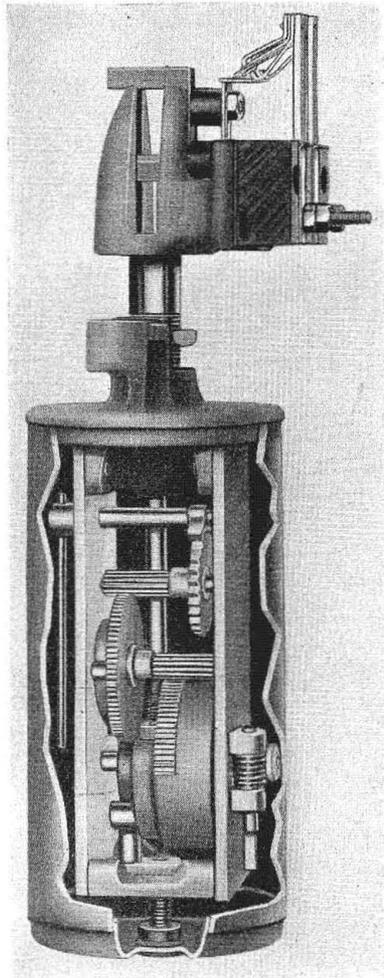


New and Improved Devices

"Union" Clock-Work Time Release

THE Union Switch & Signal Company has recently placed on the market a clock-work time release known as the Model-TP. This time release is compact and can be mounted on any interlocking machine where the Model-13 indication magnet can be used. It interposes a safe time interval between the operation of the signal lever from the reverse to the normal position by preventing the indication being received until after the clock-work time release has completed its cycle. In this way a quick change in route is prevented should the engineman fail to note that the signal had been returned to the stop position after once having been cleared.

The Union Model-TP clock-work time release embodies several desirable features. It can be fitted easily to the interlocking machine, and a substantial thrust is exerted on the latch. An accurate time adjustment of from five seconds to two minutes is provided for by means of the micrometer adjustment at the side of the mechanism and by changing the length of the pendulum. The adjustment may be made at $\frac{1}{2}$ sec. intervals from five seconds to one minute and at one second intervals from one minute to two minutes. Changing the length of the pendulum allows for several ranges in the time adjustment.



Time intervals from five seconds to two minutes can be obtained with the release

The operation of the segment on the lever shaft pushes down the driving rod of the time release and the latch, and breaks the electrical contact. Pushing down the driving rod winds a spring which is encased in a drum. When the segment is moved to the center position, the drum operates as a driving gear and causes a pendulum to swing. The effective length of the pendulum and the tension in the spring, control the time required for the driving rod to move upward to close the contacts.

The parts of the mechanism are machined with precision, and the mechanism is enclosed in a sheet brass container.

Stiles Drawbridge Circuit Controller

AN improved circuit controller for drawbridge applications has been placed on the market by the T. Geo. Stiles Company, Arlington, N. J. This new device is designed especially for high-voltage circuits and is designated as the Model-D drawbridge circuit controller. It replaces the Model-C unit which has been installed at numerous points on railways in this country and abroad, but which was designed primarily for low-voltage circuits. Because a number of railroads had been using the Model-C machine for circuits up to 650 volts and 12 amp., the manufacturer decided to redesign the controller to meet the higher voltage requirements. Better insulation between current-carrying parts is provided in the Model-D controller, and hence it is more reliable than the Model-C for high-voltage service.



Color-light signals on the Missouri Pacific at Benton, Ark.