

J. P. COLEMAN.
INDICATOR OR SIGNAL.

Patented Dec. 15, 1896.



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UNITED STATES PATENT OFFICE.

JOHN PRESSLEY COLEMAN, OF SWISSVALE, PENNSYLVANIA, ASSIGNOR TO
THE UNION SWITCH AND SIGNAL COMPANY, OF SAME PLACE.

INDICATOR OR SIGNAL.

SPECIFICATION forming part of Letters Patent No. 573,207, dated December 15, 1896.

Application filed June 29, 1896. Serial No. 597,278. (No model.)

To all whom it may concern.

Be it known that I, JOHN PRESSLEY COLEMAN, a citizen of the United States, residing at Swissvale, in the county of Allegheny and State of Pennsylvania, have invented or discovered certain new and useful Improvements in Indicators or Signals, of which improvements the following is a specification.

The invention described herein relates to certain improvements in indicators or signals, and has for its object a construction of inclosing case or shell, and an arrangement of operating mechanism within the case or shell, whereby the latter can be easily removed from and placed within the shell or case.

The invention is hereinafter more fully described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a sectional front elevation of my improved indicator, and Fig. 2 is a sectional side elevation of the same.

The drum-like shell or case 1 is provided on its side with a socket 2 for the reception of the upper end of the post or support 3, the lower end of the latter being secured in a similar socket on the base-plate 4. In the front wall 5, which is preferably made integral with the sides, is formed an opening in which is secured a glass disk 6. The front wall of the shell is provided on its inner side with sockets 7, having the ends of bars 8 secured therein. These bars are designed to support the operating-magnets 9 and the parts attached thereto. These magnets are secured to a plate 10, having sleeves 11, formed integral therewith and adapted to slide onto the bars 8. The pole-pieces 12 are attached to the cores of the magnets by screws 13, and between the pole-pieces and the ends of the cores is secured a plate 14, which is made of such size and shape that the main portion thereof will be in line with the glass disk 6, thus forming an indicating-plate, while the shorter end of the plate will bear against the side of the shell, thereby preventing such sagging of the free ends of the magnets toward the sides of the drum as will interfere with the free movement of the indicating-disk. This indicating-disk 15 and the counterweight 16 are secured to the rotating ar-

mature 17, which is secured to the shaft 18, mounted in suitable bearings in the supporting-plate 10 and in the cross-bar 19, extending between the pole-pieces 12, and held in place by the screws 13.

The outer faces of the plate 14 and disk 15 are painted in contrasting colors, as, for example, the outer face of the plate 14 is painted white and the outer face of the disk is painted red.

The supporting-plate is provided with an arm or bracket 20, to which the binding-screws 21 are secured, but insulated therefrom. To these binding-screws are attached the ends of the coils of the magnets and the circuit-wires 22, the latter passing up through the hollow post or standard.

The removable cover 23, which is provided with a circular groove for the reception of the edges of the shell or case, is held in place by a nut 24, screwing onto the threaded stud 25 on the locking-bar 26. One end of this locking-bar is constructed to fit behind a shoulder 27 on the case or shell, and the bar is made a little longer than the diameter of the case or shell. In placing the bar in position its upper end is inclined toward the front of the case or shell, and the lower end placed behind the shoulder 27, which will also prevent a longitudinal movement of the bar. If the bar be drawn toward the rear of the case or shell, its upper end will bind tightly against the inner wall of the case.

It will be observed that the magnets are arranged at one side of the case or shell, while the locking-bar passes diametrically across the same, and that when the bar is removed the magnets and the parts carried thereby can be drawn out of the case or shell without liability of injuring any of the delicate parts.

I claim herein as my invention—

1. In an indicator or signal, the combination of a case or shell, one or more supporting bars or rods having one end secured in the case or shell, one or more sleeves adapted to fit over said bars, and signal-operating mechanism supported by said sleeves, substantially as set forth.

2. In an indicator or signal, the combination of a case or shell, one or more bars or rods having one end secured in the case or

shell, one or more sleeves adapted to fit over
said bars, magnets supported by said sleeves,
a plate attached to the magnets, and a disk
attached to the armature of the magnets, sub-
5 stantially as set forth.

3. In an indicator or signal, the combina-
tion of a case or shell having a glass-covered
opening in one end, a removable cover for the
case or shell, a bar having a length greater
10 than the diameter of the case or shell, a shoul-
der on one side of the case or shell for hold-

ing one end of the bar as against outward or
longitudinal movement, and means for de-
tachably securing the cover to the bar, sub-
stantially as set forth.

In testimony whereof I have hereunto set
my hand.

JOHN PRESSLEY COLEMAN.

Witnesses:

W. Z. KINNEAR,
H. D. MILES.