 501 pants quietly on the sidelines as her crew spins a New Haven sleeper on the turntable at St. Albans, Vt.

CNR Mikado No. 3710 encounters 2-8-0 and work train at the four-way junction point of Cantic, Que.

equate capital, etc. *ad infinitum* — but it still bulks big in the public consciousness. For one thing, the competition is not so dense. With the notable exception of the St. Lawrence, rivers do not threaten, and the status of the passenger train may be gauged by the fact that on a per capita basis, twice as many Americans as Canadians own cars. Moreover, Canada is still pushing back the frontiers. New railroad construction is the rule rather than the headline. Finally, steam still performs approximately half the work.

You may discern the gulf between there and here in the difference on these pages between the Central Vermont photos and the Canadian shots. The CV 0-8-0 at St. Albans, Vt., for example — quietly panting on the sidelines as her crew spins a streamlined New Haven sleeping car on the table ... not much compensation, really, for steam searchers who could recall leads full of 2-10-4's at the same site only a few years before.

And the scene at Bolton, Vt., with southbound milk train 212 waiting in the hole for a meet with a northbound extra behind CNR diesels. Age meets youth ... beauty and the beast ... in the clear for modernism — you think up your own caption, but what took place at Bolton expressed our eagerness to be off for Montreal and environs.

Steam in Quebec was so commonplace, so much part and parcel of everyday existence, that we came upon a commuter at Dorval, Que., calmly reading his morning paper as Canadian Pacific G-2 4-6-2 No. 2539 strolled past with his train for Montreal and the office. Hastings mused, "Breathes there a man with soul so dead ..." and I all but exclaimed, "Look up, brother — she's steam!"

Silly, of course. How could he know that his observers rejoiced in what he accepted as ordinary, that in most of the U.S.A. such machines as a G-2

Eastbound at sunrise, Ford paces CPR G3g No. 2393 and Montreal-bound commuters near Pointe Claire, Que. (Below) CPR 2541 calls at Dorval with train 512 — we had traveled thousands of miles to see such power rolling with such pomp.

were one with the Ohio stern-wheeler and the two-place Jenny, that we had traveled thousands of miles to see steam rolling by with such pomp?

There was so much steam banging through Dorval that morning that we could afford to pick and choose among many engines in many wheel arrangements, and the locomotive that won my affection, hands down, was operated by the parallel Canadian National. She was No. 46 and she was, with the formidable classification of X-10-a, a genuine 4-6-4T, constructed for the Grand Trunk in 1914 by Montreal Locomotive Works. An Elesco heater gave her a businesslike, altogether commanding appearance quite out of keeping with her total weight of just 137½ tons and she was dandified by white tires and running boards, a glossy jacket, and canted heralds on her squat tanksides.

No. 46 ran in either direction with equal facility (and at a lively gait of 60

There was so much steam banging through Dorval that morning that we could afford to pick and choose: CPR G3h Pacific 2461 (top) races through with train No. 510. On the parallel CNR main, U-2-h Northern 6238 (above) works past with an Extra East.

or so) and the very fact that she shunned turntables underwrote a freewheeling switching maneuver at Dorval. The tanker wheeled out four or five coaches from Montreal on the westbound main of double track, which presented the problem at Dorval of crossing over and getting the engine on the other end of the consist for the return trip.

Mind you, this was a passenger operation, not some freight cars being kicked out by a peddler on the prairie or by a yard goat nosing into industry; and commuters were parking their cars and walking to the platforms for their CNR train or crossing them to get to the nearby CPR tracks.

So the crew simply pulled off a flying switch. The tanker backed past the

Montreal-Ottawa CPR train 503, with G3 2470 leading RPO, combine, coaches, and parlor car, did not deign to stop at Dorval.

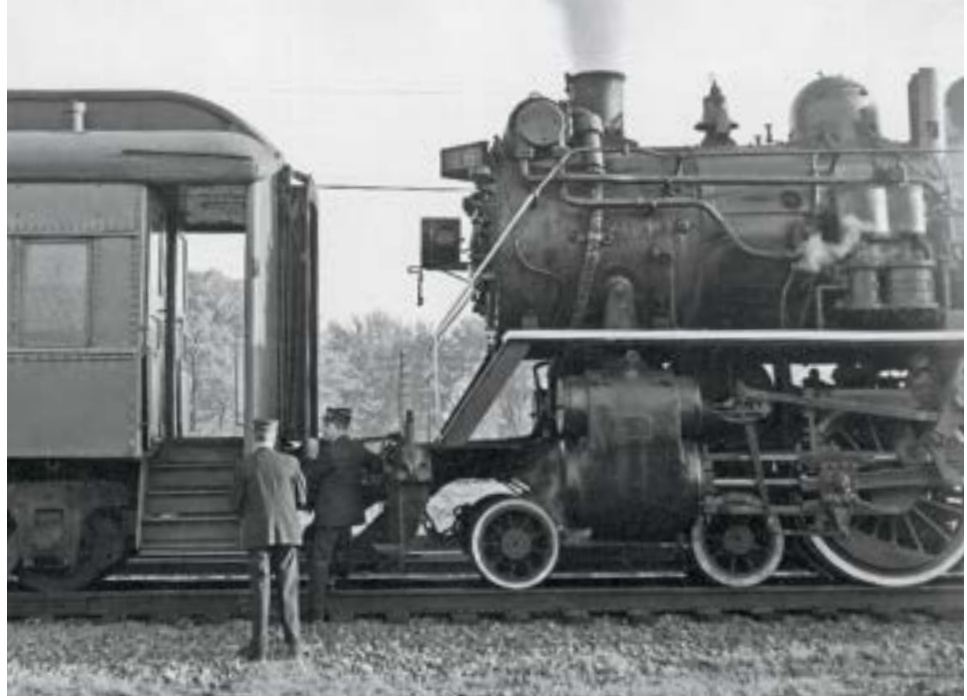
crossover, reversed, and picked up speed ... and the brakeman cut her off. The 4-6-4T wheeled over the turnout, another brakeman threw the switch, and the cars rolled from west to east mains, up to the platform, and stopped. Whereupon the engine came back, went through the crossover, and coupled on.

And nobody, employee or patron, batted an eye!

The locomotive that won my affection, hands down, was Canadian National No. 46, a genuine 4-6-4T with the formidable classification of X-10-a constructed for the Grand Trunk in 1914 by Montreal Locomotive Works.

Oh, those Canadians.

Not that I shouldn't have known better; I've ridden freights above the border for which I had to drop off exact running times from my copy for fear of implicating a crew running 5 or 10 mph faster than a liberal 60 speed limit — and this with archbar trucks in the consist. Not to mention another instance in Ontario where we descended a long but tangent grade with 40 or so merchandise cars behind



Following a freewheeling "flying switch" maneuver to change ends, No. 46 couples to its train at Dorval, Que., and departs (below) with morning commuters bound for Montreal. Oh those Canadians — ! and !!

Canadian Pacific 4-6-2 2541 calls on Dorval with westbound No. 571 (three photos) — in a land where the railroad dominates and steam was in the saddle.

a 4-8-4 — descended so fast that I wondered if the caboose might not well have been subjected to a wind tunnel test before participating in such rapid operations — and the skipper leaned across the cupola and said apologetically, "You should ride with us sometime when we're late." ! and !!

We saw many trains and steam locomotives on the outskirts of Montreal. I selected two of Hastings' prints as especial proof of what a land appears like when the railroad dominates and steam is in the saddle.

First, Extra 3738 (right) on Canadian National at Delson, Que., because ... well, because she was a USRA-ish 2-8-2 (I am frankly prejudiced in her behalf), and because of her odd modified front end (observe how the smokebox has been chopped back to accommodate the Elesco feedwater heater, not to mention the proximity of bell and stack), and finally, because of the

way the safety valves have poured foam down over the jacket to indicate a tank of rather poor water.

How open and frank the steam locomotive really was, particularly as compared with its replacement. She told you so much in a glance, at a listen ... the jacket meant bad water which foamed as it boiled, the status of the coal pile indicated the end rather than the beginning of a run, the clank of the rods told of age and mileage between class repairs. The wail of an open injector ... the deeper note of a stoker screw turning ... the way a whistle sounded at speed and from a standing engine ... the difference in exhaust between starting tonnage and merely cutting off ... the bang of a tank cover being kicked open to take on water. Oh yes, steam told you her story.

But now to the photo of CNR 4-8-4 6212 at the four-way junction point of

Canadian National Extra 3738 crosses Highway 9-C near Delson, Que. — a tale of mileage between classified repairs.

Freshly shopped CNR 4-8-4 6212 rolls through the four-way junction at Cantic, Que., with an extra freight — compensation for all of the dirty, neglected power we had seen on our steam search.

Cantic, Que. (above). There's a sight for U. S. eyes! Fresh from the back shops, the Northern rolled through with an extra. She glistened in glossy black, and even the white flags were freshly laundered. She was compensation for all of the dirty, neglected power we had seen on our steam search, the power so obviously running out its final few miles before flues expired or an ICC boiler inspector shook his head or another batch of Geeps showed up.

But not the 6212. She was an engine with a future.

We concluded our search at Norfolk, N. Y., just outside the doors of the enginehouse of Norwood & St. Lawrence — an 18½-mile short line which trundles pulp from the namesake river to the mills of its owner St. Regis Paper. Today a pair of GE 70-ton diesels do this work, but then two reasonably modern Moguls were around

Norwood & St. Lawrence Mogul 211 enters enginehouse — evidence of West Albany.

Norwood & St. Lawrence enginehouse and motive power at Norfolk, N.Y.

— No. 211 (Cooke 1923) and No. 210 (Baldwin 1926). Interestingly enough, their block lettering was the unmistakable evidence of a trip to the shops of New York Central at West Albany, N. Y., some years before for an overhaul.

According to an employee, these Moguls had their work cut out for them, N&StL possessing one 6 per cent grade out of a quarry on which a 2-6-0 could take either two 50-ton cars of stone or a single 70-tonner, not to mention other grades of 3½ and 2½ per cent, respectively.

Alas, the Moguls steam no more on Norwood & St. Lawrence — indeed, many if not most of the locomotives we encountered on our tour of September 1955 were retired within a year or two, if not cut up altogether.

Quite frankly, I do not expect to experience again such drama in railroading, indeed in anything mechanical, in this country. I do find that the diesel has its moments, and they increase in proportion to the degree one forgets

Sunset at Dorval — I was happy that our search for steam wound to a close in Canada.

what it supplanted — but one cannot compare the two in that way. I do find, too, that travel is more instructive through dieseldom because time formerly spent observing locomotives can now be expended upon the railroad plant at large — upon that awesome interlocking plant at Fostoria, O., which may handle 57 movements per trick ... upon the variety of freight equipment — "peek-a-boo" gons and DF box cars and 12-wheel Virginian coal cars and those 75-foot piggyback flats ... upon the *Shenandoah* as she scars the darkness with a battery of searchlights mounted midtrain on the dome's roof.

More instructive, but not as intriguing, I fear. ■

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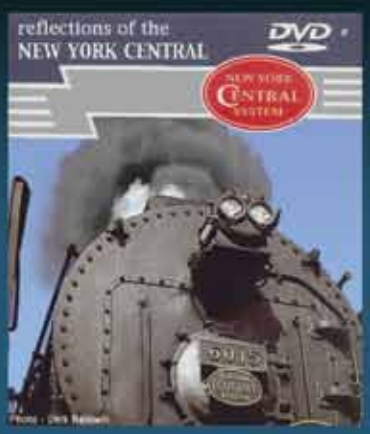

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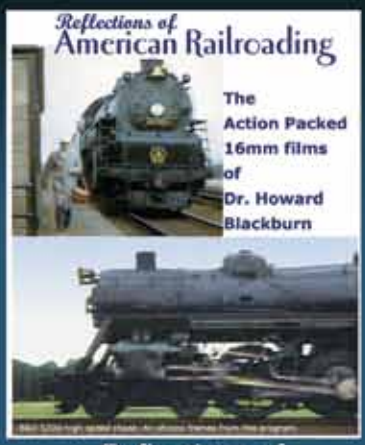

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