

The News of the Month

The directors of the Chicago, Burlington & Quincy have authorized a pension for the employees of that road. Prior to the announcement of the plan, a study is being made of the pension systems of other roads.

The Board of Railroad Commissioners of the state of North Dakota proposes to launch immediately a state-wide campaign for the reduction of grade crossing accidents. This is believed to be the first instance of a state department undertaking on its own account an extensive campaign against such accidents.

Six passenger trains were snowbound in the Columbia river gorge on the night of November 21, on the lines of the Oregon-Washington Railroad & Navigation and the Spokane, Portland & Seattle roads. The storm was characterized as the worst in the history of railroad operation through the gorge.

Five thousand poles, telegraph, telephone and trolley wire, were reported destroyed or disabled in New England—mainly within 50 miles of Boston—after a severe rain and sleetstorm on November 27, 28 and 29. The suspension of telephone and electric lighting service was the most extensive on record for many years.

The sub-committee of Committee 15, Valuation, Signal section A. R. A., will hold a meeting in the A. R. A. headquarters Chicago, January 11, followed by a full committee meeting January 12. It is the purpose of this meeting to agree upon a tentative form of instructions and a table of service life, both to be presented at the March meeting.

The Rochester Sectional Committee of the Signal section, A. R. A., held a meeting in Buffalo, N. Y., December 9. J. L. Woodbridge, chief engineer of the Electric Storage Battery Company, delivered a lecture on the "Application and Maintenance of the Storage Battery." A. C. Turner, supervisor of signals, Erie, gave a talk on the "Approach Lighting of Automatic Signals."

The St. Louis Sectional Committee, Signal section, A. R. A., will hold a meeting Friday, January 20, in the Railroad Y. M. C. A., St. Louis, Mo. "The Color Light Signal" is the subject of a paper to be presented by D. R. Day of the Hall Switch & Signal Company. Charles G. Mahana, chief engineer at Sheffield Plant, Fairbanks-Morse Company, will present a paper on "The Railway Motor Car."

A preliminary compilation of the reports of 193 Class I railroads to the Interstate Commerce Commission of revenues and expenses for the month of November shows a net railway operating income for these roads of \$65,741,000, as compared with \$50,502,000 for November, 1920. The operating revenues were \$462,000,000, as compared with \$589,000,000, while the operating expenses were \$366,000,000, as compared with \$511,000,000.

The Savannah Sectional Committee of the Signal section, A. R. A., will hold a meeting at the De Soto hotel, Savannah, Ga., on January 17. The morning session will start promptly at 10:00 a. m., and the subjects of "Maintenance of Mechanical Interlocking" and "Rail Bonding" will be discussed. H. S. Balliet, assistant terminal manager, Grand Central Terminal, New York, will deliver a lecture on "Signaling—Historical Facts and Application," at the afternoon session.

Twenty-six people killed, 190 injured and 586 automobiles destroyed is the grade crossing record on the Southern Pacific for the past nine months. Nearly 300 drivers ran in front of or tried to beat the train to the crossing; 126 ran into trains, instead of trains striking them; 76 stalled on the track, largely the result of waiting until on the track before shifting gears; 55 ran into and broke down crossing gates; 28 approached the track at high speed, and five ran down and injured crossing flagmen.

Where an easement for telegraph lines along a railroad right of way was not used for 40 years, during which time

the telegraph company had accepted an exclusive lease of rights for its lines, and had subsequently started condemnation proceedings to take part of the right of way, the Alabama Supreme Court holds that the non-user, together with the acceptance of the lease and the condemnation proceedings, sufficiently showed an abandonment of the easement.—*Western Union v. L. & N. (Ala.)*, 89 So. 518.

The Kansas City Sectional Committee of the Signal section, American Railway Association, held a meeting in Kansas City, December 12, 1921. The program was devoted to the a.c. floating battery system. A. C. Reid, chief engineer of the Leich Electric Company, and F. Ballman, chief engineer of the Valley Electric Company, presented interesting papers on the operation and maintenance of vibrating rectifiers. H. M. Beck of the Electric Storage Battery Company explained the operation and maintenance of storage batteries in connection with the a.c. floating system.

J. J. Daniels is the inventor of a mechanical trip automatic train stop which has been installed, for experiment, on the track of the Great Eastern Railway of England, at Bruce Grove, on the Enfield branch. The apparatus is described in the *Railway Gazette* (London) of November 4. The track member is enclosed within a case, sandproof and snowproof; and the engine member is a jointed rod, carrying at its lower end a rubber tired wheel. There are three engine members, arranged side by side, these members coming in contact with different track members arranged for different indications.

A telegraph company having by decree been required to remove its poles, etc., from a right of way, and having sold the poles, etc., to the railroad, which used them only in the operation of its road, the Alabama Supreme Court holds that the sale did not require the approval of the Public Service Commission, being the legitimate result of the decree following upon Section 3867 of the Alabama Code, in effect declaring it to be the public policy of the state that the telegraph company should no longer be allowed to maintain its lines on the right of way; and the railroad could not be required by the commission to maintain a public telegraph service to the towns and villages affected by the sale.—*Alabama P. S. C. v. L. & N. (Ala.)*, 89 So. 524.

The Butte Sectional Committee of the Signal section A. R. A. held a meeting in Butte, Mont., on December 12. "The Approach Lighting of Signals" was the title of a paper delivered by P. A. Garrity of the Thos. A. Edison, Inc. H. B. Crantford of the Electric Storage Battery Co. presented a paper on the "A. C. Floating Battery System," and E. W. Rowland of the Ohio Brass Company gave a talk on the "Gas Welded Bonding." "Dry Cells, Their Use and Abuse," was the subject of a paper offered by J. M. Spangler of the National Carbon Co. Talks on the activities of the Signal section, A. R. A., and the Sectional committees were made by A. H. Clark, assistant secretary of the Signal section, by H. K. Lowry, signal engineer, C. R. I & P., and C. A. Christoferson, signal engineer, N. P. Sixty were in attendance at the meeting.

Heavy rains in the Ohio river valley and the state of California have caused the railroads considerable damage and inconvenience at certain points in these regions. The greatest damage was done at San Diego, Calif., which city was completely isolated for several days, as it was necessary to suspend traffic on both the Atchison, Topeka & Santa Fe and the San Diego & Arizona on December 25. The Santa Fe lost 1,000 ft. of track and roadway near Sorrento, and in the Rose Canyon, and there were small washouts at several other points, while the bridge over the San Diego river was threatened. In the Ohio region, it was necessary for the Cleveland, Cincinnati, Chicago & St. Louis, the Southern and the Baltimore & Ohio to abandon the Central Union station at Cincinnati temporarily because of high water. Service was not resumed at this station, except for one or two

local trains operated on a track above the water line, until December 28. While little damage was done at this point the railroads here and at other points on the river experienced a great deal of inconvenience from the high water.

Collision at Manhattan Transfer

A report on collision at Manhattan Transfer has been issued by the Interstate Commerce Commission, dated November 21, and signed by W. P. Borland, chief of the Bureau of Safety. This was a rear collision of westbound passenger trains which occurred on the Pennsylvania Railroad near Manhattan Transfer, N. J., on the morning of October 28, about 12:30 o'clock, when 38 passengers, four Pullman employees and four railroad employees were injured. There was a dense fog at the time, and express train No. 103, consisting of electric Motor No. 11 and 12 sleeping cars moving at from 10 to 25 miles an hour, ran into the rear of a preceding train, No. 701, which had been brought to a stop about one mile east of Manhattan Transfer station. Train 103 had run past two automatic block signals set against it, one at caution and the other at stop; a second stop signal 271 ft. in the rear of the standing train; and also past a flagman and fusee and torpedo signals; although the flagman and the fusee and torpedoes were not very far back from the standing train.

The flagman is censured for not affording his train proper protection. If his train had been moving at ordinary speed, he had from seven to 10 minutes in which to go back; while if it had been moving slowly, he ought to have thrown off fusees, which he did not do.

The engineman at fault admitted that he passed the two automatic signals without observing their indications; and he did not make a sufficient reduction of speed. The engine man's helper on train 103 is also held at fault for failure to observe the signals and to warn the engineman that signal locations had been passed without the indications being seen.

The line between Pennsylvania Terminal, New York, and Manhattan Transfer, nine miles, double track, is equipped with automatic block signals for the movement of trains in either direction on either track; and, in addition, automatic stops are provided on that portion of the line which is in tunnel; at the entrances to the tunnel and at the approaches to a drawbridge, about two miles east of the point of collision. The report indicates that no reason was disclosed why automatic stops had not been installed on the track at every block section throughout this nine miles, all electric motors running over the line being equipped with train-stop apparatus; and "to prevent the recurrence of accidents of this character, it is recommended that the installation of the automatic train stop system be extended" to cover the whole of this line.

All of the cars involved in the collision were of steel; and the report declares that if any one of them had been of wood there probably would have been loss of life.

Construction

The Missouri Pacific has awarded a contract to Gillespie & Daly for the construction of a two-story interlocking and signal tower at Hiawatha, Kansas.

The Pennsylvania has awarded a contract for one 56 lever Model 2 unit lever type electric interlocking machine and one operating switchboard for installation at Rochester, Pa., to the General Railway Signal Company. The machine will have 38 working levers and 18 spare spaces and the installation will be made by railroad forces.

The Grand Trunk Railway System has placed an order with the General Railway Signal Company for one 24-lever Saxby & Farmer mechanical interlocking machine and other materials for installation at Mack Ave., Detroit, the machine to have 18 working levers and 6 spare spaces. The installation will be made by the signal company's forces.

The Missouri, Kansas & Texas has ordered from the Union Switch & Signal Company the materials required for the installation of automatic block signaling between Vinita, Okla., and Wybark, consisting of 80 Style "S" and 2 Style "T-2" signals, with the necessary relays, switch circuit controllers, etc., for a complete d.c. system of block signaling within this

territory. The field work of installing these materials will be carried out by the railway company's regular signal construction forces.

The Kanawha & Michigan is converting two iron Morse wires into two dispatchers' telephone circuits at the present time. The Ohio division dispatchers' circuit, with the dispatchers located at Hobson, O., runs from Corning, O., to Hobson, a distance of 57.2 miles, and will have 17 selector stations and 31 booth and pole box sliding stations. The West Virginia division dispatching circuit, with the dispatchers at Charleston, W. Va. (about midway), runs from Hobson, O., to Swiss, W. Va., a distance of 117 miles, and includes 9.6 miles of new copper wire from the Gauley bridge to Swiss. It will have 37 selector stations and 55 booth and pole box siding stations. This road also is arranging to string two No. 9 A. W. G. copper wires for two telephone message circuits, one circuit to extend from Corning, O., to Charleston, W. Va., a distance of 125.6 miles, on which there will be 52 selector stations; the other message circuit will extend from Charleston, W. Va., to Gauley Bridge, a distance of 37.5 miles, and will require 28 selectors. The monitor operators for both circuits are located at Charleston. The selectors are of the alternating current type and all circuits are arranged for simplex. The foregoing additional five circuits will make the Toledo & Ohio Central, Zanesville & Western, Kanawha & Michigan, and Kanawha & West Virginia, 100 per cent telephone dispatching and about 50 per cent message telephone. Telephone blocking is in service on all except three divisions.

Personal

June C. Browne, recently appointed the joint superintendent of telegraph of the Missouri Pacific and the Western Union Telegraph Company, with headquarters at St. Louis, Mo., was born July 13, 1866, at Richmond, Va.



June C. Browne

Mr. Browne succeeds **E. A. Chenery**, whose obituary was published on page 498 of the December issue of the *Railway Signal Engineer*. Mr. Browne entered the railway service as a telegraph operator on the Missouri Pacific on December 22, 1882, and has spent 37 years in the service of the telegraph department of this road. He was promoted to telegraph office-manager in November, 1887, and was advanced to general foreman July 1, 1907. On December 10, 1908, Mr. Browne was promoted to supervisor of telegraph, which position he held for

10 years. He was then appointed assistant superintendent of telegraph January 1, 1918, which position he held until his appointment as superintendent of telegraph on December 1, 1921, as noted above.

Signal Supply

The Okonite Company of Passaic, N. J., has opened a branch office in Atlanta, Ga., Room 1512, Candler building. **John L. Phillips** is to be the manager of this office and **E. A. Thornwell**, sales representative. Their territory will be North and South Carolina, Georgia, Alabama, Florida, Tennessee, and the City of New Orleans, La.

H. O. Garman has entered private practice in consulting engineering and the management and operation of public utilities with offices in Indianapolis, Ind. For more than fourteen years Mr. Garman was chief engineer of the Public Service Commission and the Railroad Commission of Indiana, serving under five governors. Mr. Garman is national president of the American Association of Engineers.

Arc Welding for repair and reclamation, general applications of arc welding, and arc welding for manufacturing processes are well described and illustrated in Leaflet 1825, just published by the Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. A story is told of how costs are reduced by the use of arc welding.

The Westinghouse Electric & Manufacturing Co., East Pittsburgh, Pa., has recently issued a new catalogue describing safety switches and panel boards, in which the dimensions and list prices are given in detail. Some of the subjects that are discussed are the railway type safety panel boards, the safety car lighting panels, the auto-lock control panels, the dead-front and dead-rear safety switchboards, the live-front knife switches, and many other devices.

The Hall Switch & Signal Company, Garwood, N. J., has arranged with the General Electric Company, Limited, of London, to manage the sales in foreign countries of the Hall Color Light Signal and other signal apparatus of Hall manufacture. This arrangement includes France, Belgium, Holland, China, India, Siam, South Africa, New South Wales, Victoria, New Zealand, Western Australia, Argentine and Chili. It is also announced that the Hall products will be sold in Canada by the M. & F. Company of Montreal.

The Ward Leonard Electric Company has issued five bulletins recently. The first describes a new heavy duty motor starter for use with all types of d.c. motors. Another bulletin describes a new heavy duty motor-starter for use with single-phase commutator type a.c. motors, either 25 or 60 cycle. The third describes a speed-regulator for starting and regulating the speed of d.c. motors by armature control. Automatic motor-starters for d.c. motors are described in a two-page leaflet, while the complete line of vitrohm enameled field rheostats are described in detail and illustrated in a 24-page catalogue.

O. B. Frink, whose appointment as representative of the Waterbury Battery Company, with headquarters in New York, was noted in the November issue of the *Railway Signal Engineer*, started in signal work at the factory of the Hall Switch & Signal Company at Garwood, N. J., in 1899. In 1900 he went on the road in charge of signal construction work and placed in service the normal danger wireless circuit between Newark, N. J., and Jersey City. He was transferred to the signal department of the C. R. R. of N. J. in 1903 to maintain this installation. At the time the automatic signals through Fourteenth street on the Interborough Rapid Transit were placed in service he accepted the position as maintainer on this installation. In March, 1905, Mr. Frink returned to the Hall Switch & Signal Company, having charge of the experimental installation of the Kinsman all electric train stop on the Erie at Paterson, N. J. In June of the same year he transferred as construction foreman in charge of the installation of signals on the Delaware & Hudson and in 1906 he resigned to accept the position of signal supervisor of the Pennsylvania division of this road. Mr. Frink resigned in January, 1909, to return to the Hall Switch & Signal Company to take charge of the testing room. He was promoted to general inspector in October, 1914, and appointed factory engineer in July, 1915, and only a year later was advanced to sales engineer, from which position he was promoted in June, 1919, to principal assistant engineer, continuing in this capacity until he resigned October 7, 1921, to join the forces of the Waterbury Battery Company. While with the Hall Switch & Signal Company Mr. Frink spent a large portion of his time experimenting with and developing the

present type of relay and was for a number of years the official representative of the Hall Switch & Signal Company on Committee VII—Direct Current Relays, Signal section, A. R. A.

Samuel J. Hough, whose appointment as Western representative of the Waterbury Battery Company, Waterbury, Conn., with headquarters in Chicago, was noted in the November issue of the *Railway Signal Engineer*, was born in Philadelphia, Pa., June 29, 1891. He was educated at the Germantown Academy in Philadelphia, from which school he graduated in 1912. In 1913 he entered the employ of Thomas A. Edison, Inc., Orange, N. J., in the phonograph works, subsequently going in the primary battery department laboratory. Mr. Hough spent considerable time testing and developing primary batteries for railway signaling and especially track circuits. He was later appointed inspector in the eastern territory. On January 1, 1917, he entered



Samuel J. Hough

the employ of the Waterbury Battery Co. as field service engineer, with headquarters in New York, which position he held until his recent appointment as western representative of the Waterbury Battery Company.

Obituary

Henry J. Hovey, one of the pioneers of railway signaling, whose death occurred at Ellworth, Me., April 15, 1921, was born in Gouldsboro, Me., 74 years ago. As a young man Mr. Hovey invented a machine for utilizing small scraps of lumber in the manufacture of spools for cotton thread, thus showing the inventive genius that in later years produced important inventions in the signal field. From 1890 to 1892 he was employed in the signal department of the New York, New Haven & Hartford. Soon after, he entered the signal department of the Chicago & Northwestern as assistant superintendent of signals and held that position until 1905, when he became signal engineer of the Bryant Zinc Company of Chicago, with which company he remained until he retired from active business in 1910. Mr. Hovey contributed in no small way to the rapid advancement of automatic block signaling, by inventing the self-cleaning relay contact that is in universal use today. He also conceived and made practical a simple relay that replaced the cumbersome interlocking type of relay then used for controlling automatic block signal circuits. In later years Mr. Hovey turned his attention to highway crossing apparatus and invented three different types of interlocking relays for controlling bells and other apparatus on single track railroads. Henry Hovey was probably the first man to conceive the use of a crossing alarm bell that was entirely self contained. It was while employed by the Bryant Zinc Company that he invented the No. 666 alarm bell.



O. B. Frink



Henry J. Hovey