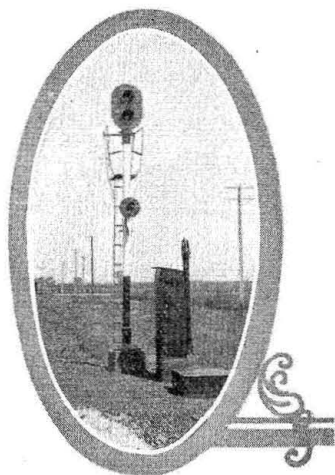
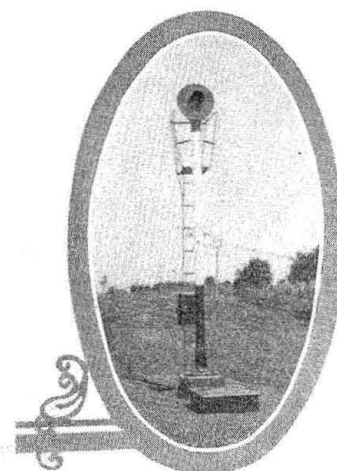


Automatic Interlocker Saves Over 8,000 Train Stops Annually



One of the home signals on the C. & A.



One of the distant signals on the C. & A.

Simplified control system used at C. & A.-N.Y.C. crossing at Streator Junction, Ill. — Push-type release employed

AN annual saving in excess of \$3,000 is anticipated as a result of an automatic interlocking plant just installed at Streator Junction, about 2½ miles east of Streator, Ill. At this point the branch line of the Chicago & Alton from Dwight to Peoria crosses the main line of the New York Central, which runs from South Bend, Ind., to Zearing, Ill. Prior to the recent installation, there was no protection at this crossing and all trains were required to make a stop. With the new facilities the trains do not stop, but are required to observe a 25 m.p.h. speed restriction over the crossing. No complications in control are necessary in this plant because there are no interchange tracks. A hand-operated switch leads to a station track at the west end of the plant on the New York Central line, but this switch falls within the approach section and standard automatic signal practice in respect to track circuit shunting is followed.

Traffic on the Chicago & Alton includes two passenger, four regular freight and two extra freight trains daily, while on the New York Central there are four passenger and 10 freight trains daily. It will, therefore, be possible to eliminate about 8,000-train stops annually.

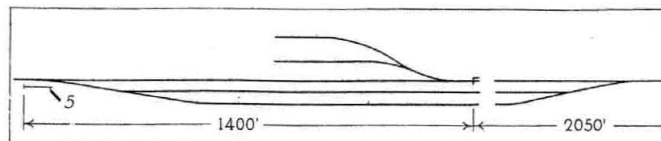
Color-Light Signals

The home signals are located 500 ft. from the crossing on each line. The two-unit (red and green) G-R-S Type-D color-light signals employed at these locations are equipped with 8-volt, 18-watt lamps and are lighted normally from an a-c. supply controlled by means of approach lighting circuits. A single-unit color-light

EMGO-7 120-a.h. storage battery at the crossing for emergency lighting. Each home signal is equipped with a red marker light to designate it as an absolute stop signal. As each marker light is equipped with an 8-volt, 10-watt lamp, it is not quite as brilliant as the home signal which has an 8-volt, 18-watt lamp. In connection with the lighting of the home signals, two Type-H power-off relays are employed, one for each line, in order to reduce the current carried by each contact in the relay.

Emergency Release Switch

An emergency push-type release switch is provided in a separate box mounted on the end of the relay cabinet at the crossing. This box has a hinged hasp, equipped with two padlocks, one a C. & A. and the other a N. Y. C. standard switch padlock. The function of the emergency release is to insure that all home signals in the plant are at stop, before giving a train a signal to proceed over the crossing. If a train on the C. & A. finds its home signal at stop, either because of the plant being out of order, or because of a New York Central train standing on an approach section between a home and a distant signal on that line, a C. & A. trainman proceeds to the crossing to operate the emergency re-



There are no interchange tracks between home signals—
Fixed distant signals used

distant signal, located about 2,600 ft. beyond the home signal in each case, provides only one indication, namely, yellow for caution. These distant signals burn continuously, the energy being supplied by a 220-volt circuit without a storage battery reserve. For the home signals, however, there is a five-cell Exide Type-

