

W. H. JENKINS.
 SWITCH SIGNALING DEVICE.
 APPLICATION FILED NOV. 1, 1910.

1,004,272.

Patented Sept. 26, 1911.

Fig. 1

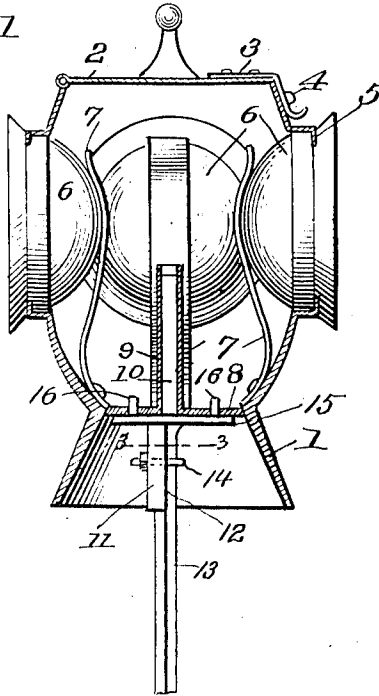


Fig. 2.

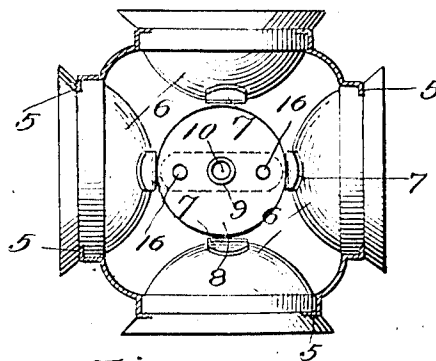
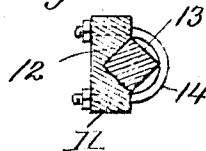


Fig. 3.



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SWITCH SIGNALING DEVICE.

1,004,272.

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To all whom it may concern:

Be it known that I, WILLIAM H. JENKINS, citizen of the United States, residing at Oroville, in the county of Butte and State of California, have invented certain new and useful Improvements in Switch Signaling Devices, of which the following is a specification.

This invention comprehends certain new and useful improvements in railway appliances, and relates particularly to visual signaling devices designed to indicate to the engineer of an approaching train the condition of the switch at a siding, cross-over, or the like.

The invention has for its primary object a simple, durable and efficient construction of switch signaling device embodying a series of mirrors arranged in quartering relation to each other and secured, as in a lantern frame, on a switch-stand, said mirrors being designed to reflect the light from the headlight of an approaching locomotive, back to the eye of the engineer in the locomotive cab, the two opposite mirrors reflecting red and two white, whereby the position of the switch-points or the like can be instantly determined.

And the invention has for a further object a device of the character outlined in the above paragraph, whereby no oil will be required, no trimming of wicks, and no danger of the light failing as in the case of the ordinary lantern that is so liable to blow out, the device of my invention lasting a considerable time without any attention, unless one or more of the mirrors or reflectors should become broken, and the light at the switch, while clearly indicating to the approaching engineer the position of the switch-point, being only produced, by the reflection, when the locomotive is approaching the siding or cross-over.

With these and other objects in view as will more fully appear as the description proceeds, the invention consists in certain constructions, arrangements and combinations of the parts that I shall hereinafter fully describe and claim.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a side elevation of my improved switch indicating device, parts being

shown in section; Fig. 2 is a top plan view thereof, with the cover removed; and Fig. 3 is a section on the line 3—3 of Fig. 1.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The frame or body portion of my improved switch signaling or indicating device may be of any desired shape and construction, being preferably formed of sheet metal with a substantially rectangular main portion formed with a downwardly flared base 1 by which it may be conveniently fastened to a switch-stand so as to turn as the switch-points are shifted. The body portion of the device is further formed, at the top, with a hinged lid 2 securely held in closed position by a hasp 3 through which a staple 4 passes, a pad-lock or the like being then secured to the staple. The body portion of the device is provided with four openings set in quartering relation to each other and preferably defined by inwardly extending annular flanges 5, and mirrors or deflectors 6 are adapted to be set in said openings, being engaged at their front face by the flanges 5 and being retained in place in the openings by said flanges and by springs 7 which extend up along the rear faces of the mirrors or reflectors, the free ends of the springs engaging the reflectors and the lower ends being attached to the body portion of the device by rivets or similar fastening devices. Two of these reflectors or mirrors, in opposite relation to each other, will reflect white rays and the other two will show red.

From the foregoing description in connection with the accompanying drawing, the operation of my improved indicating or signaling device will be apparent. In the practical use of the device, as the locomotive approaches the switch at night, the rays from the headlight of the locomotive will be reflected in whatever mirror is set at right angles to the track, and hence the light will be reflected back to the eyes of the engineer in the locomotive cab and indicate to him the position of the switch. In day-light the mirrors will also show white or red as the case may be, in an obvious manner.

It will thus be seen that I have provided a very simple and efficient construction of switch indicating device which will require practically no attention to maintain, which

will last an indefinite time unless one of the reflectors should accidentally become broken, and which may be maintained at a minimum cost, no kerosene or other fuel being necessary.

In order to provide against placing the signaling device on the switch stem in a wrong position, I have employed the following instrumentalities: The base 1 of the frame or body portion of my improved switch indicating device is formed with a transverse bottom plate or partition 8 formed with a centrally disposed opening from which a tube 9 extends upwardly into the body portion. A rod 10 extends up into said tube, said rod forming part of a substantially cruciform holder which also embodies a downwardly extending arm 11 which is formed with a recess or groove 12 by which it is adapted to fit upon the switch stem 13, being secured thereto by a clamp 14 of any desired character. The holder also embodies oppositely extending arms 15 which are provided at their ends with upwardly projecting lugs 16 adapted to enter apertures 17 formed in the plate 8 at opposite sides of the central opening of the latter. It will thus be seen that by the use of this improved holder the body portion of the switch indicating device can only be secured to the switch stem in a certain position, and all liability of placing it thereon in a wrong position is avoided.

Having thus described the invention, what is claimed as new is:

1. An indicating device of the character described, comprising a body portion formed with openings set in quartering relation to each other, the openings being defined by flanges, and outwardly facing mirrors secured in said openings and engaged by said flanges, and springs secured to the body portion and extending back of the mirrors to hold the same in place against the flanges.

2. An indicating device of the character described, comprising a body portion formed with openings set in quartered relation to each other, mirrors facing outwardly from said opening, a tube held upright in the body portion, a base plate in the body portion formed with an opening registering with the lower open end of the tube, the plate being also formed with an aperture to one side of the opening, and a holder embodying a downwardly projecting arm adapted to be secured to a switch stem and also embodying an upwardly projecting arm adapted to enter the tube, and a laterally projecting arm formed with a lug adapted to enter the other opening in the base plate.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. JENKINS. [L. s.]

Witnesses:

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