headquarters at St. Louis, Mo., in 1927, and was advanced to resident manager at the same office in 1937. Since 1939, he has been engaged in important special assignments, and in 1947 was appointed assistant to the president.

A. H. Rudd, retired chief signal engineer of the Pennsylvania, died at his home, Upper Farm, Lakeville, Conn., on September 17, at the age of 82. A native of Lakeville, Mr. Rudd was graduated from the Sheffield Scientific School of Yale University in 1886, at the early age of 19. The same year he entered Pennsylvania service as a draftsman in the real estate department, and in March, 1888, became draftsman in the signal department. Four years later he left the Pennsylvania to become inspector of signals on the New York Central & Hudson River, now a part of the New York Central. In May, 1892, he was promoted to signal engineer, and in May of the following year he became assistant superintendent of signals on the Hudson division. He was appointed foreman of electric signals on the Hartford division of the New York, New Haven & Hartford in August, 1894, and was later promoted to signal engineer of the Hartford and Valley divisions. In April, 1900, he became signal engineer of the Delaware, Lackawanna & Western, returning to the Pennsylvania in March, 1903, as assistant signal engineer, Lines East of Pittsburgh. Mr. Rudd became signal engineer in August, 1907, and was made chief signal engineer, system, in March, 1920, from which post he retired in 1937.

A. H. Rudd

In 1905, Mr. Rudd collaborated with Frank Rhea, of the engineering department of the Pennsylvania Lines West of Pittsburgh, in the preparation of a comprehensive survey of signaling methods, which in large part formed the basis for unifying signaling practices on the Pennsylvania System. When the Pennsylvania's main line suburban area, stretching 20 mi. west of Philadelphia, was electrified in 1916, the adoption of the overhead wire suspension system, known as "cross catenary," presented new signaling problems. The lattice effect of the wires and poles, it was felt, might tend to obscure the semaphore type of wayside signals then in use. To meet this situation, Mr. Rudd collaborated with Dr. William Churchill, technician of the Corning Glass Works, in the production of the "position-light" signals, mounted on bridges over the tracks, and giving the same indications by day and night.

Trade Publications

Instructions and Technical Data for Rubber Jar Batteries is the title of a 5 in. by 8 in., 38-page booklet just released by the Gould Storage Battery Corporation, Trenton 7, N. J. This book, GB748, includes an extended illustrated explanation of the maintenance and operation of lead type storage batteries. Copies of this book are available on request to the company at the address above.

Telegraph and telephone components—Radio Engineering Products, Ltd., 4305 Iberville Street, Montreal 34, Que., has announced a list of standard telephone and telegraph components, now available for immediate delivery from stock. Also listed, in abbreviated form, are major items of telephone and telegraph equipment.

Stationary Batteries for Auxiliary Power and Control is the title of an 8 in. by 11 in. 16-page booklet issued by the Gould Storage Battery Corporation, Trenton 7, N. J. This book, GB852, includes illustrations, tables and explanations concerning various types of Gould batteries including the Planté, the Floté and the Kathanode types. Copies of this booklet are available upon request to the above address.

Stimsonite all plastic reflectors for use on railroads is the title of an eight-page bulletin issued by the American Gas Accumulator Company, 1027 Newark Avenue, Elizabeth 3, N. J. This booklet, printed in colors, explains the use of reflector materials on railroad crossing gates and "End of Automatic Block" signs and other similar signs. Also this material is used as reflectors in place of lamps in switch stands and some signals such as fixed distant signals.

Mobile radio—The RCA Victor Division of the Radio Corporation of America, Camden 2, N. J., has issued a two-page circular on its new Fleetfone—two-way mobile radio communication equipment designed for practically every mobile application in the 30-50 mc. band.

Communication equipment—Radio Engineering Products, Ltd., 4305 Iberville Street, Montreal, Que., has announced a catalog of data sheets on their line of telephone and telegraph equipment for railroads, copies of which are available upon request. The company's equipment is principally for long-distance service, and includes a number of standard types of carrier telephone and telegraph and allied equipment.

"How to Reduce Abrasive Wear with Thermalloy HC-250," is the title of a booklet which has been released by the Electro-Alloys Division of American Brake Shoe Company. Copies are now available and will be mailed upon request. A six-page folder, this bulletin describes the physical properties of Thermalloy HC-250, listing the many uses and advantages of this exceptionally abrasive resistant material. Physical properties of Thermalloy HC-250 are compared with 13 per cent manganese steel, ABK Metal (controlled Ni-Hard) and white cast iron, in a carefully compiled table. The bulletin describes case histories of the metal giving actual field service data in each case. Information is also included on machining and high temperature service.

Microphone Stand—Electro-Voice, Inc., Buchanan, Mich., has announced illustrated Bulletin No. 150 on their new "Break-In" touch-to-talk microphone stand, which fits any microphone with standard 5/8-in. 27-thread, and which is applicable for communications, paging, dispatching and public address. A copy is available upon request.

Scotch-Weld is the title of a four-page bulletin issued by the Minnesota Mining & Manufacturing Company, St. Paul 6, Minn., that explains in detail the use of electrical insulating film No. 70 which is applied like tape to coils and is then heat treated to form a unified layer of insulation.

Mechanical Pressure Gages are explained in a four-page illustrated bulletin issued by W. C. Dillon & Company, Inc., 5410 W. Harrison St., Chicago 44. These gages measure mechanical pressure, not fluid pressure, being unique in this respect.

D. W. Onan & Sons, Inc., Minneapolis, Minn., manufacturers of complete gasoline and Diesel-driven electric generating equipment and air-cooled engines, announce the appointment of the John W. Thorp Company, Inc., of 50 Church Street, New York, distributors of railway supplies, as Onan sales representatives for railway sales in New York and the New England area.

Automatic Electric To Offer G. E. Radio-Telephone Equipment

Automatic Electric Company, Chicago, has announced completion of an agreement with General Electric Company, Schenectady, N. Y., whereby the former will act as distributor in the United States and possessions for all types of General Electric radio-telephone equipment suitable for telephone use. The Automatic company points out that this arrangement gives timely recognition to the steadily increasing importance of radio-telephone facilities among railroads, independent telephone companies, pipeline companies and other organizations having requirements for such equipment for use either as separate systems or to supplement existing wire telephone networks.

General Electric radio-telephone equipment to be made available through the Automatic Electric organization includes:

(1) Systems for railroad use.

(2) Fixed point-to-point radio systems for common carrier or private use in the so-called "micro-wave" and other bands.