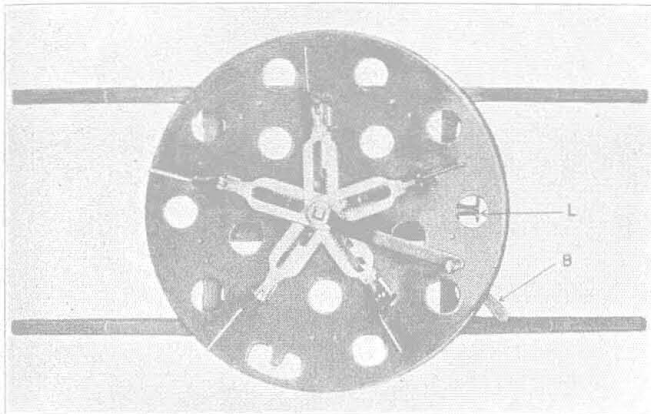


to which it has been pulled. A new and exclusive quick release feature is incorporated in Matthews slack pullers. When the entire take-up has been used, the wire is temporarily dead ended and the lock released. This permits the slack puller to be immediately extended to its maximum or any intervening length.

The Matthews slack puller is ruggedly constructed to withstand severe service. It is said that the great economy effected by its use, coupled with the relative ease and safety with which difficult jobs can be accomplished, make the device a necessary tool for



The Matthews adjustable reel has a metal table which can be grounded to protect men using it in the event that the conductor should accidentally come in contact with a live wire

any pole line work. The slack puller is now obtainable in two sizes, one of 3,000 lb. maximum and one of 10,000 lb. maximum, capacity.

Several distinctive features not found, it is said, in any other similar piece of equipment are incorporated in the Matthews adjustable reel. The claim is made that many railroads are buying wire (both for line and guys) on wooden reels, that could be bought cheaper in coils. While coils of wire are ordinarily hard to handle unless some type of reel is used, the Matthews adjustable reel makes it easier to handle wire in coils than on wooden reels. Economy is effected by the fact that wire can be purchased in coils as the cost of wooden reels and their incident freight charges can be saved. Wire stringing or pulling out can be greatly expedited with the adjustable reel as it is not necessary to pull wire down and then coil it up by hand as the pulling out and coiling on the reel can be done at the same time; therefore saving considerable time.

The Matthews adjustable reel affords safety to the reel attendant and to the other men working on the conductor being strung or pulled out due to the fact that the reel table is metal and can be grounded, thereby protecting the men should the conductor accidentally come in contact with a live wire.

The five arms can be quickly and easily contracted or expanded to fit the inside diameter of any coil of wire within its range. The revolving table is made of sheet steel reinforced by a turned over edge which prevents it from being bent out of shape. This edge also prevents the wire from getting caught under the table or cutting itself on the sharp edge. The reel is supplied with or without a brake, but the brake is recommended as it prevents racing when paying out wire. An exclusive feature in the form of four roller

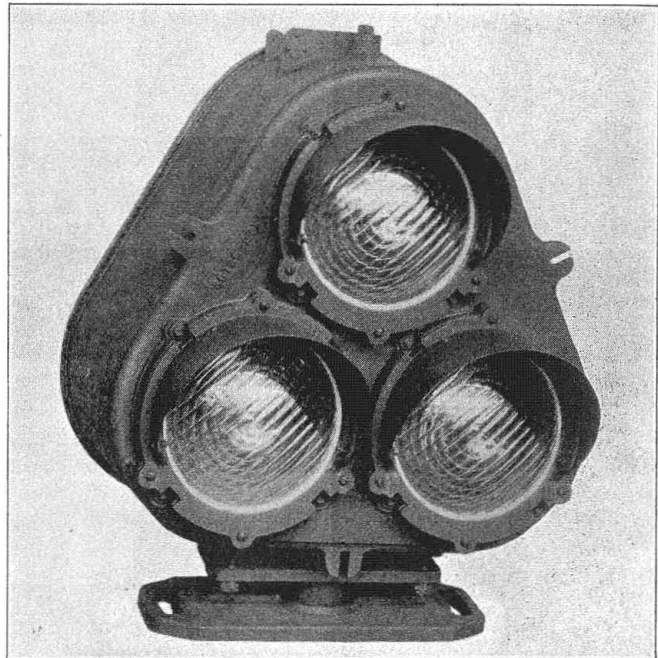
bearings is provided. These roller bearings prevent the reel from catching on the frame or bending with unequal pressure on the sides of the table. The reel can be operated either in the horizontal or vertical position.

## New Triangular Signal Unit Produced by G. R. S. Co.

**T**HE Type-L triangular signal unit, manufactured by the General Railway Signal Company, is of compact design, enabling the signal, when used as a dwarf, to be located between tracks without encroaching on standard clearance lines.

This signal unit takes doublet lens combinations, the outer lens being  $8\frac{3}{8}$  in. in diameter, suitable for long range as a high signal or producing a strong indication as a dwarf signal. Deflecting cover glasses are used to give an upward close-up indication on dwarf signals. When required on high signals the same type of deflecting cover glass is used to give a horizontal spread either to the right or to the left.

By merely changing the method of mounting the case, the Type-L unit can be used for high or dwarf



Type-L triangular light signal unit is suitable for use as a high signal or dwarf signal

signals. When used as a dwarf signal an adjustable base is used permitting horizontal and vertical adjustment of the unit. When used as a high signal the case is mounted on a standard adjusting bracket which permits both horizontal and vertical adjustment. The case is deep so as to provide for the housing of individual lighting transformers when required.

## Rotating Stop Signal for Highway Grade Crossings

**T**HE Griswold Safety Signal Company of Minneapolis, Minn., is marketing a new railroad crossing signal that may be installed in the center or at the side of a highway. The signal can be operated by a track circuit control scheme or by manual control and may be used as here illustrated with stand-