

THE
DELAWARE AND HUDSON RAILROAD
BULLETIN

*"The
D. & H."*

JUNE 1, 1936

NEAR CHESTERTOWN, N.Y.

Words

WORDS are very potent things,
used by commoners and kings;
Many varied roles they fill;
they can serve or slay at will.

Words may mitigate, inflame,
censure, stimulate, defame;

- Stab, enchant, exasperate,
shackle, quench, extenuate;

Startle, soothe, antagonize,
cheer, depress, monopolize;

Blight, embellish, desecrate,
challenge, menace, captivate.

Words were made for you and me.

Wordless, what would mortals be?

But carefully choose the words you seek.

It pays to think before you speak.

—SWIFT'S GOLD LEAFLET.

"The D.H."

The

DELAWARE AND HUDSON RAILROAD

CORPORATION

BULLETIN

"The D.H."

Held "Vacation Job" 52 Years

Position In Oneonta Smithy Started Long Rail Career

FIFTY-THREE years ago the 22nd of this month fifteen-year-old JAMES R. GERLING went to work in the Albany and Susquehanna Car Shops at Oneonta on what he and his "temporary employer," Master Car Builder John R. Skinner, mutually understood to be a "vacation job," given him so he could help support a family of six children through the summer, returning to school that fall. Over 52 years later,



the Delaware and Hudson's blacksmith shop under Foreman Robert Smith. The next year a brick blacksmith shop was built around the wooden structure then in use and the old one was then torn down inside the new one, which is still used by the Car Department for the same purpose.

The "vacation job" already referred to was given to MR. GERLING by Mr. Skinner when a drill press and on the

After four years on the drill press, MR. GERLING began to "tally lumber" as they called the keeping of records of the lumber received for use in car-building. When a carload was being unloaded at the shops he recorded the number of pieces of various sizes on a large sheet of ruled paper; his figures were then assembled for checking against the wholesaler's invoice. The two total amounts seldom agreed, however, for some of the lumber in most cars was not accepted because of flaws or damage, so the bill was paid on MR. GERLING'S figures—not those of the consignor—and his record was never questioned. His was an enviable job on spring, summer, and fall days when the other men were working in the dark, smoky shop buildings, but he "paid for it all in the winter" when he had to stand outdoors with his tallyboard in the sub-zero wind.

In 1892, when he was sent to the main car shop, now the wheel shop, as timekeeper, there were no time clocks. The timekeeper had a little black book on which he kept a record of each man's working time, sending it in to the office periodically so the payroll could be made up. Later that same year the Car Department's one clerk was transferred to the Master Mechanic's office and MR. GERLING became Master Car Builder John R. Skinner's one-man office force, keeping time for the car force as well as the records of materials used.

When Mr. Skinner became master mechanic, February 1, 1897, both car and motive power work were concentrated under his direction, and the office forces were therefore combined. In 1899, the position of chief clerk to the master mechanic being

GERLING received the ar

When the Accounting Department was formed, MR. J. H. REDDY, then system shops and stores accountant, placed MR. GERLING in charge of that work on the Susquehanna Division. Then, in March 1918, when all maintenance of way, transportation, and shops and stores accounting was combined under the first division accountant, MR. F. L. DANFORTH, with offices in the Oneonta Hotel building, MR. GERLING became head clerk. He served in this capacity under the three succeeding division accountants, Messrs. H. V. McClennan, J. F. FORNER, and B. A. ANDERSON, who held the position when this work was centralized in Albany, November 1, 1935. Rather than leave his adopted city MR. GERLING applied for and was retired on a pension effective that date.

MR. GERLING is a member of the Delaware and Hudson Veterans' Association, the Masons, and the First Methodist Church of Oneonta. For twelve years prior to the organization of the Oneonta City Fire Department, in 1901, he was a member of the volunteer fire department; he also served five years as a member of the Oneonta Water Board which has charge of the waterworks willed to the city by the late Hon. George I. Wilber.

For many years MR. and Mrs. GERLING have made their home at 35 Burnside Avenue, Oneonta, within earshot of the busy shops where he began his railroading career over half a century ago.

Foolish Question

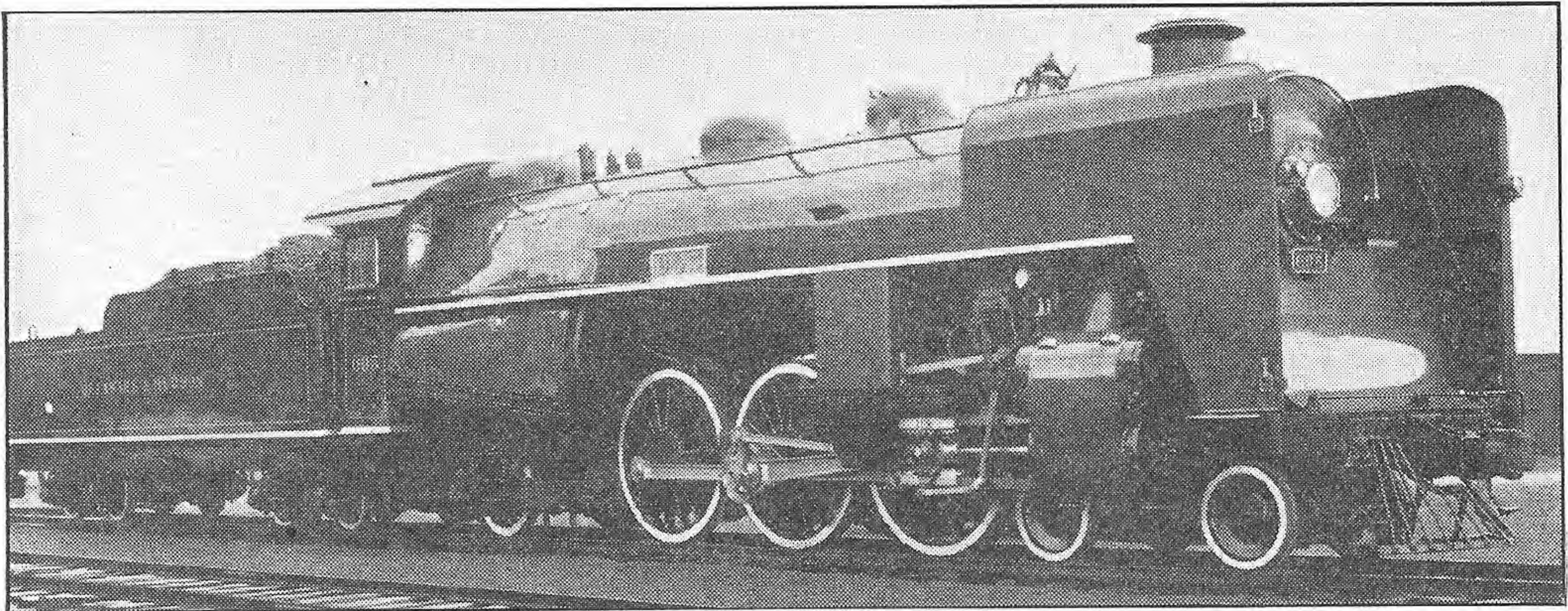
Wife: "Did you see those men staring at that flapper as she boarded the street car?"

Husband: "What men?"

• ,

As To 1935 —

Extracts from President Loree's Annual Report



Locomotive 605 has roller bearings on main axle and crank pins, and force feed lubrication on the link blocks, which are housed in.

DECREASED revenues and increased operating expenses and taxes are reported by PRESIDENT LOREE in the 106th Annual Report of The Delaware and Hudson Company, covering activities during the year 1935, extracts from which are given below.

Gross operating revenues were \$22,884,178, a decrease of \$312,134, or 1.35 per cent under 1934.

Freight revenues amounted to \$20,770,033, or 0.37 per cent under 1934, miscellaneous reductions on various commodity rates offsetting the emergency charges effective April 18, 1935.

Due to an increase in average haul from 123 to 133 miles, revenue ton miles increased slightly, though the tonnage carried decreased 6.6 per cent. Freight traffic density increased 2.63 per cent while revenue tons per train increased nearly twice as much.

Local traffic contributed 24 per cent of the freight carried, traffic originating on the line for off-line destinations 30 per cent, off-line business for D. & H. delivery 14 per cent and "bridge" traffic passing over our line between "foreign" points of origin and destination, 32 per cent, approximately.

Passenger revenues of \$1,057,193 represented a decrease of nearly 7 per cent from 1934. As in the case of freight, though the number of passengers decreased nearly 14 per cent, the average ride increased over 7 per cent, the passengers carried one mile decreasing 7.63 per cent. This reduction in

volume is primarily due to discontinuance of unprofitable passenger service on 57 miles of line during the year. Thus, though aggregate volume of traffic decreased, the density (passenger miles per mile of road) on the remaining mileage operated, increased 2.47 per cent.

Revenues other than passenger and freight amounted to \$1,056,952, a decrease of \$155,630, of which \$123,747 was due to decreased milk traffic caused by motor truck shipments.

Operating expenses in 1935 were \$20,555,726, a fraction of a per cent more than in 1934. The operating ratio was 89.83 against 88.15 in 1934.

Maintenance of way expenses were \$3,407,720, slightly higher than 1934, due in part to flood conditions and damage to a bridge near Sidney, N. Y. Use of the Teleweld process for building up 674 worn frogs and several miles of main line rail ends reduced ordinary maintenance costs. Fifty-eight miles of track were rock ballasted.

Maintenance of equipment costs decreased nearly 3 per cent although, at the end of 1935, but 4.5 per cent of locomotives owned were in need of repairs, as compared with 22.0 per cent for the Class I roads of the country. Only 4.2 per cent of the freight cars on the line needed repairs as against 15.0 per cent for all Class I roads.

Transportation expenses amounted to \$8,909,075 or a 0.79 per cent decrease. Empty car miles decreased from 39.24 per cent of the total to 35.71

per cent, equal to a 9.00 per cent improvement. Average train load increased from 888 to 934 tons or about 5 per cent.

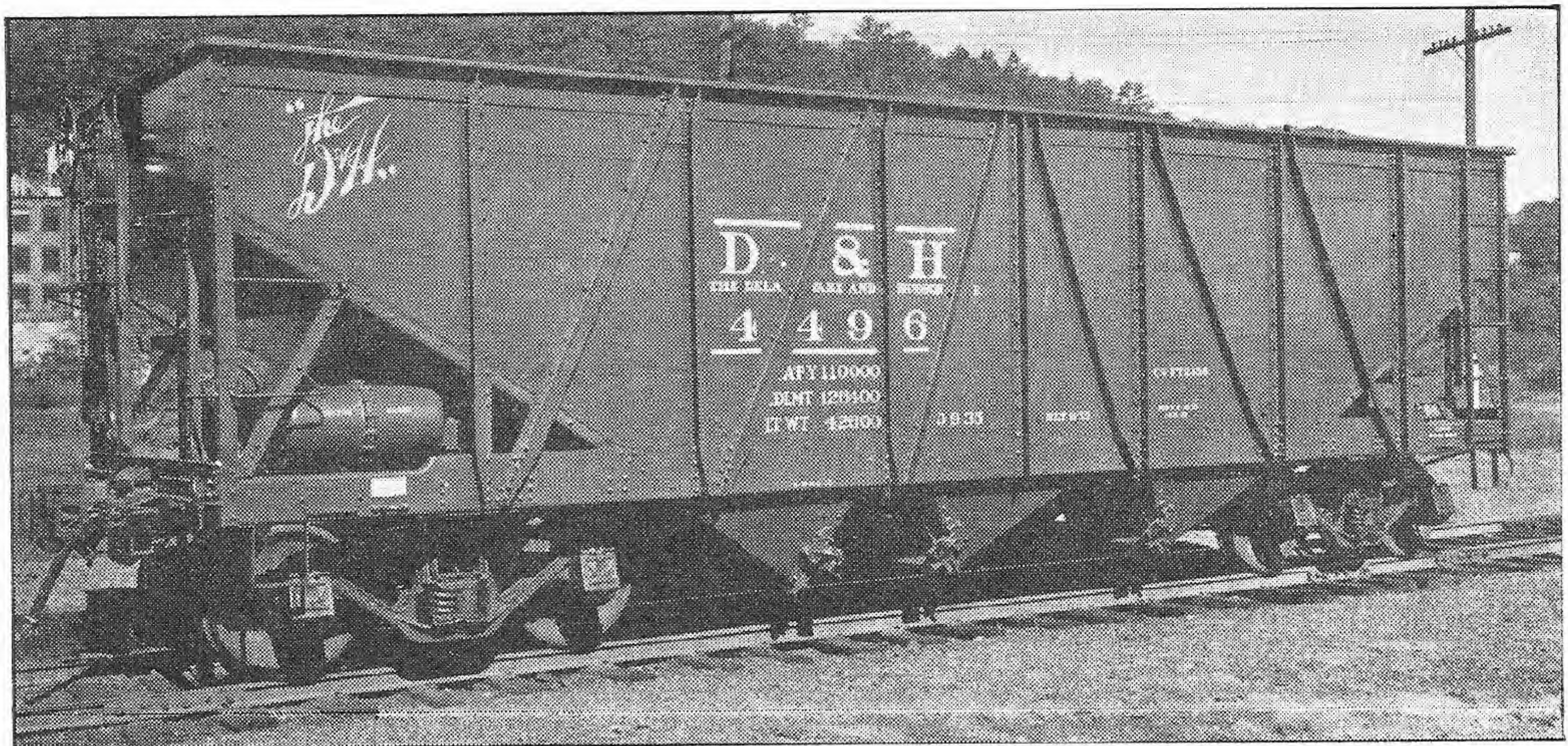
Five stations were closed during the year and certain unproductive passenger trains discontinued.

Offsetting these economies were the increase in cost of fuel, despite the reduction in the amount burned, and increased rates of wages, the 6 per cent reduction made effective in 1934, (when other roads reduced wages 10 per cent) being fully restored April 1, 1935.

Pension payments increased nearly \$25,000, a net increase of 19 employes being shown on the pension rolls during the year.

were rebuilt at Colonie Shops during 1935. Smoke deflectors were applied to 8 passenger locomotives to improve visibility for engineers. Twenty obsolete locomotives were dismantled.

Fifty triple hopper gondolas of 55 tons capacity were built at the company's Oneonta Shops to replace 65 twin-hopper 42½-ton cars. Various improvements were made on a number of units of freight equipment, 44 twin-hopper gondolas were converted to flat-bottom gondolas, and cupolas were removed from 6 cabooses to adapt them to mine run service. Under contract, 1000 obsolete twin-hopper gondolas are being sold and scrapped, while company forces dismantled 601 obsolete freight



50 triple-hopper gondolas were built at Oneonta Shops

Net Railway Operating Income for 1935 was \$1,328,713 or 34 per cent under 1934. Eliminating certain adjustments in tax accruals, etc., it showed a decrease of 24 per cent below 1934.

Continuing the program of changing from 90- to 131-pound rail, 16.8 miles of the new standard was put in. Nearly 15,000 steel ties and over 17,000 lineal feet of steel switch ties were installed in various yards and sidings.

The removal of rock at Comstock to permit realignment of main tracks was completed during the year. The rock removed was crushed and used in ballasting 11 miles of main track.

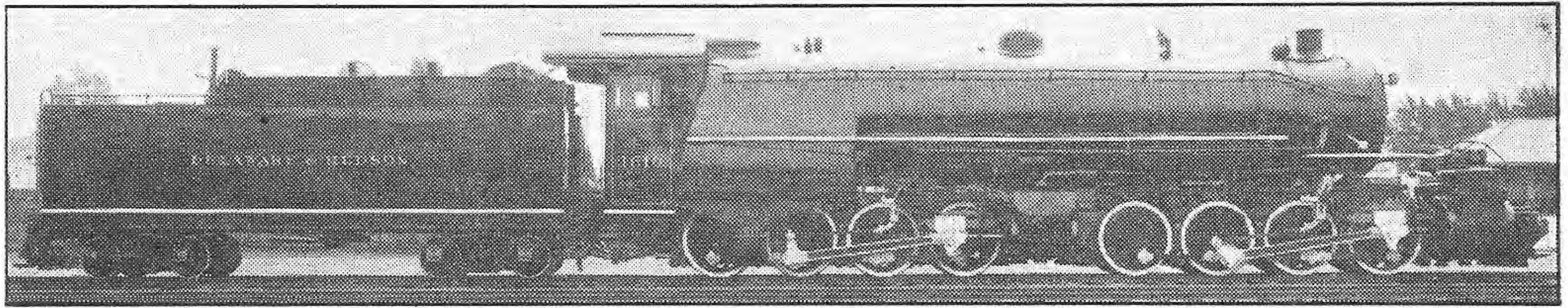
Following suspension of train control requirements the roadway equipment, together with devices from 141 locomotives, was retired during the year.

One Pacific type passenger locomotive and one Mallet articulated compound freight locomotive

were rebuilt at Colonie Shops during 1935. Smoke deflectors were applied to 8 passenger locomotives to improve visibility for engineers. Twenty obsolete locomotives were dismantled.

Air conditioning equipment was installed in one parlor-cafe car; hot water heating systems were installed in two mail and baggage cars, and metal steam connections were applied to 10 passenger train cars. One coach was converted to work equipment, one passenger and baggage car sold to the Schoharie Valley Railway Co., a subsidiary, and 24 obsolete passenger train cars were dismantled.

To provide for safe transfer of inflammable liquids, 7 tank car transfer outfits were manufactured for use with wrecking equipment. Fifteen units of work equipment were destroyed by accident and 52 obsolete units were dismantled.



Mallet articulated compound freight locomotive rebuilt at Colonie

During the year 81 new industrial plants were located along the railroad. Four new side tracks were constructed.

On August 29, 1935, the President approved two acts of Congress: one to establish a retirement system for employes of carriers subject to the Interstate Commerce Act, and the other to levy an excise tax on carriers and an income tax on their employes. The effect of these two laws is to establish a railroad retirement system for employes of carriers along substantially the same lines as the previous Act held unconstitutional by the Supreme Court. Under the provisions of the Tax Act, the employer and employe are each subject to a tax of 3½ per cent of all wages paid up to \$300 per month, effective March 1, 1936. The Railroad Retirement Act of 1935 is subject to pending court action to test its legality.

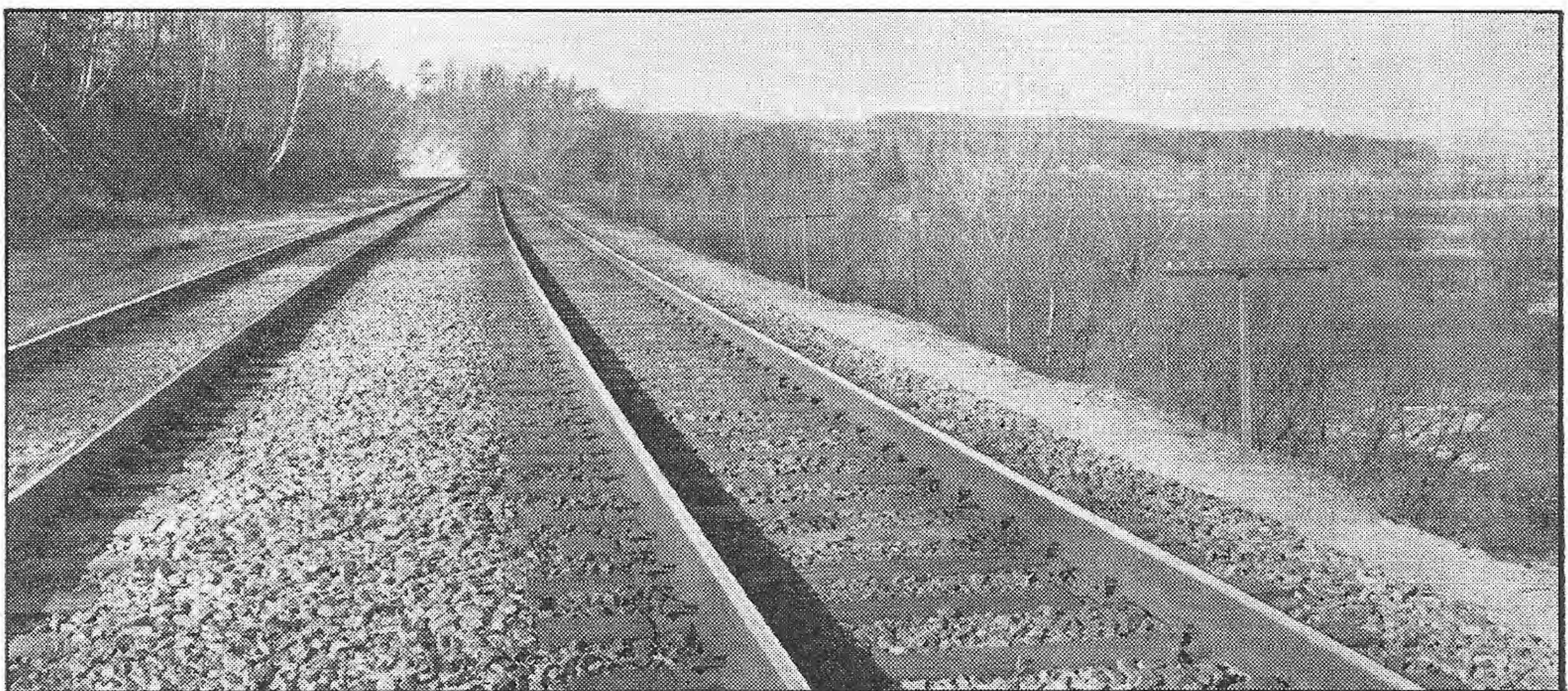
On August 14, 1935, the President signed the Social Security Act which, among other things, provides for an unemployment trust fund, contributions to which are to be made by the employer only, effective January 1, 1936, on the basis of 1 per cent on all remuneration paid in 1936, 2 per

cent in 1937, and 3 per cent thereafter. Nine states, including New York, and the District of Columbia have adopted Unemployment Insurance Acts to conform to the provisions of the Federal Social Security Act. The states of Pennsylvania and Vermont have not yet adopted such legislation.

The group insurance plan, through which comprehensive protection is afforded to employes and their families against losses by death, illness, accidents, and dismissal, has been continued. The payments to employes or to the beneficiaries they selected amounted to \$534,584, as follows:

140	Death claims.....	\$325,624
1,028	Health claims.....	115,167
143	Accident claims.....	12,047
14	Accidental death and dis- memberment claims.....	17,900
11	Total and permanent disa- bility claims	17,025
28	Dismissal allowances.....	2,121
26	Pensioners' death claims.....	44,700
<hr/>		<hr/>
1,390		\$534,584

(Continued on page 94)



Installed 16.8 miles of 131-lb. rail and 11 miles of rock ballast

Col. Ramee Reviews Police

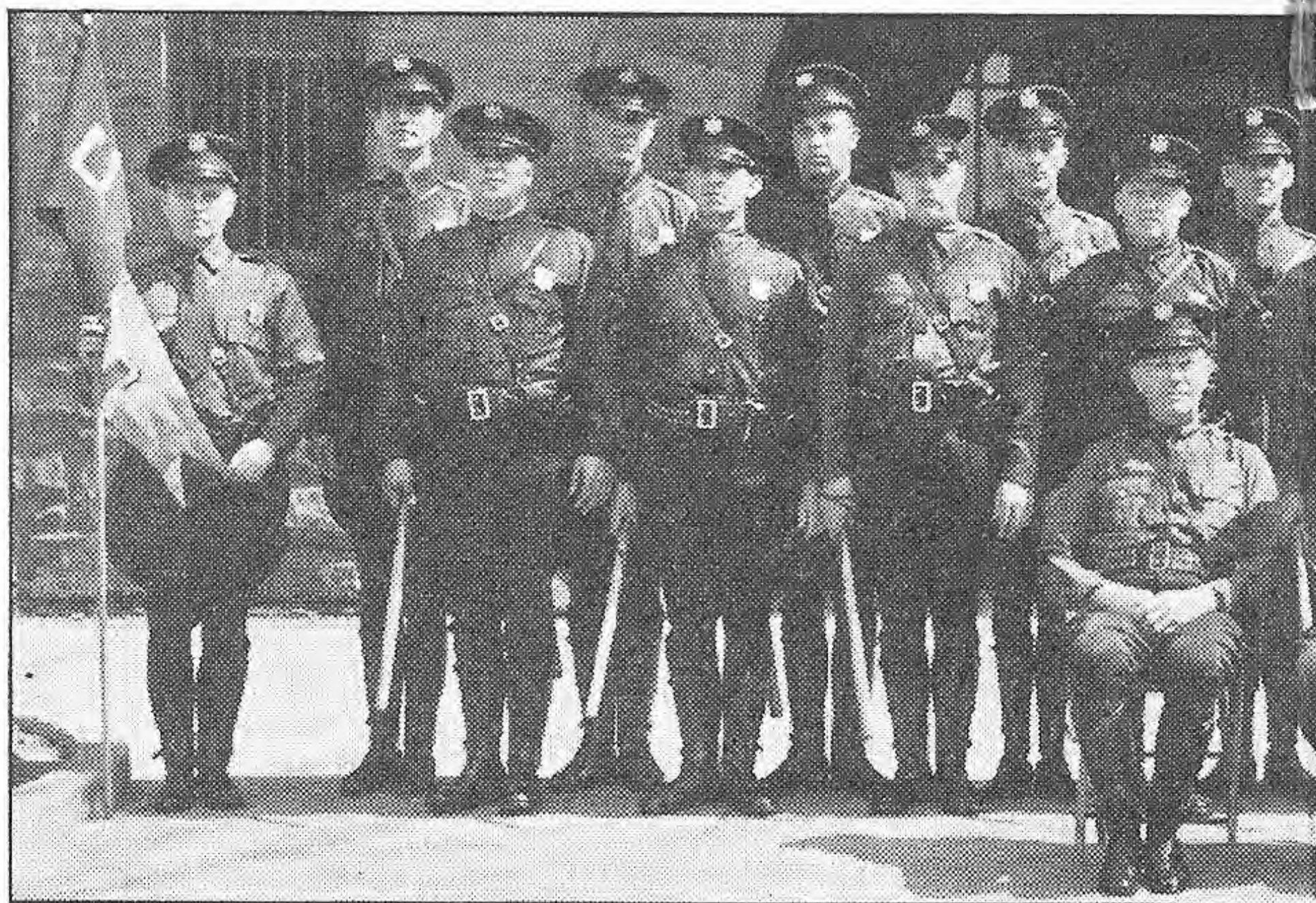
Honors Awarded at 14th Annual Inspection Ceremony

THE first duty of an army is to prevent war; its second duty is to win wars which cannot be avoided. The first duty of a police force is to prevent crime; its second duty is to apprehend the culprit after a crime has been committed. The record shows that arrests have been greatly reduced along your railroad, but that when crimes do occur you get your men and they are convicted in a large percentage of instances. After examining your record and spending two days with you—yesterday on the rifle and pistol range, today at this inspection—I am convinced that you are a very efficient police force.” Thus Lieut.-Col. Per Ramee, of the United States Army, addressed the members of the Delaware and Hudson Railroad Police force at the conclusion of the department’s Fourteenth Annual Inspection, held in the Tenth Infantry Armory, Albany, Friday afternoon, May 8.

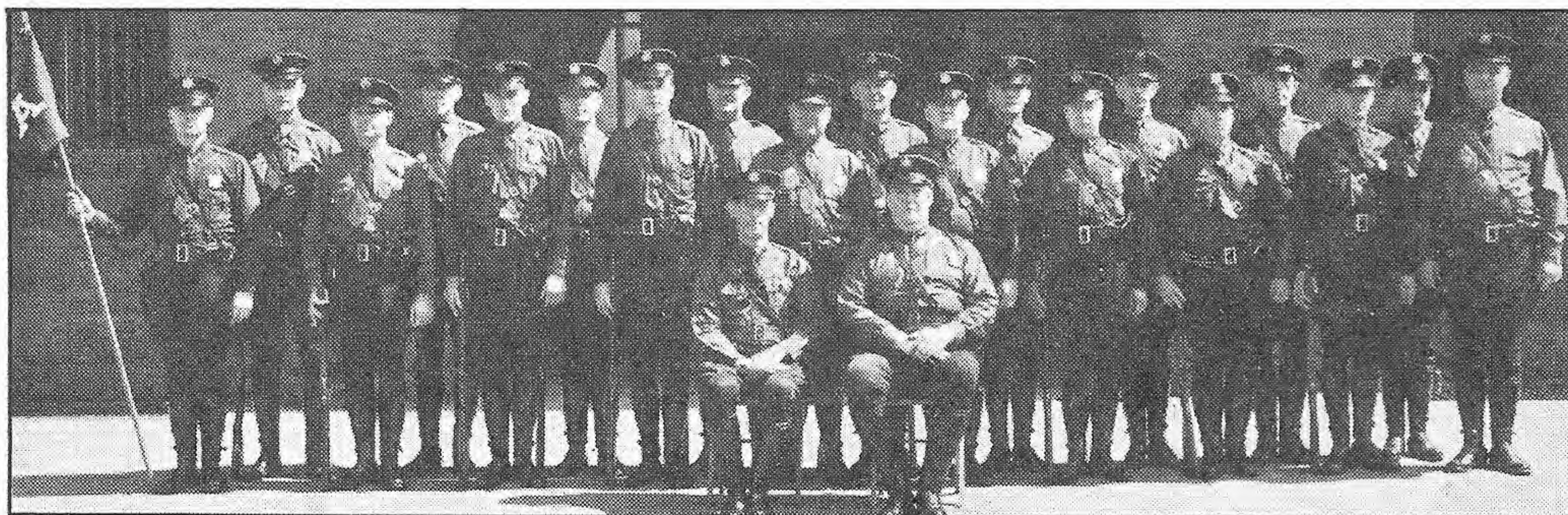
A few minutes previous, Col. Ramee had pinned the silver star medal with oak cluster, together with a purple heart medal, on the uniform coat of PATROLMAN ALEX A. WENSTROM, of Albany, for “conspicuous gallantry in action” during the World War. WENSTROM, then a corporal, was twice cited by General John J. Pershing: once for dragging a mortally wounded captain back for hospitalization, under heavy enemy fire; the other citation, the record of which cannot now be located, must also have involved “conspicuous gallantry in action, above and beyond the call of duty, in the face of enemy fire,” to make him eligible for the silver star medal with oak cluster. Part of his heel was shot away by a rifle or machine gun bullet at Chateau-Thierry and he was gassed in the Meuse-Argonne offensive, making him eligible for the

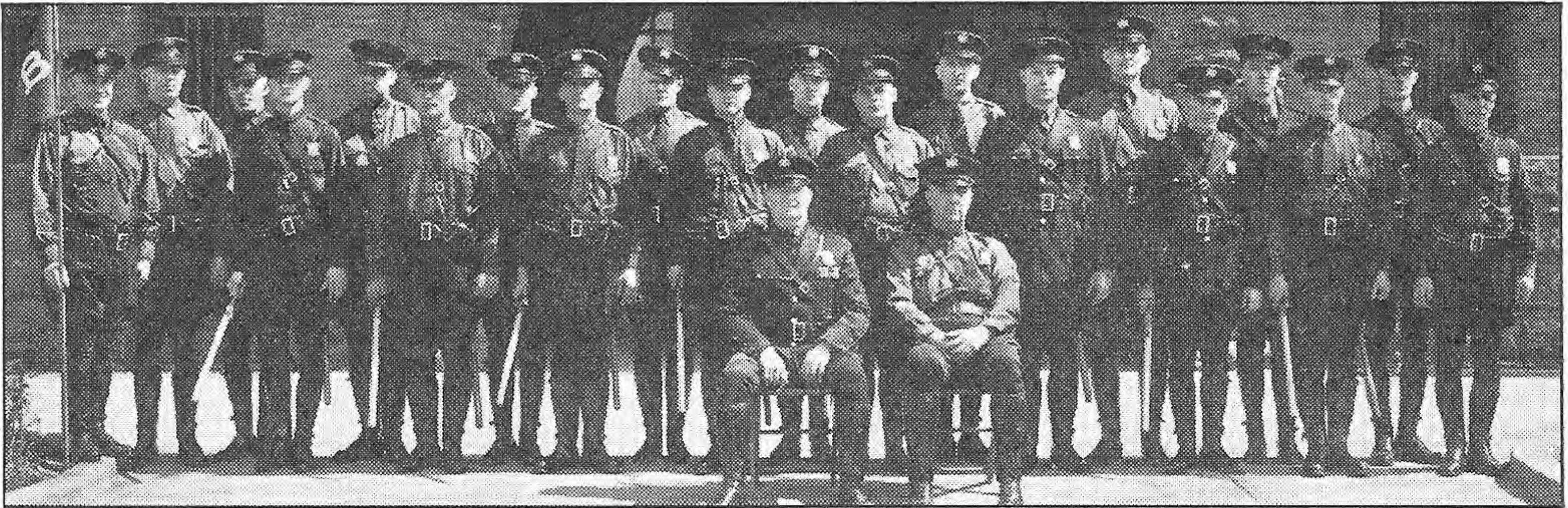
purple heart medal. He also saw service as a sergeant in the marine corps and in the navy as torpedoman, first class, before joining the Police Department seven years ago.

COL. J. T. LOREE, vice-president and general manager, who annually conducts the inspection, was prevented from attending this year; however, he telegraphed his regrets. The message, which was read by H. F. BURCH, assistant general manager,



said: “Please explain to Police Department my regret at being unable to attend inspection and review today. Likewise express to it my feeling that their work during the past year has been of the same high order as in the years past.”





In the absence of COL. LOREE the Taber-Loree-Collins Cup, awarded annually to that member of the department who makes the highest score in the

higher scores, but due to the ruling that no one man can win the trophy more than once, were ineligible for first prize; they were: PATROLMAN H. J. RUSS, Wilkes-Barre, 382; J. R. HERRON, Schenectady, 371; B. R. MASKO, Albany, 367; R. L. ADRIANCE, Binghamton, 365; and J. H. OVERBAUGH, Albany, 363.

For purposes of inspection the more than 100 officers summoned from their posts from Rouses Point to Wilkes-Barre, were formed into a provisional battalion of three companies and a first aid detachment, under the command of MAJOR F. A. THIESSEN, chief of police, with INSPECTOR JOSEPH P. ANDRES acting as adjutant. Officers of the companies were: Company "A," CAPTAIN WALTER D. FOX, Oneonta; LIEUTENANT S. N. PIERSON, Carbondale; Company "B," CAPTAIN N. R. HENTZ, Scranton; LIEUTENANT JAMES FOX, Binghamton; Company "C," CAPTAIN H. W. HOOGHKERK, Whitehall; LIEUTENANT C. W. BENTLEY, Albany. The first aid detachment was headed by LIEUT. THOMAS J. CARRICK, Albany.

The color guard consisted of PATROLMAN GEORGE P. JAUSS, Albany, color bearer; SERGEANT RALPH M. PARKIN, Wilkes-Barre; and PATROLMAN HENRY JENSEN, Albany. Guidon bearers were PATROLMAN B. R. MASKO, A. J. FARRON, and J. P. FLEMING.

After the battalion had passed in review, to the music of the 50-piece band of the La Salle School, Albany, in colorful bright blue uniforms with yellow cape linings gleaming over youthful shoulders, each individual's equipment was inspected in detail by Col. Ramee and his staff, which included MESSRS H. F. BURCH, W. W. BATES, CAPT. E. B. GORE, and LIEUT.-COL. OGDEN J. ROSS. Company "C," winner of last year's competition, was again awarded the guidon signifying the best drilled unit. The ceremonies were concluded with a battalion parade and the marching of the colors to their quarters.

rifle and pistol match, was presented to PATROLMAN JAMES B. DISNEY, of Albany, by W. W. BATES, assistant to general manager.

He also presented a pair of handcuffs to LIEUTENANT JAMES C. STONE, of Plattsburg, winner in the Class "B" competition, which includes those shooting higher than 282 but less than 328; and a five dollar cash prize to PATROLMAN JOHN P. FLEMING, of Green Island, winner in the Class "C" group, those firing between 227 and 275.

In the rifle and pistol match each participant fires the Army "L" course with the pistol, which includes 10 shots slow fire, 10 shots timed fire, and 10 shots rapid fire, all at 25 yards; and 20 shots with a 25-35 caliber rifle, at 200 yards, including five shots prone, five kneeling or sitting, five off-hand (standing), and five rapid fire. A perfect score with the pistol would be 300 and with the rifle 100, making a possible total of 400. DISNEY, the winner, scored 351. Five men had

The

Delaware and Hudson Railroad
CORPORATION
BULLETIN

Office of Publication:
DELAWARE AND HUDSON BUILDING,
ALBANY, N. Y.

PUBLISHED MONTHLY by The Delaware and Hudson Railroad Corporation, for the information of the men who operate the railroad, in the belief that mutual understanding of the problems we all have to meet will help us to solve them for our mutual welfare.

All communications should be addressed to the Supervisor of Publications, Delaware and Hudson Building, Albany, N. Y.

Vol. 16 June 1, 1936 No. 6

You believe that easily which you hope for earnestly.

—TERENCE.

Our Opportunity

IT is an old saying that a poor workman blames his tools. Conversely, an expert craftsman can turn out a good job even though his equipment may not be the best obtainable, since he knows its weaknesses and takes special care to compensate for them. We have heard that some of the finest machine work in the world is turned out by Swiss mechanics on lathes which will not, of themselves, turn straight by several thousandths of an inch. On the bed of the machine, however, is marked a calibration curve by the aid of which the operator is enabled to adjust the tool and thus obtain results perfect within the limits of a few ten-thousandths of an inch variation allowable in modern practice.

Perhaps such methods are by now obsolete in shop practice, but they still produce practical results in many fields. Good men are turning out good work even though their equipment is not the most up-to-date, while other men are failing to produce satisfactory results regardless of the tools with which they are provided.

How much of an effort do we railroaders make to turn out a job of which we can be proud? Are we taking extra pains to see that cars are properly ventilated and heated; that hand baggage and parcels are not so placed in luggage racks as to be likely to fall and injure someone; that trains are handled smoothly; that strangers to the ways of railroad travel are given information correctly, courteously and fully, regardless of how silly their questions

may seem to us? Are we impressing shippers with the idea that we are ready to give them service and assistance in handling their problems, rather than taking the position that we know everything and that they know nothing? The very complexity with which some employes seem to delight to clothe the not-too-simple tariffs and similar matters has been responsible for sending a lot of business to the highway trucks.

During the severe weather of the past winter, both freight and passenger traffic showed more of a tendency to return to the rails than at any time in recent years. Whether this will continue depends to a large extent on the attitude of the employes; the kind of a job they do with the tools at hand. Whether or not you come in direct contact with the traveling or shipping public, your work will, directly or indirectly, have its effect for good or ill.

Machines vs. Unemployment

A MANUFACTURER recently said that he employed the same number of men now that he did before the World War, but that the output of his plant had multiplied four times. He imagined that this improvement in productive efficiency was one cause of unemployment.

Such reasoning is unsound.

Most of the income of the American people is spent or invested as quickly as it is earned. It is converted into commodities or services. As the national income and the standard of living improve, in consequence of productive efficiency, new wants are created and satisfied. To mention a homely example, think of the vast number of women employed today as manicurists. Mowing lawns was once a boy's work; now in wealthy suburban districts it is an industry.

Whatever is earned is spent. If the owner does not spend it to gratify his own wants, he lends his surplus to another who uses it to build a house or buy a locomotive.

The temporary dislocations caused by labor-saving machinery are painful, but they do not cause permanent unemployment. The manufacturer who quadruples his output in fifteen years, without an increase in the number of employes, makes a substantial contribution to the national well-being.

The surplus that is created by such methods can be enjoyed either in increased leisure or in a greater plenitude of goods. We probably choose to take a little of both, that is, a little more leisure and a few more goods.

Right now, in fact, we are working fewer hours and enjoying more conveniences than a decade ago.

—*Through the Meshes.*

Magna Carta or Great Charter

The First Step in the Fight for Freedom

IF a neighbor pounded on your door tonight and told you in a guarded voice that your good friend, George, had been taken from his bed and spirited away to an unknown fate "on orders of the king," you would cry: "Ridiculous!"

No, this couldn't happen in America now. But it did happen in England in the period known as the Middle Ages, when nearly every man was subject to a master's will.

After centuries of vicious tyranny and heavy taxation the patience of the people came to a sudden end.

Hell broke loose!

The people took up arms against the tyrant—King John.

The people feared him. Never before had anyone dared to question the King's power. For all they knew his armies would quickly wipe them out.

But as it happened, the King was afraid of their fury as much as they were of his. The people won, and in the winning achieved the first grant of human liberty.

Magna Carta, or "Great Charter," was the result of that first great victory of the people in the long, long struggle for the freedom we know in America today under the Constitution.

King John was forced to sign the Magna Carta, and thereby a new world was opened up to a people who for centuries had lived as in a dark underground jail, shackled by hopeless poverty and constant fear of the cruel King's armies and his spying henchmen.

Magna Carta limited the King's right to tax the people. It made, for the first time, every person in the Kingdom, including the King himself, subject to the same laws. If the King disobeyed them, it gave his people the right to take up arms against him.

The signing of the document, however, was only the small beginning of the struggle. No



sooner had King John signed the "Great Charter" than he laid plans to destroy its provisions and jail the ringleaders who had forced his signature.

King John failed, but the document and the new rights and privileges it represented were saved only through the constant vigilance of those who highly prized their newly won liberties.

All this occurred more than 700 years ago. Magna Carta was signed on June 15, 1215. Almost 500 years later, in 1689,

the people won another great victory in their fight for freedom when the Bill of Rights was passed in England.

This bill gave them the right of free speech and the right to elect their representatives. It gave them the right to petition their rulers, and provided for trials by impartial juries. From the King the bill took away the unfair, but long established, privilege of suspending laws or exempting favored subjects from obeying them. It also took away his power to assess taxes or maintain an army without the consent of the people. These had been the tools of tyranny and now the Bill of Rights had destroyed them.

Thanks to Magna Carta and the Bill of Rights, the American of today is largely the governor of his own life. But before this freedom was fully established in America, the early settlers had to pass through a tragic period of terrible torture and tyranny at the hands of the very people who had fled the Old World to win freedom for themselves. —Paul Stowe.

Exactly

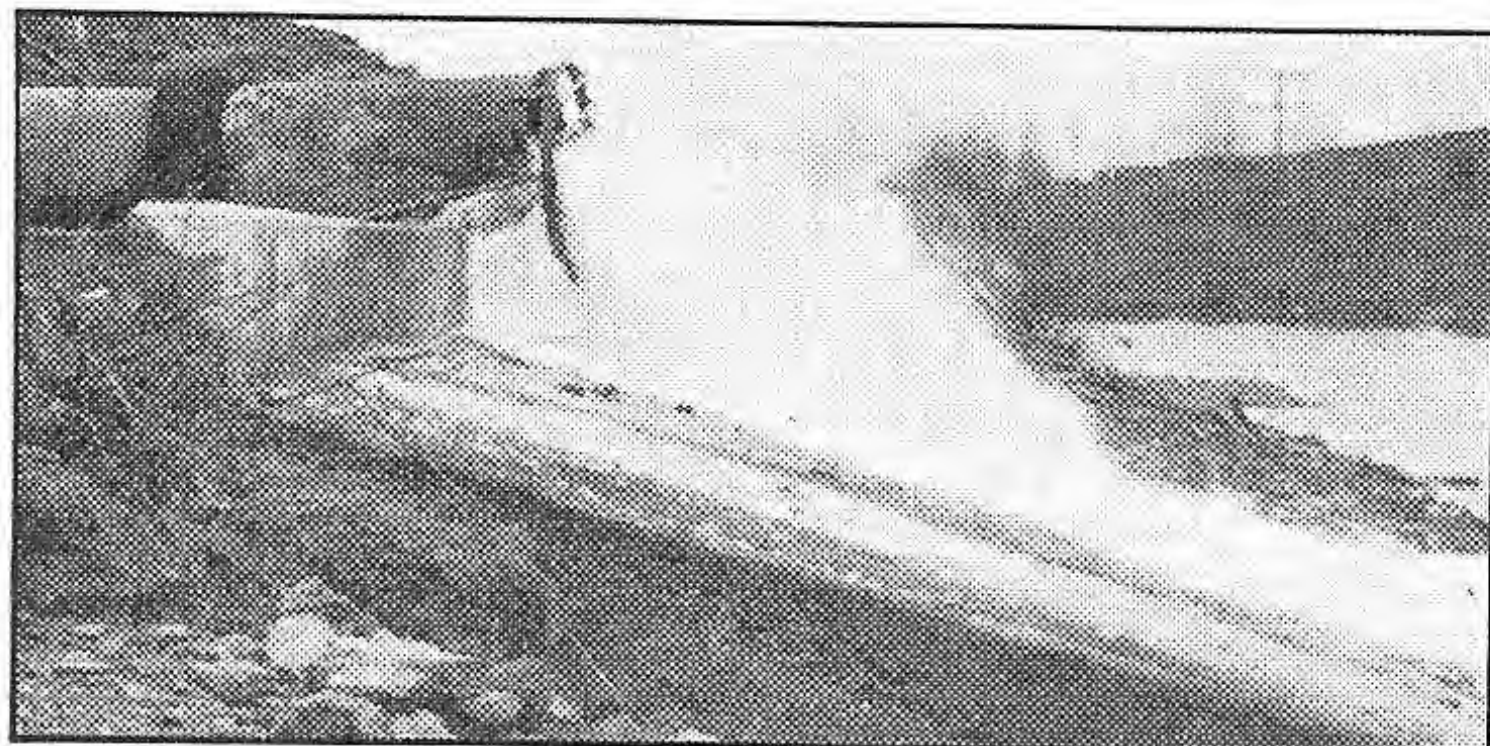
Mandy: "Doctor, Ah's skeered Ah's got er infernal injury frum dat fall when Ah slipped on dat banana peelin'."

Doctor: "You mean 'internal' injury, Mandy. 'Infernal' means 'lower regions'."

Mandy: "Dat's right, Doctor, 'infernal'."

Pumping a Billion Gallons

That's What Jermyn Colliery Apparatus Did During March Flood



36" pipe delivering 33,000 gal. per min.

SEALED in the solid rock nearly 300 feet beneath the village of Jermyn, Pa., is one of the largest pumping stations in the world. Its capacity is conservatively rated at 48 million gallons of water per day, which is sufficient to supply the needs of two cities the size of Scranton or Albany. Normally it is operated eight hours a day to bring to the surface all the water seeping into the anthracite mines in the entire area between Simpson, one-half mile north of Carbondale, and the point where the Archbald coal bed crops out at the surface half a mile below Jermyn, some 6½ miles from Simpson. All the billions of gallons of water which annually find their way into these workings are conducted through a drainage system to a great underground lake or sump, which is situated directly over the pumping station and approximately 250 feet below the ground level.

Under normal conditions only part of the pumping equipment is required to keep the underground reservoir empty, operating from 11 P. M. until 7 A. M., when the demand for electric current for other purposes is not as great as in the daytime. However, beginning March 13, when flood conditions on the surface caused the accumulation of over 300,000,000 gallons of water in the sump, every pump in the station was continuously operated at capacity for the first time over any considerable period. When normal operation was resumed April 6th, a total of over 1,000,000,000 gallons had been forced up and into the Lackawanna River through a single 36-inch pipe.

The purchaser of anthracite little realizes that for every ton of coal produced by The Hudson Coal Company, an average of 21 tons of water must be pumped to the surface so that mining operations may be carried on. In July 1922 the

Jermyn Colliery workings were so badly flooded that it was decided to install a pumping station at that point with sufficient capacity to prevent a recurrence. The project was completed and placed in operation in 1933 and, prior to March 1936, it was seldom necessary to keep all the pumps operating continuously for 24 hours. So much water entered the workings this year, however, that the entire battery was run at capacity for 583 consecutive hours. If the station had not been built, all the underground mine openings at and in the vicinity of Jermyn Colliery would have been filled with water.

To give a clearer picture of the problem which the company's engineers faced in 1922, it may be stated that all snow and rain water falling in the upper Lackawanna Valley is naturally drained by streams which lead into the Lackawanna River, which eventually empties into the Susquehanna at Pittston. Mining operations have necessitated the cutting of such a network of underground passageways that, if it were not for caves and robbed areas, it would be possible for a person to go from Forest City to a point several miles south of Wilkes-Barre without coming to the surface, or about 32 miles. These man-made "burrows," together with cave-ins, allow surface water to seep down into the lower mine workings, and unless it is pumped out again, all underground operations would be "flooded out."

Beneath the surface at Jermyn Colliery are seven veins of coal, each of which has been partially removed. They are linked together by mine slopes and tunnels so that water drains into the spaces in the Archbald bed from which the coal has been removed. This vein of coal is 10 feet thick, averages one mile wide, and is nearly 1½ miles long on Jermyn property. Due to the extent of voids caused by first mining it would be possible for 1,000,000,000 gallons of water to accumulate underground at Jermyn Colliery alone and more than twice that amount in the whole underground area tributary to the Jermyn sump before it ran out of the Bottom Grassy Bed Manway located near the O. & W. station at Jermyn. Because this overflow point is 9.8 feet below the entrance to the slope leading to the concealed pumping station, the pumps cannot be flooded from any accumulation of water in the underground workings.

Once this system of draining all water into one

huge underground basin had been worked out, a pumping station of sufficient capacity to keep it empty under the worst flood conditions which might prevail had to be designed. The plans called for a battery of eight electrically-driven, centrifugal pumps, located approximately 270 feet below the Lackawanna River into which they were to discharge.

The first step in building it was the sinking of a slope 700 feet long, by 16 feet wide, and 8 feet high, through solid rock and four veins of coal, on a grade of 39 per cent. This slope is divided lengthwise by a tile and brick wall: one half houses the 36-inch discharge pipe and electric power lines; the other a stairway and a 28-inch gage railroad track over which the machinery and pipes were lowered in cars, operated by means of an electric hoist.

At the foot of the slope the solid rock was excavated to form a room 200 feet long, 22 feet wide, and 30 feet high, to house the pumps, pipes, and valves, with a wing 40 feet long, 12 feet wide, and 16 feet high, for the electric control panel and additional piping.

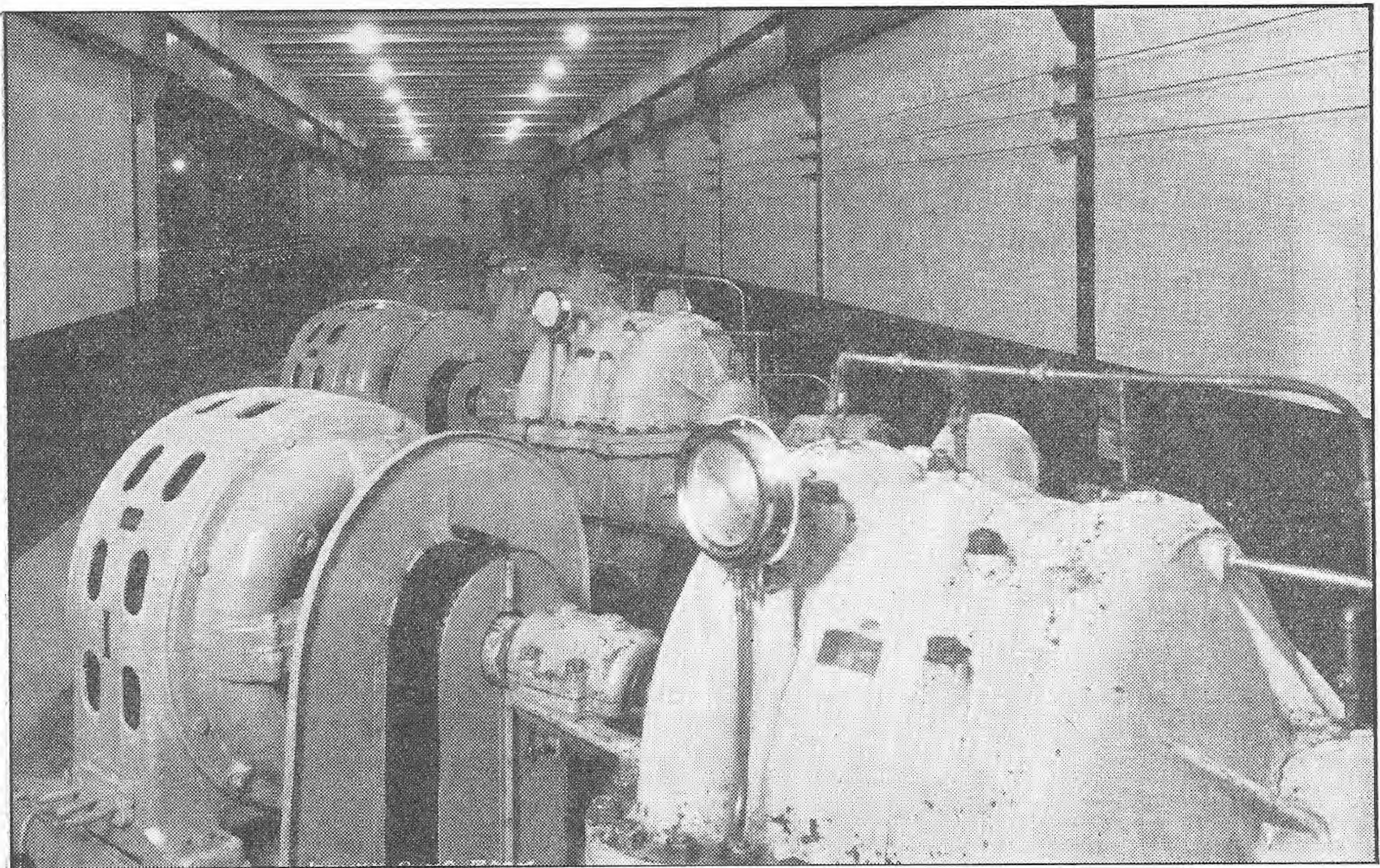
Water from the sump enters at the top of the pump through three 36-inch pipes. The drains leading into the intake pipes are located at different

levels in the Archbald bed, the highest being about 11 feet above the lowest. Normally the pumps are run until the lowest intake is covered with water. This spring, however, the water rose to a level of 50 feet above the highest intake pipe at one time, and all pumps were kept running continuously for 24 days.

The pumps include: four 5,000-gallon-per-minute units, each consisting of two single-stage pumps in series, driven by 500-horsepower, 2,300-volt induction motors; and four 3,000-gallon-per-minute, three-stage pumps, powered by 300-horsepower motors of the same style. A ninth unit, rated at 1,000 gallons per minute, is used to remove water which leaks from valves, pumps, or pipes and accumulates in a sump sunk below the pipe level at the far end of the room.

The pump room is ventilated by a large fan, direct-driven by a 40-horsepower motor. Fresh air is sucked down into the room through the track side of the slope, passes through the pumphouse, and is expelled through the pipe-line side of the slope.

All the 36-inch pipes are wood-lined and fittings lead-lined to prevent corrosion by the naturally formed sulphuric acid in the water. Smaller pipes, as well as fittings are lead-lined or of bronze con-



These 8 pumps will deliver over 48,000,000 gallons of water a day

struction, while the valves are also of bronze which resists the action of this chemical. The necessity for priming the pumps was eliminated by locating them below the level of the water they were to remove.

As to 1935 —

(Continued from page 87)

All claims, except dismissal allowances and pensioners' death claims, were paid by the Metropolitan Life Insurance Company, which underwrites the plan. At the close of the year 1935, 9,444 employes were protected by group life insurance to the extent of \$17,785,386, an average of \$1,883 per employe.

The anthracite produced by The Hudson Coal Co. during 1935 totaled 4,340,895 tons, 8.5 per cent below 1934, as compared with a decrease of 12 per cent for the entire industry. The Company produced 9 per cent of the total of 47,562,591 tons mined in 1935. Total sales of D. & H. Anthracite aggregated 4,408,391 net tons, 6.86 per cent less than for 1934.

The decreased demand for anthracite in 1935, as compared with 1934, was due partially to the fact that the early part of 1934 was much colder than the same period in 1935. The reduction is principally attributable, however, to the increased competition of oil, coke, bituminous coal, gas and other fuels. The high price at which anthracite must be sold, as a result of the unduly high wage rates paid to anthracite mine workers under the existing contracts, has made it very difficult for anthracite to compete with less costly fuels.

The business of the established producing companies was also affected by traffic in so-called "boot-leg," or stolen, coal which, it is estimated, amounted to 4,000,000 tons during 1935. This is coal mined illegally by unauthorized persons from lands, mainly in the Schuylkill region, of the larger companies. Most of it is poorly prepared and sized, and is sold to truckers and consumers for whatever price it will bring. Protests have been made by representatives of the producing companies to the law enforcement authorities of Pennsylvania, so far without avail.

A Word For It

Mrs. Withers had been to the talking pictures for the first time.

"'Ow did yer like it, Nell?" asked her friend.

"All right enough, but to tell yer the truth, I'd rather 'ave been to one of the old unspeakable ones."

It Is Said That :

More than 900,000 square miles, or 28 per cent of the area of Canada exclusive of the Arctic islands, are still unexplored.

The greatest distance that thunder has been heard is thirteen miles, but the usual distance is about nine miles.

A snail travels at an average speed of a mile in 14 days.

The human jaw has a biting power of 171 pounds.

Baseball bats are made mostly from wood imported from India.

The Hall of Fame was erected in 1900 by the New York University and has panels for 150 famous Americans selected by the University Senate. One must be dead ten years before becoming eligible for selection.

One-half the population of Delaware lives in the city of Wilmington.

There is enough salt in Utah to supply the entire world for over 500 years.

In ancient Rome the cat was a symbol of liberty.

Sunlight is about 618,000 times as bright as the light of the full moon.

China's population, as announced recently by the Ministry of the Interior, totals 474,787,386.

About one out of every 100 residents of the United States cannot speak English.

Numerous tests indicate that no snake ever strikes a greater distance than about three-fourths of its length.

The Secret

THE way to have teeth with which you can crack nuts is to refrain from cracking nuts with your teeth.

The way to have a stomach in which you can put practically any kind of food is to refrain from putting practically any kind of food into your stomach.

The way to have eyes with which you can read fine print in a poor light is to refrain from reading fine print in a poor light.

The way to have friends who would give you the shirt off their respective backs is to refrain from asking them for their shirts.

The way to make friends with a traffic cop so that he will overlook slight infractions of the traffic rules is to avoid slight infractions of the traffic rules.—*The Transmitter.*

Clicks from the Rails

America's "Queerest" Railroad

which connected the sleepy New York State hamlet of Hayt's Corners with the Willard State Hospital for the Insane, will be abandoned by the Lehigh Valley June 30. It had only one locomotive, "Old No. 4," which was thought to have gone "loco" itself a year ago when it disappeared from the asylum end of the line. It later developed that No. 4 had been stolen and run over the branch by some unknown party for it was found on the main line single track of the Ithaca-Sayre Division, having been run through a switch and abandoned after it ran out of steam.



A Train Kept Time

for the people living along the New York Central's line linking Conneaut and Cleveland, Ohio, for 82 years, so they said in their action before the Ohio Public Service Commission seeking to restrain the railroad from discontinuing a train. The Lake Shore Railroad inaugurated daily service over this route May 10, 1854, with what was called the Conneaut Accommodation train. Now that its operation is no longer profitable, the New York Central, which now owns the property, is seeking to discontinue the train. One of the unique reasons advanced by the residents for continuing the service at a loss is that they have set their clocks by it for 82 years—but they expressed no intention of riding the train.



A Whole Crew Retired

from service on the Rock Island's *Kansas City Express* on the same date. The four men, all of whom had recently reached the 70-year mark, together with their terms of service, were: Engineman Earl Crossett, 33 years; Conductor Robert Wickett, 34; Fireman William Crist, 44; and Trainman John Baxter, 37.

Wanted: The Engineer

in charge of the building of a tunnel on a new railroad in North China. A mountain had to be pierced and headings were driven from both ends. Unfortunately the two headings made a complete miss in the center of the mountain range, and the engineer responsible disappeared, fearing the wrath to come, and has not been heard from since.



Baths on Trains

have been discontinued by Canadian railroad officials because they have been so little used by the traveling public. Several years ago baths were provided on transcontinental trains but they have never been proven popular.

"The Broadway Limited,"

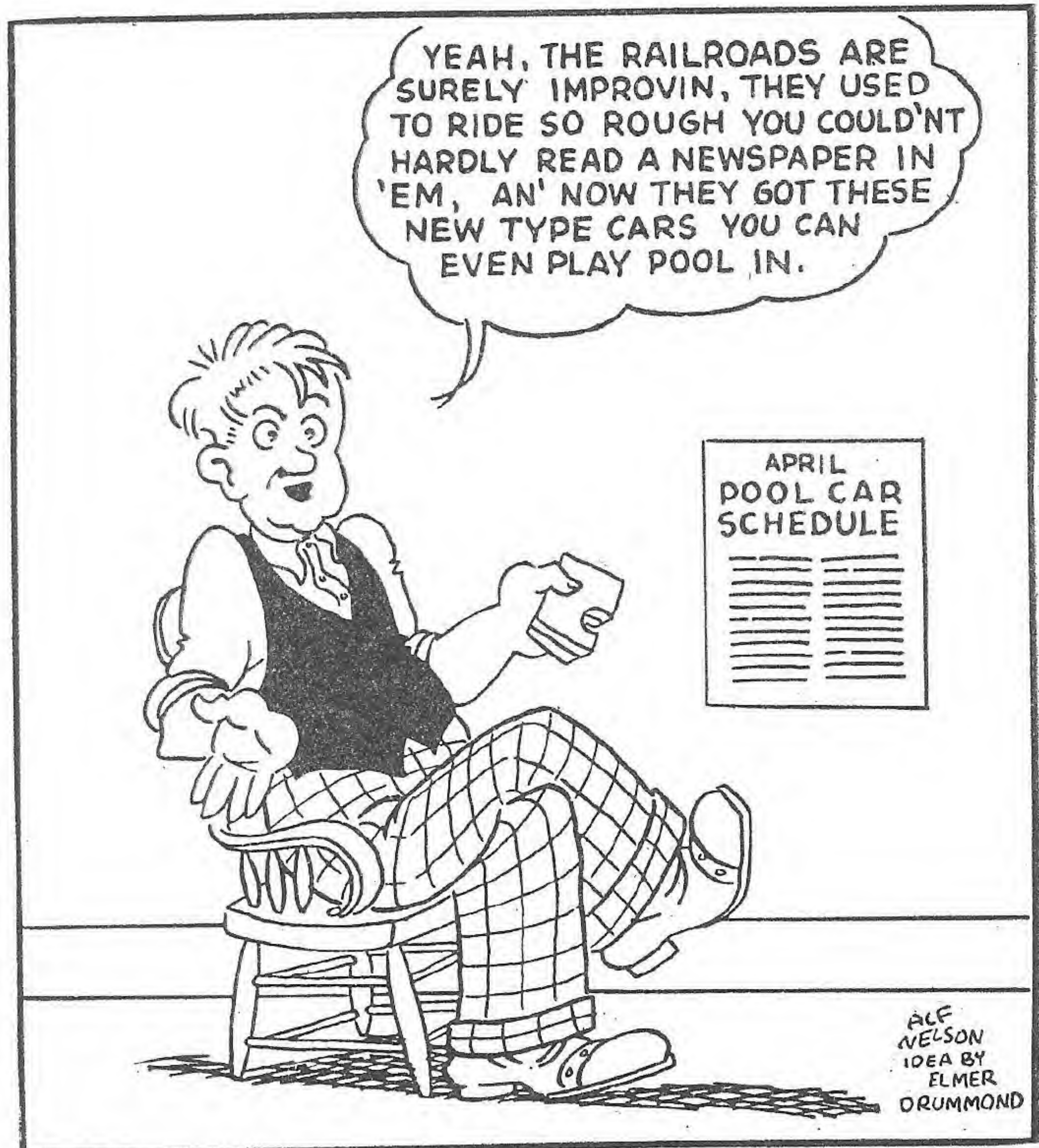
pride of the Pennsylvania's steel passenger fleet, is now scheduled to average 72 miles an hour over the 116½ miles between Liverpool, Ind., and Fort Wayne Junction, Ind. The speed for the entire Chicago-New York run has been stepped up to a start-to-stop average of 55 miles an hour.



"The Busiest Woman

in the United States" is the unofficial title given to Mrs. Kathryn L. Dicks, station agent at Buckland, Ohio, since 1900, by her fellow employes, because she is also: expressman, signalman, car checker, switch tender, baggage handler, and crossing watchman.

Or Swimming Pools?



Courtesy The Parchment News

Was It You?

S*OME one started the whole day wrong
—was it you?*

*Some one robbed the day of its song
—was it you?*

*Early this morning some one frowned,
Some one sulked until others scowled
And soon harsh words were passed around
—was it you?*

*Some one started the day off right—was
it you?*

*Some one made it happy and bright—was
it you?*

*Early this morning we are told
Some one smiled, and all through the day
This smile encouraged young and old
—was it you?*

*A little more smile, a little less frown,
A little less kicking a fellow who's down.
A little more 'WE'—a little less 'I';
A little more laugh, a little less cry.
A little more flowers on the pathways of
life,
And fewer on graves at the end of the
strife.'*

—ANONYMOUS.