ing relay. Although it is more common practice to illuminate the lamps alternately, the control is flexible enough so that the lamps may be illuminated at the same time or continuously during the time a train is approaching a crossing.

## Hall Position Color-Light Signal

A new position color-light signal has been placed on the market by the Hall Switch & Signal Company. This form of signal has the dual advantage of displaying both color and position indications, and thereby meets the demands of both the advocates of light position and color signaling.

The signal consists of six or eight light units mounted on a circular supporting background 40 in. in diameter.



Rear View of the New Hall Position Color-Light Signal

The light units are spaced 28 in. apart from center to center and are arranged at proper angles to correspond with the color indication given. Three or four position color indications are given as required, the fourth indication being omitted when not used.

Each light unit is entirely self-contained and is provided with its own individual adjustments and sights. The units are adjustably mounted on the background, and may be independently alined along the track by means of their telescopic sights. Alinment is accomplished by accurate transit adjustments and the units are locked in place. A doublet lens combination is used in the unit in conjunction with a universally adjustable lamp socket. Sighting devices in the unit allow commercial lamps to be used in the signal and insure accuracy in placing the filament in the focal point of the lamp. The operation of alining the filament is simple and may be accomplished by a maintainer in a short time.

One of the light units weighs 15 lb., being made of

a special non-corrosive metal which is not subject to rusting. A complete position light signal weighs about 120 lb.

An outstanding feature of this new signal is the unit system of assembling the light units. This allows a three-unit, vertical or triangular cluster or any other type of signal to be made with no change except that required in the supporting background. This feature facilitates field construction by eliminating the use of gin poles and tackle when erecting signals. The background and supports are made entirely of steel, eliminating casting breakage in shipment and erection. Where the units are used in a three unit signal, the total weight of the signal is only about 80 lb.

Practically any desirable commercial bulb may be used and provision has been made for placing a transformer in each light unit so that commercial 110-volt supply may be used where available.

## New Type of Crossing Signal

The Philadelphia Rapid Transit Company recently installed on its suburban line terminating at Erdenheim, a new type of highway crossing signal, giving indications by a bell and flashing projectors or spot lights. At the



Installation of Nachod Flasher Light Crossing Signal on P. R. T. Lines

signal location the double track trolley line crosses the Bethlehem Pike, a main automobile highway.

The standard holds the two 9-in. glass parabolic reflector units, each of which are fitted with a red cover glass. and a 110-volt, 23-watt lamp, headlight type, with standard Edison screw base. The optical system is said to be unusually efficient, and a large percentage of the light is projected into a beam of but slight dispersion, forming