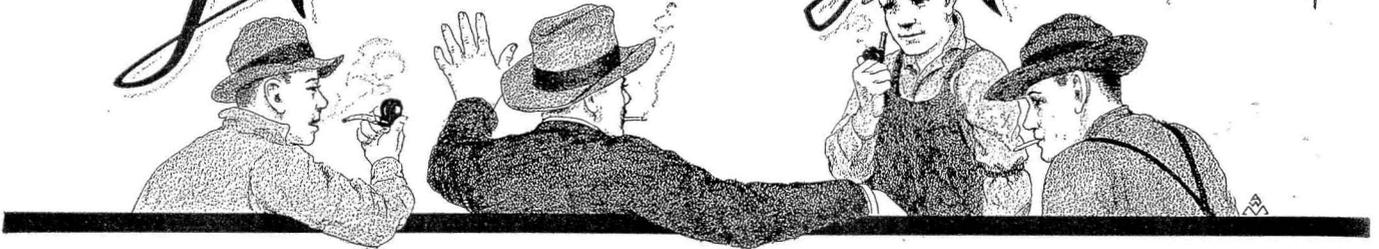


The News of the Month



The Texas & Pacific was ordered on August 27 to install within 60 days an automatic warning bell at its crossing of Paull Maillard road in the Parish of St. Charles, near Luling, La.

The Southern Railway reports that in 1922 a total of 17,668,605 passengers were carried on its trains, without a single fatality to any passenger as the result of an accident to a train or negligence on the part of the railway.

Specifications for Dry Cells, have been issued by the Bureau of Standards as Circular No. 139. The items covered in this "United States Government Specification for Dry Cells," include types and sizes of cells used, zinc, sealing compounds, etc., and the tests for voltage and performance are outlined. Copies of the bulletin may be received from the Government Printing Office, Washington, D. C., for five cents each.

The Chicago Post Office has recently issued a bulletin explaining that a large amount of direct mail advertisements, catalogs, etc., sent by third class mail are never delivered, on account of insufficient address or the party having moved. The postmaster is anxious to call to the attention of the public that if the wrappers or envelopes are stamped "Return Postage Guaranteed" that the matter will be returned to the sender and mailing lists can be kept up to date, thus obviating a continued waste of effort.

The Pennsylvania Railroad has petitioned the Interstate Commerce Commission to modify the automatic train control order of June 13, 1921, by substituting a division of the line between Baltimore, Md., and Harrisburg, Pa., for the line between Philadelphia and Pittsburgh as the location for the installation required by the commission. The commission is also asked to make an inspection and test of the apparatus now installed on the Lewistown division (about 50 miles), to the end that the system may be approved before the road proceeds at great expense with an installation on other divisions. This installation, which was put in service on July 11, has already cost \$300,000.

The Train Control Corporation of America has been organized with headquarters at 1409 Grand Central Terminal, New York City. F. B. Lincoln is president and general manager, Col. H. B. Hunt, director supervising manufacturing and air brake engineering, George Sergeant, Jr., director supervising contracts and installation and Bruce J. Delette is secretary and treasurer. The corporation has taken over the Clifford Automatic Train Stop Company, proprietor of the Clifford automatic train stop. The company has a branch office in Scranton, Pa., and an engineering office at Port Jervis, N. Y. Preparations are being made for a test of the Clifford devices on the Erie near Port Jervis.

Seeing a Smash-Up.—Life is too short and too sweet to take blind chances at grade crossings, when it is so easy to make sure. This is the advice of the Standard Oil Company in its advertising campaign to sell to automobilists greater quantities of gasoline. Continuing, the ad writer says: "I saw a smash once, and that was enough for me. No more taking chances for Yours Truly, or 'hoping' there isn't a train coming. You can't absolutely trust anything but your own eyes to tell you whether the track is clear or not. The flagman may not be on duty when you happen

along. The automatic signal may be out of order. The train may be coasting quietly down a grade toward the crossing. There are a dozen 'mays,' and 'may nots,' and 'ifs.' No siree! My tip is: Always assume there is a train coming. It is better to be wrong than to have your picture in next day's paper—'Victim of Auto Wreck.'"

The Signal Section, A. R. A., will hold a two-day stated meeting at the Hotel Pennsylvania, New York, November 14 and 15. The advance notices including reports of ten committees and one special committee are to be mailed about October 10.

The following rates will be in effect at the Hotel Pennsylvania:

Rooms with double bed for one, \$4.50, \$5.00, \$6.00 and \$7.00 per day.

Rooms with double bed for two, \$6.50, \$7.00, \$8.00 and \$9.00 per day.

Rooms with twin beds for one or two, \$7.00, \$8.00, \$9.00 and \$10.00 per day.

All rooms with bath.

All hotel reservations are to be made direct with the hotel management.

Proposed Railroad Club for Chicago

A movement has been started for the establishment in Chicago of a railroad club similar to the Railroad Club of New York. It is being promoted by Arthur E. Hooven, recently business manager of the Railway Review, and formerly connected with the Railway Age.

Railway officials, railway supply manufacturers and other persons interested in railway matters would be eligible to membership. Under the plan an entire floor in one of the principal office buildings would be taken and private dining rooms and meeting rooms, as well as other club conveniences, would be provided.

It is proposed to limit the initial membership to 1,200, the non-resident membership to 600. Non-resident members would be persons whose business headquarters were more than 25 miles from Chicago. The project for the organization of the club has been received with considerable favor by railway officers and railway supply manufacturers of Chicago.

"A New Method of Determining the Rate of Sulphation of Storage Battery Plates," is the title of bulletin No. 225, issued by the Bureau of Standards recently, which was prepared by G. W. Vinal, physicist, and L. M. Ritchie, associate chemist. This paper describes experiments which have been made to develop a speedy and accurate method for measuring the effect of impurities in storage-battery electrolyte. Because of the inaccuracies of the method previously used and the time required to complete the experiments it was decided to determine the effect of impurities in terms of the rate of the reaction taking place at the plates. This may be determined accurately in a short time by successive weighings of the plates immersed in solutions which are maintained at constant temperature. The plates were suspended in the electrolytes from the arm of a sensitive balance. By this arrangement it is possible to weigh each plate without exposing it to the air. The reaction at the negative plate may be both chemical and electrochemical; the measurements show that the former predominate. The rate of

sulphation of the negative plates increased as the concentration of the electrolyte and the temperature were increased. The rate of sulphation of the positive plates is much less than for the negative plates. Corrections for the buoyancy of the electrolyte are necessary. It is possible to compute from the electrochemical equivalents the number of ampere-hours of discharge occurring as local action.

The Fastest Train in the World

The fastest regularly scheduled train in the world, as far as is known, was placed in service on the Great Western Railway (England) on July 9, when that company inaugurated its summer passenger schedules. The new train operates between Cheltenham and Paddington Station, London, and its high speed is made between Swindon and Paddington, a distance of 77½ miles, which the train is scheduled to negotiate in 75 minutes—a speed of 61.8 miles per hour. There are many regularly scheduled express trains in England, however, which travel at speeds approximating this. In this country high rates of speed comparable to those in England can be found only in the Camden-Atlantic City services of the Pennsylvania and the Philadelphia & Reading.

The Hudson Automatic Train Stop on R. F. & P.

The Hudson Automatic Train Stop apparatus was fixed on a locomotive of the Richmond, Fredericksburg & Potomac Railroad, which was exhibited to a number of railroad men at Potomac Yard, Va., about five miles from Washington, D. C., on Friday, September 21. It was also examined by three members of the Interstate Commerce Commission, Messrs. Esch, Lewis and McManamy. This is an intermittent contact device, the ramp being fixed close to the running rail. The contactor on the locomotive is a wheel 20 in. in diameter and 8 in. wide. This wheel rides upon the running rail constantly and when it reaches a ramp, it is lifted and rides on the ramp. Connected with this wheel is a scraping contact or shoe which, normally 4 in. above the running rail, is pressed downward when it comes to the ramp and thus insures a clean surface for electrical contact. The ramps, of angle iron, are 30 ft. long and stand 1⅞ in. from, and 1¼ in. higher than, the running rail. The ramp is fastened to the running rail by hardwood brackets held with iron bolts.

Construction

The Michigan Central has recently ordered from the Hall Switch & Signal Company, Garwood, N. J., 26 Flasher Type Universal crossing lamps, 10 Style "L" 110-volt, d.c. motor signals and 60 relays for installation on its lines in the United States and Canada.

The New York Central, Lines West, has ordered from the General Railway Signal Company one 56-space, Model-2, Unit-Lever type electric interlocking machine, having 41 working levers and 15 spare spaces. The interlocking machine is for installation at Bay View, N. Y.

The Cleveland, Cincinnati, Chicago & St. Louis has ordered from the General Railway Signal Company one 48-lever Model-2 Unit-Lever type electric interlocking machine having lever locks on 14 levers. The machine is to be installed at Lenox, Ill., by the railroad company forces.

The Pennsylvania Railroad has ordered from the General Railway Signal Company one 24-space Model-2 Unit-Lever type electric interlocking machine having 18 working levers, 2 spare levers and 4 spare spaces complete with lever locks. The machine is to be installed at Indiana Harbor, Ind., by railroad company forces.

The Illinois Central has placed an order with the General Railway Signal Company for one 8-lever section, Model-2 electric interlocking machine without cabinet, two Model-3 d.c. dwarf signals and two Model-5 d.c. switch machines. These materials are to be installed as additions to an existing electric interlocking plant at Smithport, La.

The Illinois Central has placed an order with the General Railway Signal Company for one 48-lever Model-2 Unit lever type electric interlocking machine having 39 working levers and 9 spare spaces, one operating switchboard and 17 Model 5, 110-volt, d.c. switch machines. The interlocking machine is to be equipped with electric locks, rotary circuit

controllers and mechanical time locks. These materials will be installed by the railroad company at North Gilman, Ill.

The Signal Construction Company has ordered from the Prest-O-Lite Company complete storage battery equipment of Type 7-KRLB batteries to be installed on the New York Central in connection with the installation of Hall color-light signals between Amboy, N. Y., and Lyons, approximately 40 miles.

The Wabash Railway has ordered from the Union Switch & Signal Company, Style S, semaphore signals, for use in installing the automatic block system on its line between Harlem, Mo., and Birmingham, Mo., seven miles. In this territory the Wabash and the Chicago, Burlington & Quincy use their two single track lines jointly, the Wabash line for eastbound movement and the Burlington for westbound.

The Union Pacific has ordered from the General Railway Signal Company, a 20-space Model-2 Unit-Type electric interlocking machine, having 16 working levers and 4 spare spaces, complete with lever lights, lever locks, etc., for installation at Provo, Utah, on the Los Angeles & Salt Lake. The order also covers 12 Model-12A upper-quadrant ground signals, 8 Model-5, switch-machine layouts, one operating switchboard, one illuminating track diagram, and other materials.

The Northern Pacific has ordered from the General Railway Signal Company one 48-lever, Model-2 Unit-Type electric interlocking machine for installation at 18th Avenue, Minneapolis, Minn. The order also calls for three 2-arm, Model 2A, 110-volt top-of-mast signals; one 3-arm, Model-2A, 110-volt top-of-mast signal; 8-Model 3, one-arm solenoid dwarf signals, three 1-arm, Model 2A, base-of-mast, low voltage signals, 20 Model-2 switch machines, Model 9E relays, tower indicators, clockwork time releases and other materials.

The Southern Pacific, Texas Lines, has ordered material for the construction of complete automatic signaling for station protection on the Galveston, Harrisburg & San Antonio between San Antonio, Tex., and El Paso at the following stations: Uvalde, Noonan, Sabinal, Alpine, Tronto, Paisano and Marfa. This work will require the use of 45 eight-volt d.c. lower quadrant Style B Union signals. Track circuits will be direct current bonded with Ohio brass gas-welded bonds. Union Model 13 relays and Kerite insulated wire will be used. Approach electric lighting will be secured by the use of Union D.N.L. relays, 10-volt bulbs taking current directly off the batteries of the signals.

Signaling the New Subway at New York

The New York Rapid Transit Corporation (formerly the Brooklyn Rapid Transit Co.) has awarded a contract to the General Railway Signal Company for the complete installation of automatic block signals and electric interlocking plants on the 14th Street Eastern Subway, which begins at 6th Avenue, New York City, and runs down 14th Street under the East River to Montrose Avenue, Brooklyn, approximately four miles of double track.

Special features of the installation are: automatic interlocking with a.c. 110-volt, dynamic indication interlocking; automatic means for feeding from a duplicate power line in case of failure of the regular power supply; speed control signals to restrict speed at locations on curve; indication of all track circuits on the line by illuminated track indicators at three interlocking plants.

The installation will consist of 46 automatic, three-indication, color-light signals, 19 color-light interlocked signals, 64-a.c. automatic electric trip stops, 4 model-2 Unit Lever type a.c. electric interlocking plants with Model-5 switch machines, as follows:

Sixth Avenue; one 24-space interlocking machine with 11 working levers and 13 spare spaces for the operation of two cross-over switches and seven signals.

Third Avenue; one 16-space interlocking machine having 10 working levers and 6 spare spaces for the operation of four signals, 2 cross-over switches and 2 traffic levers.

Bedford Avenue; one 16-space interlocking machine having 12 working levers and 4 spare spaces for the operation of 6 signals, 2 cross-over switches and 2 traffic levers.

Montrose Avenue; one 12-space interlocking machine having 9 working levers, 3 spare spaces for the control of 6