J. J. McINTYRE.

SIGNAL LANTERN.

APPLICATION FILED MAR. 9, 1909.

941,803. Patented Nov. 30, 1909.

Fig. 1.

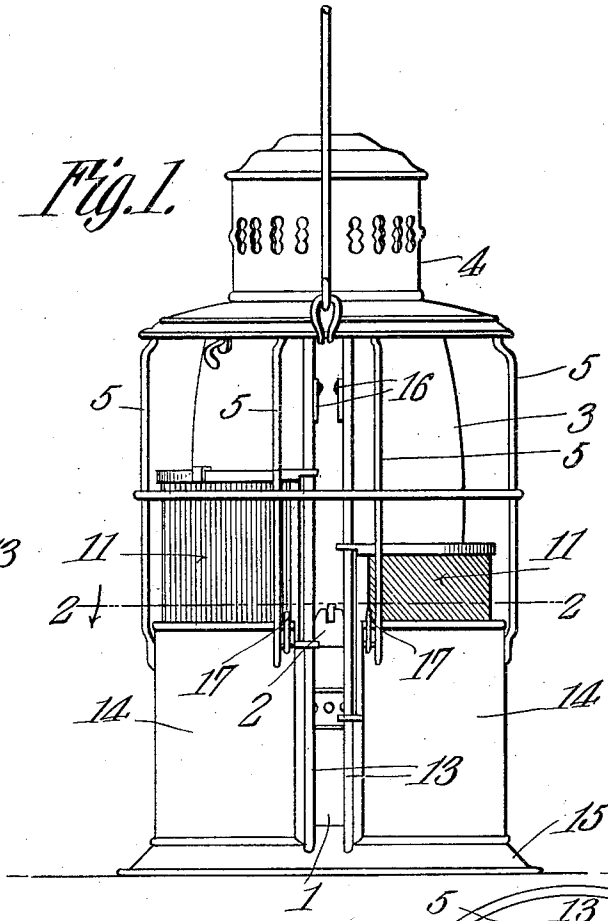



Fig. 4.

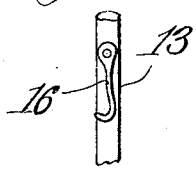



Fig. 5.


Fig. 3.

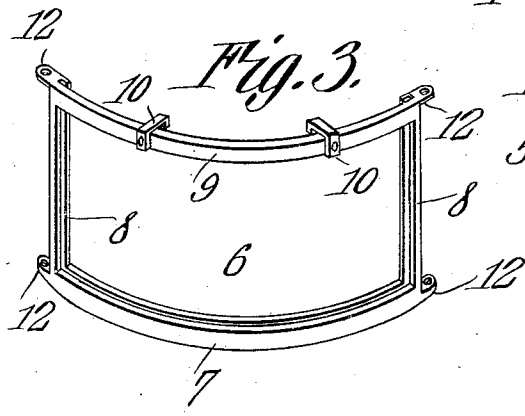
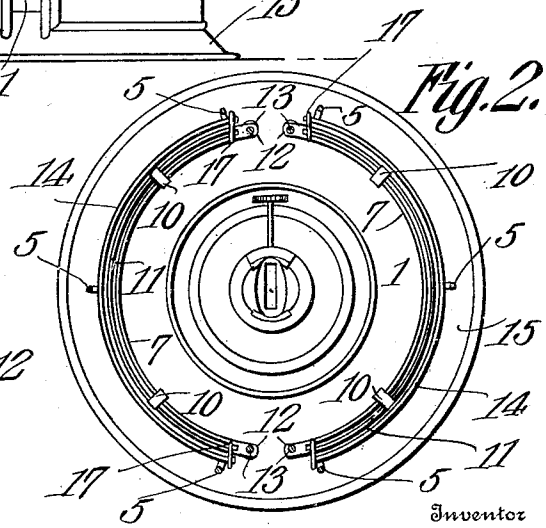



Fig. 2.

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# UNITED STATES PATENT OFFICE.

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## SIGNAL-LANTERN.

941,803. Specification of Letters Patent. **Patented Nov. 30, 1909.**

Application filed March 9, 1909. Serial No. 482,361.

*To all whom it may concern:*

Be it known that I, JAMES J. McINTYRE, a citizen of the United States, residing at Ironton, in the county of Lawrence and State of Ohio, have invented a new and useful Signal-Lantern, of which the following is a specification.

It is the object of this invention to provide a lantern having signal lenses adapted to be moved into operative and inoperative positions, means being provided for securely housing the lenses opaquely and against injury when in inoperative position; the said lenses and the housing means therefor being so disposed upon the body of the lantern as to surround and to protect the same.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a lantern, as will be hereinafter fully described and claimed.

In the accompanying drawings forming a part of this specification, and in which like characters of reference indicate corresponding parts:—Figure 1 is a view in side elevation of a lantern constructed in accordance with the present invention, and displaying one of the signal lenses in operative position, and the other partly raised. Fig. 2 is a horizontal sectional view taken on the line 2—2 of Fig. 1, and looking in the direction of the arrow thereon. Fig. 3 is a perspective detail view of one of the lens carriers. Fig. 4 is a detail view of one form of device that may be employed for holding the lens carriers in their lowered or inoperative position. Fig. 5 is a similar view of one form of device that may be employed for holding the lens carriers in their lowered or inoperative position.

The lantern, as usual, embodies an oil font 1, carrying the usual wick tube 2, a globe or chimney 3 of any preferred form, a cap 4, and guard wires 5, and as these parts may be of any preferred construction, detailed description thereof is deemed unnecessary.

The present invention resides in the provision of two colored lenses, one red and the other green, and means whereby these may be displayed as required, in the means by which they are supported for operation, and in the means for concealing the lenses when the lantern is used merely for illuminating purposes.

Each lens comprises a carrier designated generally 6, which is semi-circular in contour, and is somewhat less than one-half a circle. This lens carrier, which is shown in detail in Fig. 3, comprises, preferably, though not of necessity in an integral structure, a channeled base member 7, two channeled end members 8, and a top member 9, the latter having secured to it two spring clamps 10 that are designed to retain the lenses 11 in position. The base and top members 7 and 8 are extended beyond the end members to provide ears 12 that are orificed and are designed to engage guide rods 13, the upper and lower ends of which are secured respectively to the oil font and to the cap.

The lens carriers, when not in use, are concealed from view by a pair of semi-circular metallic shields 14, between the opposed ends of which the guides 13 are arranged. These shields are secured to the base 15 of the oil font by being soldered or beaded thereto, and to the upper outer portions of the shields are soldered or otherwise secured the lower ends of the guard wires 5. These shields are of a height somewhat greater than that of the lens carriers, so that there will be no danger of an accidental improper signal being given as by the exposition of a short length of a lens. The ears 12 will, of course, loosely fit the guides 13 and in order to hold the lens carriers in elevated position, each of the guides 13 has secured to it, near its upper end, a catch or hook 16 which is designed to engage with the upper ear 12, it being understood that each of these ears are engaged by one of the hooks. While the hook is herein shown as merely pivoted to the guide, it is to be understood that a spring may be employed for holding it in positive engagement with the ear, or any other form of fastening device may be employed in lieu of the form shown.

As in the carrying of the lantern, there might be some danger of a lens working up and thus being exposed to view when not desired, a suitable means is provided for holding the lens carriers down, and this means consists of four hooks 17 that are suitably secured to the shields, adjacent their ends, and are designed to hook over the

upper edges of the top members 9 of the lens carriers.

In addition to performing the function of concealing the lenses from view, the shields also operate to protect them against injury, as by being struck against any hard object while being carried.

Where used by railroad men, the lens carriers will be raised and secured in this position by the pairs of hooks 16, and the track-walker or other employee will expose the appropriate colored lens to the on-coming train. If preferred the lenses may remain housed within the shields at all times except when needed for use, and may then be quickly brought to operative position.

The improvements herein defined are simple in character, but will be found thoroughly efficient for the purposes designed, and will co-act in the presentation of a thoroughly efficient form of signal lantern.

I claim:—

1. The combination with a lantern, of a pair of approximately semi-circular lenses, each arranged to reciprocate vertically upon the exterior of the lantern independently of the other, and means for holding the lenses in raised or lowered position.

2. The combination with a lantern, of two pairs of guides disposed upon the exterior of the lantern, lens carriers slidably mounted upon the guides, colored lenses carried by the carriers, means for holding the carriers in raised or lowered position, and means substantially surrounding the lantern and rigidly assembled therewith for concealing the lenses from view, and also for protecting them against injury.

3. The combination with a lantern comprising an oil font and a cap, of two pairs of guides secured at their terminals to the oil font and to the cap, lens carriers slidably mounted upon the guides, colored lenses carried by the carriers, means for holding the carriers in raised or lowered position, and shields rigidly supported by the base of the oil font and being of a height somewhat greater than that of the lenses, whereby to conceal the same from view and also to protect them against injury.

4. The combination with a lantern, of upright guides terminally assembled with the lantern upon the exterior thereof; a pair of lenses each arranged to extend half-way around the lantern and individually slidable upon the guides, and means for holding the lenses in a raised or a lowered position.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JAMES J. McINTYRE.

Witnesses:
R. W. Dovel,
Chloy D. Russell.