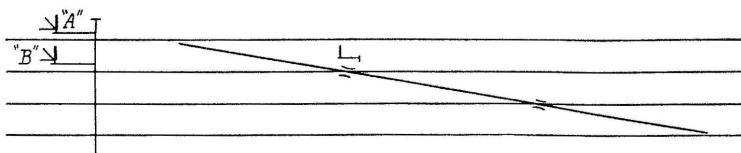


## Signals in Advance of Switches

(2) Should the clearing of advance signals A or B (either automatic or lever control) be permitted prior to lining of route or



the clearing of dwarf signal governing movements to the advance signal?

### Power and Mechanical Operation

W. M. POST

Signal Engineer, Pennsylvania,  
Philadelphia, Pa.

It is the practice on the Pennsylvania to control signal B so that whenever crossover 3 is reversed signal B will show its most restrictive indication. Where signal B is power-operated, the control for this signal is taken over the lever operating crossover 3. If signal B is a mechanical signal, the lever operating it locks 3 in the normal position.

### At Interlockings and in Automatic Territory

F. B. WIEGAND

Signal Engineer, New York Central,  
Cleveland, Ohio

On the New York Central it has been the practice to provide so-called back locking so that signals immediately in advance of switches cannot

be cleared prior to the lining up of the route. This applies to locations where advance signals are immediately in advance of interlocking plants and in automatic territory where facing point switches are a short distance in the rear of the automatic signals. In my opinion such back locking is desirable.

### Back Locking Desirable

R. LANG

Signal Maintainer, Toronto Terminals,  
Toronto, Ont.

If there is an interlocked switch between the advance signal and the dwarf signal, from which the train or engine expects to receive an indication to proceed, the signal for the route on which the engine or train is standing should be cleared first. In my opinion, this procedure helps to eliminate non-observance of signals, which happens in many cases where advance signals have been permitted to be cleared first.

panies for the past 11 years. In such a signal, improper colors cannot be displayed by the sunlight because of its having to pass through internal colored roundels that are positioned for the proper indication by a relay mechanism.

Corrective means on existing signals would vary considerably, depending upon the type of signal and the local conditions. One means for correcting this type of trouble is offered by the device known as "Phankill" as advertised in *Railway Signaling* (May, 1937). Further modifications to the lens assembly, such as the addition of gauze screens or special lamp bulbs to break up the internal reflected light, may also be found necessary.

### Deflecting Prism May Help

M. J. PEACOCK, JR.  
Philadelphia, Pa.

As to the matter concerning phantom indications, from color-light type dwarf signals installed on a slant in order for the engineman to see the signal indications, produced by the sunlight shining upon the lens of the dwarf signal, regardless of the visor to prevent it:

In such a case as this, I am suggesting that deflecting prisms be installed on all such signals producing phantom indications. The deflecting prism to which I refer is installed over the outer lens of the dwarf signal, and, in my estimation, is about the most suitable method to carry out in remedying such a case.

## Phantom Indications of Dwarfs

*"Where color-light type dwarf signals have been installed on a tilt in order for the engineman to see the indication being displayed, certain roads have had trouble with phantom indications, produced by the sun shining on the lens, regardless of the visor to keep away the sunlight. What, in your opinion, is the best procedure to follow out in correcting such a case as this?"*

### Depends on Conditions

F. W. BENDER

Signal Engineer, Central Railroad of New  
Jersey, Jersey City, N. J.

With reference to the subject of phantom indications on color-light dwarf signals, when installed on a tilt. I wish to advise there are few locations where signals are located and adjusted in such a manner that interference due to the sunlight must be given consideration. If an analysis

is made by each road of the conditions on that road, it will probably be found that the possible chance for having this difficulty will occur only for a short period of time on a certain few days in the year.

The best protection against this type of trouble on new installations, or, if economically practical on existing installations, would seem to be the installation of what is known as the searchlight type, color-light signal that has been made available through both of the large signal com-



Home signal at automatic interlocking  
on the Santa Fe