J. H. GOURLEY.

HIGHWAY SIGNAL.

APPLICATION FILED APR. 8, 1919.

1,356,276. Patented Oct. 19, 1920.

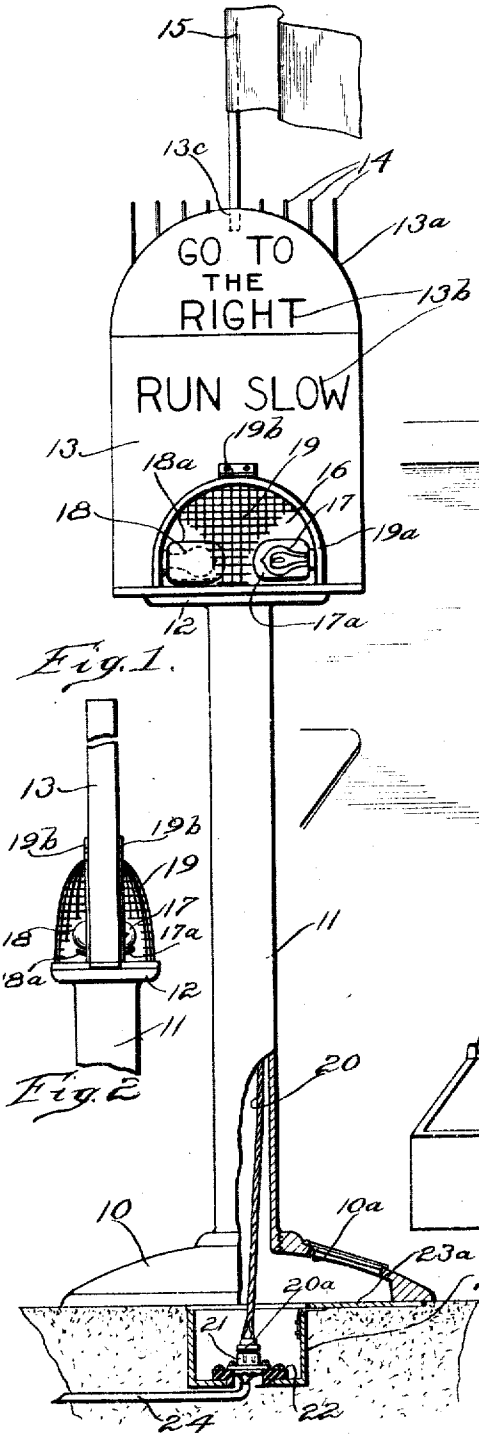

Fig. 1.

Fig. 2

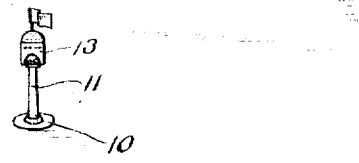

Fig. 4.

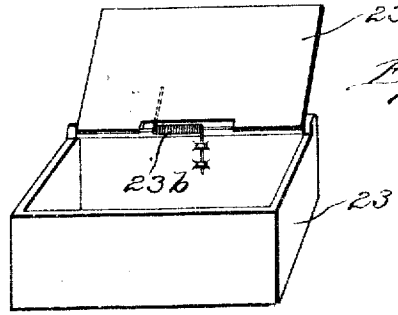

Fig. 3.

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UNITED STATES PATENT OFFICE.

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HIGHWAY-SIGNAL.

1,356,276. Specification of Letters Patent. Patented Oct. 19, 1920.

Application filed April 8, 1919. Serial No. 288,472.

To all whom it may concern:

Be it known that I, JOSEPH H. GOURLEY, a citizen of the United States, and resident of Milton, county of Norfolk, State of Massachusetts, have invented an Improvement in Highway-Signals, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts in each of the several views.

This invention relates to highway signals of the type sometimes known as "silent policemen," which are placed at highway intersections, turns in the road and other places where warning or directive signals of a permanent character are required for handling the traffic.

A principal object of the invention is to provide a simple and inexpensive, yet reliable and effective signal, adapted to be placed in any desired location, being equipped so as to be conspicuously visible both by day and by night.

In accordance with my invention, a signal post or standard is provided, equipped with lamps that may be supplied with electric current from the ordinary street lighting system, or any other desired source, these lamps being arranged so as to indicate clearly to travelers their proper direction. A further object is to provide a highway signal device that may be quickly and easily located in position for use, and also easily disconnected and removed, the arrangement being such that when the signal is removed from the highway the current connection therefor in the highway is automatically closed and protected from injury.

The foregoing and other objects and advantages of the invention will be better understood from the following detailed description, taken in connection with the accompanying drawings and the distinctive features of novelty will then be pointed out in the appended claims.

Referring to the drawings,

Figure 1 is a front elevation with portions broken away in section showing a highway signal embodying the invention;

Fig. 2 is an edge view of the signal plate proper;

Fig. 3 is a perspective view showing a ground box for the electric connection; and

Fig. 4, a diagrammatic perspective illustrating the use of the signal device.

The base 10 of the device is preferably, and as shown, formed as a dished, externally convex plate which may be a metal casting. To this base is secured an upright, tubular, standard 11 which may be of metal pipe of proper size. On the top of this tubular standard is secured a platform 12 to which is fixed a vertical plate or board 13 constituting the signal proper. This may be formed of a metallic plate or a board of wood, or any suitable material, and while the particular shape thereof herein shown with a curved top 13^a is thought preferable, the invention is not limited to any particular outline of this plate or board. To this curved top 13^a of the plate are fixed as shown, a series of spaced apart vertically extending pins 14 which add to the artistic appearance of the device, and are also adapted to render the device less available as a rest for any one seeking physical support. The plate 13 may have any proper road rules exhibited on the opposite sides thereof, as indicated at 13^b and in the top thereof may be socketed at 13^c any desired display device such as the flag 15.

In accordance with my invention the lower portion of the board or plate 13 is cut away to form a generally hemispherical passage 16 therethrough and extending into this passage from opposite sides of the board are lamps 17, 18, these lamps being suitably socketed in the adjacent side portions of the board. These lamps are equipped with reflecting shields 17^a, 18^a, respectively, these reflecting shields being at opposite sides of the respective lamps,—*i. e.* as shown 17^a is at the farther side of the lamp 17, while the reflecting shield 18^a is in front of the lamp 18. These reflecting shields and the lamps are preferably set and inclined so as to project the light downward and somewhat laterally of the signal,—*i. e.* each lamp throws its light toward the traffic approaching from that direction, and also to the right of the signal itself, thus indicating to travelers in the darkness more clearly their proper course. With the described arrangement of the reflecting shields 17^a, 18^a, it will be understood that only one lamp projects its light in either direction. However, the arrangement is such that should either lamp be extinguished from any cause, enough light will be given out around the reflecting shield of the other lamp to illumine the

adjacent edges of the signal and make its presence apparent to travelers from the opposite direction.

To protect the lamps I preferably provide wire screens 19 carried on frames 19ª hinged at the respective sides of the board at the top of the hemispherical passage as indicated at 19ᵇ so that these screens may be readily swung back to permit access to the lamps, but normally swing downward into a protective position over the lamps by their own weight. For operating the lamps 17 and 18 a conduit cord or cable 20 extends up through the standard 11, this cord having at its lower end the usual plug 20ª adapted to engage in a socket 21 which is fixed on an insulating base 22 in a box 23 embedded in the highway at the location where the signal is to be positioned. The socket 21 is supplied with a current by an underground conduit 24 from any suitable source which may be the ordinary street light system of the locality. The box 23 is perferably devised with a hinged cover 23ª with a stout spring 23ᵇ engaging such cover and tending constantly to close the same. Thus in use, the cover 23ª may be swung back until it rests on the ground as seen in Fig. 1 and it is caused to remain in this position by the weight of the signal base 10 resting thereon. When from any cause the signal may be dislocated, the plug 20ª will of course pull out of the socket 21 and as the base 10 is removed from the cover, 23ª it will at once swing under the action of the spring 23ᵇ to close the box thus protecting the same from injury and restoring the road surface. The base 10 is preferably provided with a hand hole 10ª therethrough adapted to permit access to the interior of the box, for attending to the electric connection 20ª, 21 when the signal is in place over the box.

With the described construction it will be noted that the signal may be left normally connected with the lighting service of the locality so that the lamps may be lighted automatically along with the regular street lamps as darkness comes on, and turned off therewith when no longer required thus dispensing with any need of special attention to the signal except when it may be dislocated by a collision or otherwise, in which case it may be quickly and easily replaced and re-connected. I am aware that the invention may be embodied in other specific forms without departing from the spirit or essential attributes thereof and I therefore desire the present embodiment to be considered in all respects as illustrative and not restrictive, reference being had to the appended claims rather than to the foregoing description to indicate the scope of the invention.

Having described my invention, what I claim and desire to secure by Letters Patent is:

1. A highway signal device, comprising a box embedded in a highway and equipped with electric circuit connections, a standard equipped with a relatively wide and massive base adapted to be removably fitted over said box, an upper portion of said standard being equipped with indicia for the guidance of travelers, lamps mounted in an opening in the upper part of said standard equipped with reflectors adapted to project the light thereof in opposite directions and also toward opposite sides of the device, and electrical connections to said lamps from the base of said standard constructed and arranged for yielding detachment from the connections in said box.

2. A highway signal device, comprising a box embedded in a highway equipped with a cover hinged thereto and spring pressed to close said box, a standard equipped with a relatively wide and massive base adapted to be fitted over said box and to hold said box cover open, said box having electric circuit connections fitted therein, and said standard equipped with signal lights having electrical connections to the base thereof fitted for yielding detachment to the connections in said box.

In testimony whereof, I have signed my name to this specification.

JOSEPH H. GOURLEY.