P. CLAY & G. WASHINGTON.

SIGNAL LANTERN.

APPLICATION FILED FEB. 15, 1912.

1,035,420.

Patented Aug. 13, 1912.

2 SHEETS—SHEET 1.

Fig. 1.

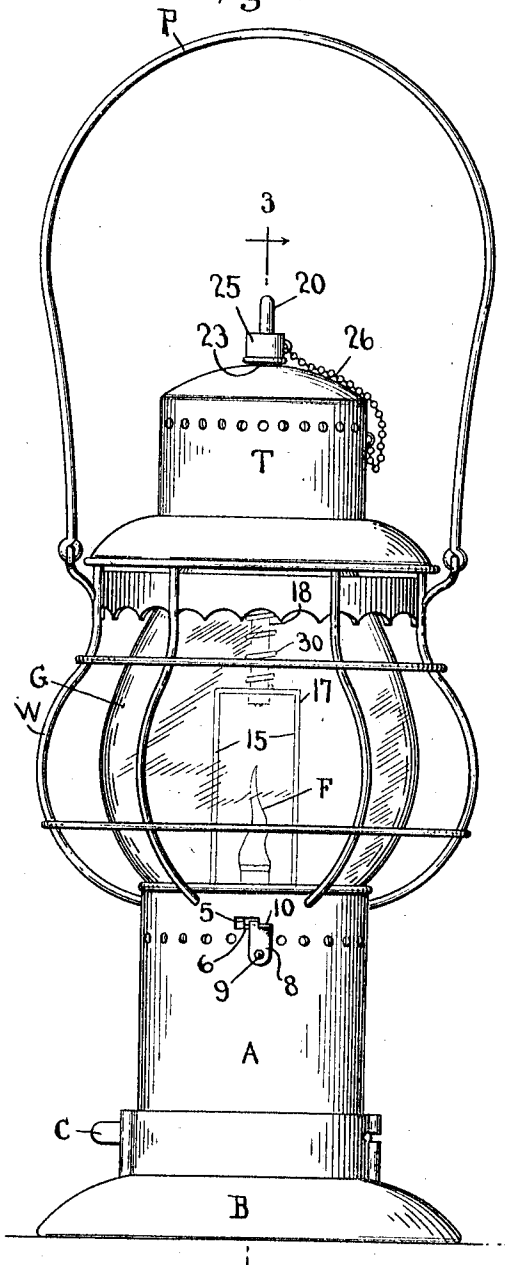
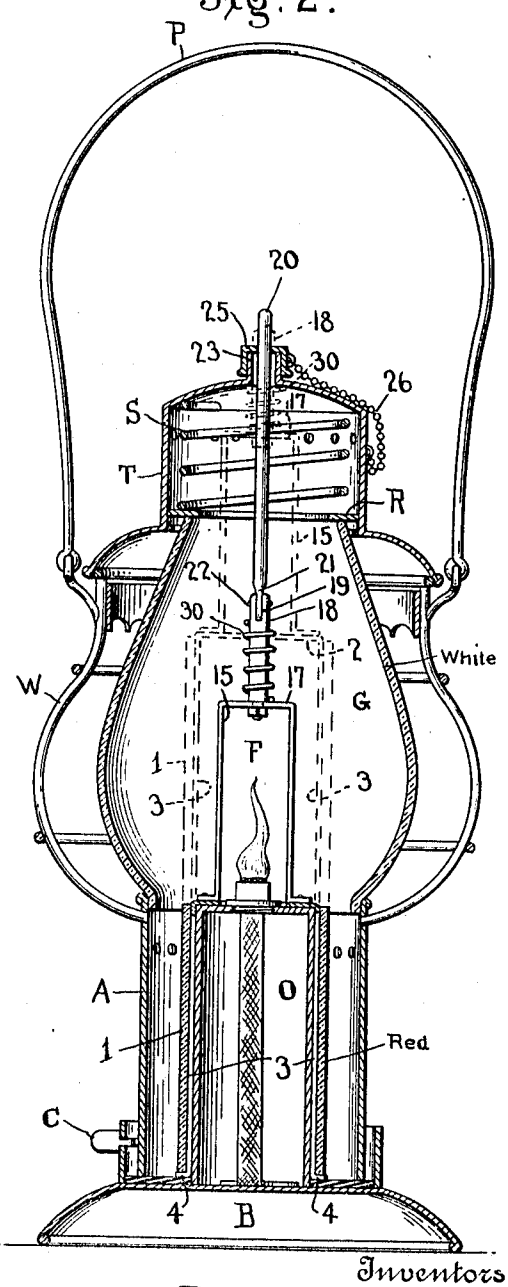


Fig. 2.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 3.

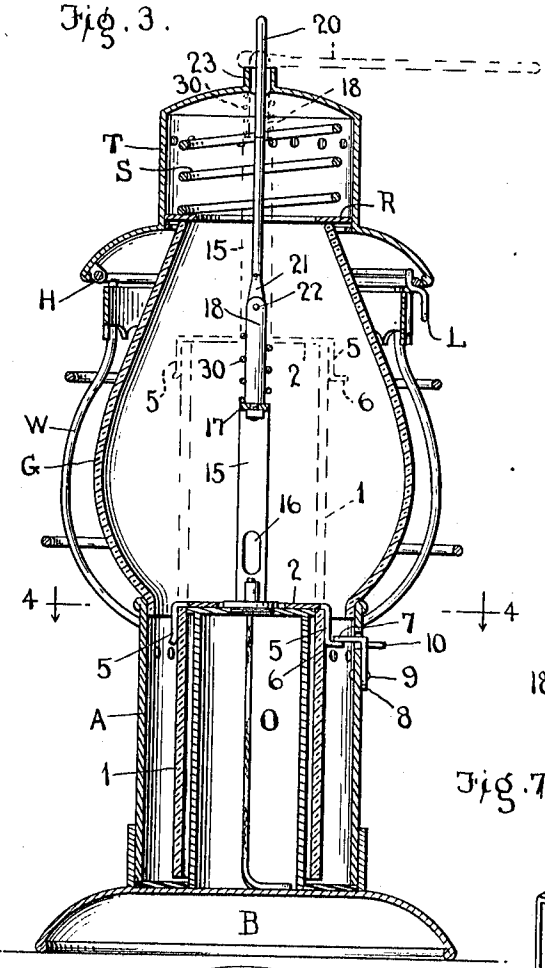

Fig. 4.

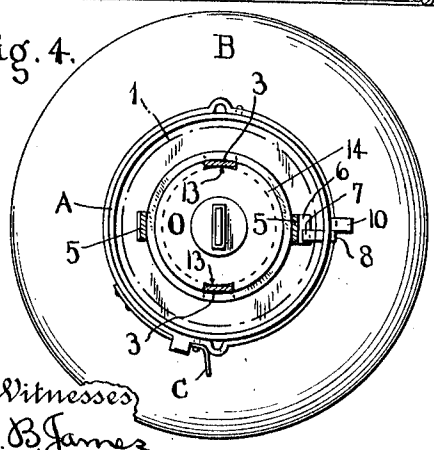

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Fig. 5.

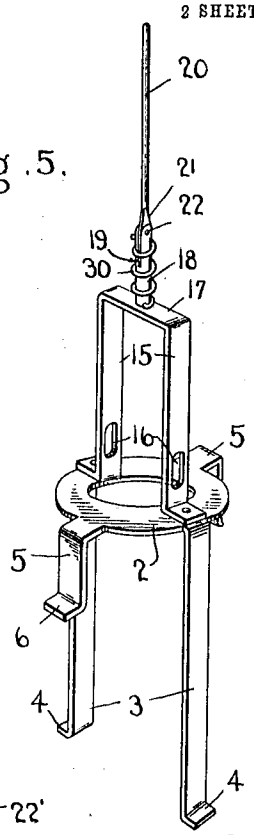


Fig. 7.

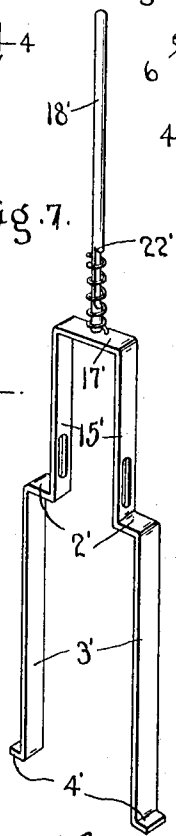
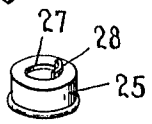


Fig. 8.



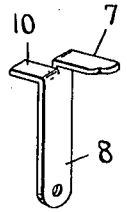


Fig. 6.

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UNITED STATES PATENT OFFICE.

PERCY CLAY AND GEORGE WASHINGTON, OF NEW ORLEANS, LOUISIANA.

SIGNAL-LANTERN.

1,035,420. Specification of Letters Patent. Patented Aug. 13, 1912.

Application filed February 15, 1912. Serial No. 677,754.

To all whom it may concern:

Be it known that we, PERCY CLAY and GEORGE WASHINGTON, citizens of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Signal-Lanterns; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to lanterns, and more especially to those intended for use in signaling; and the object of the same is to effect certain improvements in lanterns of this character wherein the colored (usually red) globe is normally hidden but is capable of movement into a position around the flame so that a colored light will be shown instead of a clear light.

The invention consists in certain details of construction which will be more fully described and claimed herein, as shown in the drawings wherein—

Figure 1 is a side elevation of this lantern complete. Fig. 2 is a central vertical sectional view thereof. Fig. 3 is a similar vertical sectional view on the line 3—3 of Fig. 1, taken at right angles to the section of Fig. 2 and showing the red globe as raised in dotted lines. Fig. 4 is a horizontal section on the line 4—4 of Fig. 3. Fig. 5 is a perspective detail of the movable frame, and Fig. 6 is a perspective detail of the latch. Fig. 7 is a perspective detail of a simpler form of the movable frame. Fig. 8 is a perspective detail of a modified form of the cap.

In the drawings the lantern body includes an annular shell A supported upon the base B detachably by any suitable form of catch C and surrounding the oil reservoir O from which the wick rises to the flame F, and the clear or white globe G rests on a shoulder within said shell and is surrounded by the wire cage W, from which rises the pivoted handle or bail P. The lantern top T is hinged at one side to the cage as at H and latched at the other side thereto as at L, and includes a cupola containing an expansive spring S which presses the ring R downward upon the upper end of the globe G so as to hold the latter removably in place. To remove the globe for cleaning or repair, the top T is unlatched and turned to one side; to get at the wick or in order to fill the oil reservoir O the base B is disconnected from the shell A and withdrawn from its lower end, and later when it is replaced it is fastened in position by the catch C. No novelty is claimed for this much of the lantern.

Within the annular space between the oil reservoir O and the annular shell A is located a globe of colored glass (red is indicated on the drawings) which is made cylindrical and here designated by the numeral 1, its length being about equal to that of the shell A so that it may be housed therein as well shown in Fig. 2, and when this globe stands as there shown it is of course hidden by the shell A and the light from the flame F shines through the clear or white globe G as usual in all railroad lanterns. The globe 1 is held on a frame best seen in Fig. 5, and which may be made of wire or preferably strap metal as shown. This comprises a ring 2 from which depend two rather long members or legs 3 having outturned toes 4 at their lower ends adapted to pass under the lower extremity of the globe and support it as best seen in Fig. 2, and at diametrically opposite points there hang from the ring two shorter members or arms 5, one of which has its lower end outturned into a finger 6 as shown. The function of this finger is shown in Fig. 3, for when the globe 1 is depressed by moving the frame downward the finger can be engaged by the tip 7 of the latch 8 shown in Fig. 6, and which is pivoted at 9 to the shell A and has a thumb piece 10. We might here say that the legs 3 travel in notches 13 formed in a disk or ring 14 which is secured to the top of the reservoir O and is made of such size that it fits closely within the red globe 1, thereby steadying the same when it is depressed as seen in Fig. 3 and obviously steadying said globe at its lower end when it is raised as indicated in dotted lines. Meanwhile the arms 5 depend over the outer side of this globe at its upper end and hold it accurately centered on the frame, and when it is to be removed therefrom the toes 4 of the legs 3 are pressed inward so as to disengage them from the lower extremity of the globe, after which it can be drawn off the lower end of the frame in a manner which will be clear.

The upper part of the frame consists of a yoke whose arms 15 are secured upon the ring and pierced with holes 16 through

which the light from the flame F may shine, and from the arch 17 of the yoke rises a rod 18 which is bifurcated as at 19 at its extremity. Another and preferably smaller rod 20 constitutes the handle of the movable frame, and its lower end is flattened as at 21 and pivoted as at 22 within the bifurcation 19, the pivot being at some distance from the lower extremity of the handle so that the latter may be turned aside as seen in dotted lines in Fig. 3 and will serve as a button to prevent the descent of the entire frame. Supporting this button is a collar 23 rising around a hole in the top of the cupola.

A simpler form of movable frame is illustrated in Fig. 7. This has the same legs 3′ which pass down inside the globe, and toes 4′ which engage beneath its lower end, but in place of the ring 2 the legs are shouldered as at 2′ and continued upward in yoke arms 15′ and these are connected by an arch 17′. Rising rigidly from the top of the latter is a rod 18′ which itself constitutes a handle in this simpler construction and therefore has no such pivot as that above described, and this rod has a notch at one point as shown at 22′. With this construction we make use of the rotary cap best seen in Fig. 8, the same being a small metallic member 25 mounted loosely around the collar 23 and preferably held in place by a chain 26, and the hole 27 through the top of this cap has an upstanding lip 28 adapted to be turned into engagement with the notch 22′ in the handle or rod 18′ when the latter is to be held in elevated position. It is believed the operation of this simpler type of movable frame will be well understood without a more complete explanation and description. In the preferred type, however, the parts stand at rest as best seen in Fig. 2 and the cap 25 may be put in place around the collar 23 to prevent rattling of the rod 20. The lantern now displays a clear or white light. When it is desired to change the color of this light, the operator may remove the cap entirely and permit it to dangle by its chain; then he grasps the upper end of the handle 20 and draws upward until the parts stand in the position shown in dotted lines in Fig. 3, then turning the handle on its pivot 22 he causes the button at the lower end of the handle to extend across the upper end of the collar 23 which will prevent the frame and the globe carried thereby from falling. While held in this raised position, obviously the light shining through the red globe produces a red signal, or it would be of some other color if a different colored globe were employed. When it is desired to house the colored light and again display a clear light, the operator grasps the handle 20 and draws upward to still further compress the spring 30 which surrounds the rod 18 above the arch 17 and beneath the top T of the lantern, and as soon as the button at the lower end of the handle can be turned into alinement with the rod 18, the entire frame and its globe may be lowered and the rod will pass downward into the position shown in Fig. 2, after which the latch shown in Fig. 6 is manipulated to engage the finger 6 at the lower end of the arm 5 as illustrated in Fig. 3.

Thus it will be seen that we have produced an extremely cheap and serviceable construction of signal lantern, by means of which the user may at any time change its color from clear to red so that instead of being a safety signal it becomes a danger signal; and railroad men will appreciate the value of such a lantern. The specific construction of the details of the present lantern and of the mechanism by which this change is effected and the movable globe and its supporting frame locked either in raised or lowered position, have been set forth at length above and afford basis for the following claims.

1. In a lantern of the class described, the combination with the oil reservoir mounted on the base, an annular shell rising from the latter around the reservoir with a space between, a latch pivoted upon said shell and having its tip projecting through it and into said space, and the clear globe carried by the shell; of a disk secured upon said reservoir and having opposite notches, a vertically movable frame having upright legs sliding in said notches, an arm with a finger adapted to be engaged by said latch when this frame is depressed, and a colored globe fitting outside said legs and around the periphery of the disk and movably supported by the frame, as described.

2. In a lantern of the class described, the combination with the oil reservoir mounted on the base, an annular shell rising from the latter around the reservoir with a space between, and the clear globe carried by the shell; of a vertically movable frame comprising a ring, two spaced legs depending therefrom and having outturned toes, two arms also depending from the ring quartering to the legs, a yoke rising from the ring, a handle connected with and rising from the yoke, means for supporting said handle when the movable frame is elevated, and a cylindrical colored globe surrounding the legs below the ring and removably held by the toes, its upper end being embraced by said arms.

3. In a lantern of the class described, the combination with the clear globe, the body having an annular space below said globe, the cage, and the top and cupola; of a collar surrounding an opening in the cupola, a colored globe adapted to be housed within

said annular space, a movable frame carrying said colored globe at its lower end and having a rod projecting from its upper end and bifurcated, and a handle having its lower end flattened into a button centrally pivoted between the arms of said bifurcation and adapted to lie across said collar when the handle is turned to a position at right angles to said rod.

4. In a lantern of the class described, the combination with the clear globe, the body having an annular space below said globe, the cage, and the top and cupola; of a collar surrounding an opening in the cupola, a colored globe adapted to be housed within said annular space, a movable frame carrying said colored globe and having a radially projecting finger, a spring bearing the frame normally downward, and a rod rising from the frame through said collar and having a knuckle within its length at a point to engage such collar when the frame and globe are elevated.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

PERCY CLAY.
GEORGE WASHINGTON.

Witnesses:
JOHN PIERCE,
W. B. BARRETT.