equipped with Westinghouse anti-friction roller bearings.

The London, Midland & Scottish Railways have placed a contract with the Westinghouse Brake & Saxby Signal Company, Ltd., London, for material needed to remodel the Victoria and Exchange stations at Manchester, England. This power signaling installation will include three interlocking machines, one of 99 levers, another of 95 levers and a third of 15 levers, together with 128 electrically-operated switch machines. The unique feature of this operation will be the use of direct current supplied by alternating current mains through Westinghouse rectifiers without storage batteries. Included in the contract also are 200 color-light signals of 4, 3 and 2-aspect types, as well as 26 optical route indicators and 176 a-c. condenser fed track circuits.

The Pere Marquette has placed an order with the General Railway Signal Company covering 10 intermittent inductive auto-manual type train control engine equipments for shipment to Grand Rapids, Mich.

The Long Island has awarded the Union Switch & Signal Company a contract for the complete installation of flasher light signals at 17 crossings on the Atlantic avenue division of the Long Island.

The Lehigh Valley has placed an order with the General Railway Signal Company covering 37 additional intermittent inductive auto-manual train control engine equipments for installation between Easton, Pa., and Sayre.

The Chesapeake & Ohio is equipping 10 additional locomotives operating over its Chicago division, between Peru, Ind., and Chicago, with Union intermittent inductive train stop equipment furnished by the Union Switch & Signal Company.

The Delaware, Lackawanna & Western will install an electro-pneumatic interlocking at Denville, N. J., employing a 47-lever Model-14 machine, controlling Style A-1 switch and lock movements and Style-R color-light signals throughout. The materials for this plant have been ordered from the Union Switch & Signal Company and the field construction will be handled by the railroad.

The Reading is extending the electro-pneumatic interlocking plant facilities at Birdsboro, Pa., the work embracing 14 light signals, additional A-1 switch movements, Model-14 interlocking machine, etc. The Union Switch & Signal Company has been given the contract to furnish the materials and install this work complete.

The Delaware, Lackawanna & Western has purchased from the Union Switch & Signal Company, a 27-lever Model-14 electro-pneumatic interlocking machine, 22 Style-R color-light signals, 18 A-1 electro-pneumatic switch and lock movements and a complete equipment of relays and other auxiliary apparatus for installation at Boonton, N. J. These materials will be installed by the railroad company's forces.

The Atlantic Coast Line has ordered a 12-lever Saxby & Farmer interlocking machine, with 7 working levers, for installation at Ninth avenue, St. Petersburg, Fla. This machine will be furnished by the Union Switch & Signal Company.

The Pennsylvania has placed orders for eight Style S-8 electric units and a new set of locking for the existing mechanical interlocking at "HF" Cabin, Cross Cut, Pa. These materials will be supplied by the Union Switch & Signal Company and installed by the railroad's signal construction forces.

The Lima Locomotive Works, Inc., has placed an order with the Union Switch & Signal Company for 20 sets of continuous automatic train stop equipment for application to engines being built for the Boston & Maine, to operate over the Fitchburg division between Boston, Mass., and Greenfield.

The New York, New Haven & Hartford has placed orders with the Union Switch & Signal Company for apparatus for the coded continuous automatic train stop installation between Cedar Hill, Conn., and Auburn. These materials comprise 141 locomotive equipments, 31 color-light signals, 436 relays, 229 transformers and other necessary materials. The field installation will be handled by the railroad's signal construction forces.

The Pennsylvania has ordered an 8-lever section electro-mechanical interlocking machine with 7 working style S-8 electric units and a supporting frame for the existing 24-lever Saxby & Farmer machine now in service at Collinsville, Ill. This material will be furnished by the Union Switch & Signal Company.

The Consolidated Railways of Cuba are arranging to install mechanical interlocking protection at the Tahon and Vergara crossings. The machine at Tahon will have nine working levers operating four signals, four derails and two highway crossing gates. At Vergara, an eight-lever machine will be employed for the operation of four signals and four derails. The material for these plants is being furnished by the Union Switch & Signal Company.

The Chesapeake & Ohio has placed orders for a complete style S-8 electro-mechanical interlocking machine with eight working mechanical levers and three electric units for BG cabin, Talcott, W. Va.; also a new style S-8 electro-mechanical machine with ten working mechanical levers and three electric units for installation at JR cabin, Jerry's Run, Va. These machines will be furnished by the Union Switch & Signal Company and installed by railway construction forces.

The Missouri-Kansas-Texas is installing a five-lever Saxby & Farmer mechanical interlocking at its crossing with the H. & T. C. at Lancaster, Texas. This machine, with the necessary attendant apparatus, is being furnished by the Union Switch & Signal Company.

The Central of New Jersey has ordered 40 coded continuous automatic stop equipments for application to locomotives operating between Red Bank, N. J., and Winslow Junction. These equipments will be supplied by the Union Switch & Signal Company.

Personal Mention

George Harris Dryden, principal assistant signal engineer, Baltimore & Ohio, with headquarters at Baltimore, Md., has been promoted to signal engineer to succeed the late Frank P. Patenall, whose death is noted elsewhere in these columns. Mr. Dryden was born on February 15, 1870, at Rehobeth, Md. After completing an elementary schooling he entered Rehobeth Academy and upon completion of this training entered the service of the Baltimore & Ohio on August 1, 1891. During the seven-year period from 1891 to 1898, Mr. Dryden was employed first as a laborer, then as a lineman and

George Harris Dryden

finally as a telegraph operator. He was appointed signalman in 1898 and held this position for a period of four years. This was followed in 1902 by a promotion to signal supervisor, in which capacity he was employed for one year. Subsequently he was appointed signal inspector, then general signal inspector, assistant engineer, and in 1911, assistant signal engineer. After serving two years as assistant signal engineer of the Baltimore & Ohio, Mr. Dryden was appointed principal assistant signal engineer and held this position continuously until his recent promotion to signal engineer.

Changes on the C. & A.

H. C. Sampson, signal supervisor of the Northern division of the Chicago & Alton, with headquarters at Bloomington, Ill., has been promoted to signal engineer and superintendent of telegraph, succeeding **S. U. Rhymer,** whose death was noted last month.