



What's the Answer?

The Light-Traffic Crossing

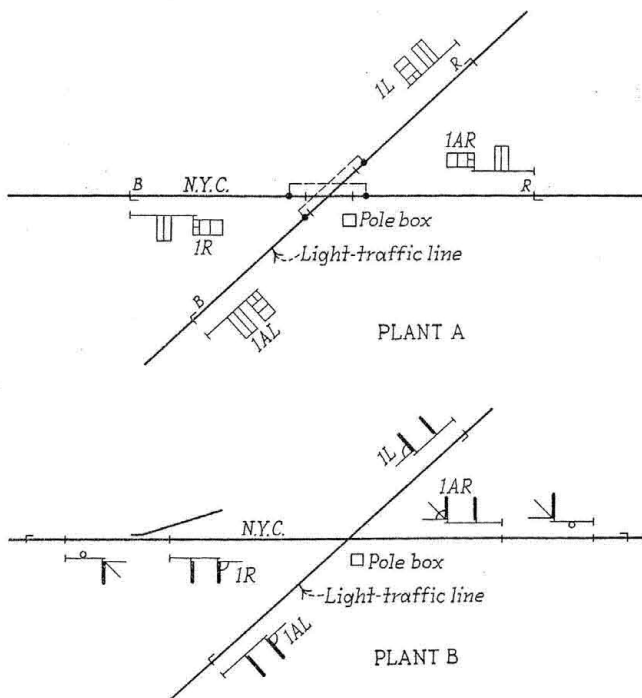
"What form of protection is recommended for railroad grade crossings where the traffic is heavy on one line and extremely light on the other?"

Electric Type of Half-Interlocker Operated by Train Crew of Light-Traffic Line*

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The illustration shows two plans for installations that have been made on this road at grade crossings where in each case the traffic on one line is very light. Both installations are substitutes for what used to be known



Plant A has one three-position working lever with electric stick locking and a time release, located in the pole box at the crossing. The lever is operated by a member of the train crew on the light-traffic line. Plant B is similarly controlled, but has distant signals on the heavy-traffic line

as the mechanical half interlocking, but each is of the electric type. This is the type of plant anticipated in the second paragraph of Mr. Loomis' reply, except that there are no derrails and that a three-position electric lever is substituted for the ground-lever stand. This electric lever, together with its electric lock and time release, is mounted on a pole box on a post at the cross-

To Be Answered in a Later Issue

(1) Based on your experience, what would you say is the maximum number of trains that can be handled under practical conditions over a single-track division of say 60 to 100 miles? (See editorial comment on page 52.)

(2) What type of automatic interlocking would you install at a railway grade crossing on one line of which it is not feasible to use track circuits?

(3) It is desired to use existing d-c. control wires as media for the simultaneous transmission of approach indications. How can this be accomplished? Alternating current is available.

(4) What time interval should be allowed for the operation of power switch machines used for remote-control or CTC installations? Under what circumstances is it desirable to provide fast operation—say, 3 seconds? What changes in power supply, gearing, etc., are most practicable, in order to secure faster operation?

ing. Therefore, so to speak, a pole box ordinarily used for telephone purposes is now substituted for an interlocking tower or cabin. With the lever in one position, right, left, forward or backward, as the case may be, the signals on one road are cleared, and when this lever is in the opposite position the signals on the other line are cleared. In each of the two cases the signals are left normally clear for the line of heavier traffic and against the line of lighter traffic. In each of these two cases the plant is operated by the train crew of the light-traffic line. In changing the line-up from the heavy-traffic to the light-traffic line, it is necessary first to set the signals on the heavy-traffic line to indicate Stop and then to wait for the clock-work time-release to run down, after which, if there are no trains inside of home signal limits, the signals for the light-traffic line may be set to indicate Proceed. The reverse procedure is followed in changing back.

In plants A and B the traffic on the heavier line is about 8 passenger and 10 freight trains per day and on the light traffic line one mixed train in each direction each day. In Case A the present arrangement replaced a mechanical pole target. In the case of Plant B it replaced a mechanical interlocking plant and caused two operators to be transferred to other duties. In both cases a mixed train on the light-traffic line is required

*Four other answers to this question were published in the December, 1931, issue. Mr. Schwendt's answer was received too late to be included in that issue.

