

No. 670,913.

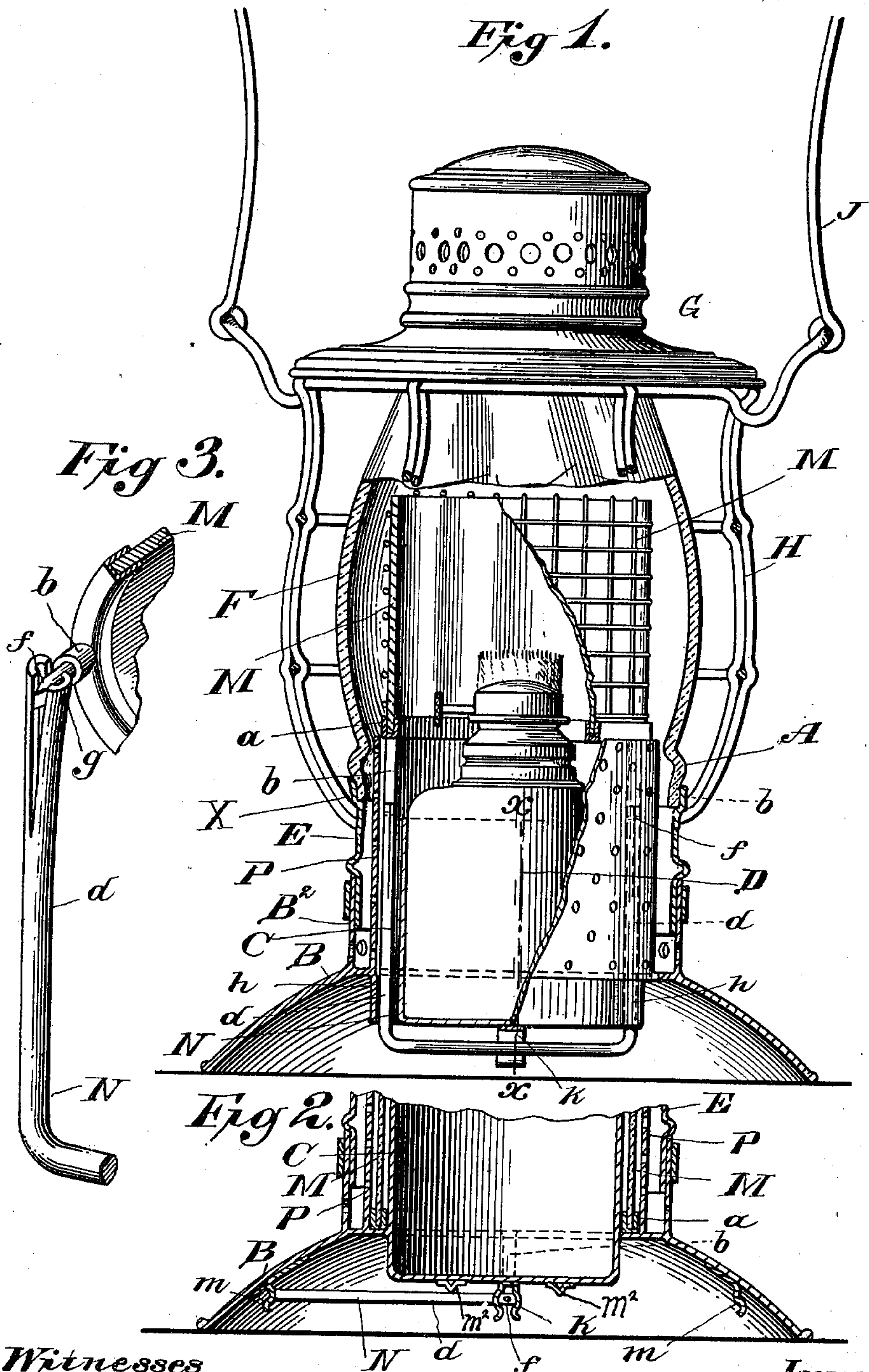
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P. C. BEMIS.

LANTERN.

(Application filed Nov. 30, 1900.)

(No Model.)



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UNITED STATES PATENT OFFICE.

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LANTERN.

SPECIFICATION forming part of Letters Patent No. 670,913, dated March 26, 1901.

Application filed November 30, 1900. Serial No. 38,151. (No model.)

To all whom it may concern:

Be it known that I, PORTER C. BEMIS, a citizen of the United States of America, and a resident of Russell, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Lanterns, of which the following is a full, clear, and exact description.

This invention relates to improvements in lanterns, and more particularly lanterns for use on railroads, where lanterns of two colors are required, as white and red or white and green.

The object of this invention is to provide a construction of lantern which is convertible from, for instance, one showing a white light to one showing a red light, whereby fewer lanterns are necessary.

The invention consists in the constructions and arrangements of parts, all substantially as hereinafter described, and set forth in the claims.

Reference is to be had to the accompanying drawings, in which the improved lantern is illustrated, and in which—

Figure 1 is a substantially central vertical sectional view of the portion of the lantern embodying the present improvements, the secondary or "change-color" globe being shown as in its elevated position around the place of the lamp-flame. Fig. 2 is a central vertical sectional view as taken about on the line *x x*, Fig. 1, the change-color globe being shown as in its lowered position, whereby the light shown by the lantern will have the color of the primary or usual lantern globe. Fig. 3 is a perspective view of the detail construction of a peculiar form of joint employed in the devices for operating and holding in place the secondary globe.

Similar characters of reference represent corresponding parts in all the views.

In the drawings, A represents a railroad-lantern of ordinary construction, except as to additions thereto which constitute the present invention to be hereinafter described, of which lantern B is the bottom or base, and C the casing or socket for the lamp D, outside of which is the usual annular wall B², formed as a part of the lantern-base and into which the ring or shell E for the lantern-globe F is removably fitted and confined.

The globe F has at its top the usual sheet-metal hood G, to which and to the ring E is secured the open-work wire guard H, and the lantern-top has the swinging handle J.

M represents the secondary "globe" or glass cylindrical shell inside the globe F, of a different color from the usual glass globe F, and which has its position either down about the body of the lamp outside of the lamp casing or socket C and between it and the outer wall or shell B² or elevated to the location about the burner-flame of the lamp, as shown in Fig. 1. The secondary globe M is provided at its lower circular edge with a trough-shaped ring *a*, to which are secured two studs *b b*, depending therefrom and peculiarly jointed to the vertical members *d* of the wire bail-like appliance N. The form of the joint between the parts *b* and *d* is shown in Fig. 3, wherein the upper extremities of the members *d d* are formed tubular and split, while the lower end portions of the studs *b* are attenuated and formed with wedge-points *f*, entered within the tubular upper ends of the members *d* and united by the pivot *g*. The bail N may be swung from vertical to horizontal positions relatively to the parts *b*, so that when in the vertical disposition (shown in Fig. 1) the bail may be pushed up to elevate the secondary globe about the lamp-flame, tubular vertical guides *h h* being provided which open through the bottom of the lantern and permit the sliding upwardly through them of the alined parts *b b d d*.

k represents a clip or catch supported by and under the bottom of the lantern, at its center, into engagement with which the horizontal member of the bail catches when the parts are elevated to position shown in Fig. 1.

When the parts are lowered to bring the pivotal points *f f* below the bottom of the lantern, the bail may be swung to the horizontal position, (shown in Fig. 2,) closely under the hollowed lantern-base B, and retained by the clip or catch *m*. These catches *m* are duplicated and arranged at diametrically opposite points under the base-shell B, so that the bail may be swung and retained at either side. Spring reaction of the parts of the bail extremities, at either side of the split therein, retains the parts *b d* rigidly as continuations one of the other when they are alined, so

that they may be pushed without buckling upwardly to the position shown in Fig. 1 and so that the secondary globe may be sustained without tipping or slanting from the proper axially vertical position.

Inside of the annular wall B^2 , formed as part of the lantern-base, and between such annular wall and the secondary globe F is an upstanding annular shell or wall P , suitably perforated so as not to interfere with the draft of the lantern, as usual. This annular wall is about of the same height as the globe F and serves as a guard to entirely obscure said globe F when it is in its lowered position, so that there can be no showing of a colored light corresponding to the color of the said globe when the latter is downwardly withdrawn.

m^2 m^2 represent small metallic lugs or braces provided at and depending below the base of the lantern, against which the side members of the bail may be brought and steadied when the globe F is in its lowered position and the bail is in its horizontally-swung position, as indicated in Fig. 2, so that any swinging or shaking of the lantern will not result in the shifting or shucking of the inner or secondary globe.

The inner globe of red or other colored glass is shown as inclosed in a cage or open-work wire frame represented by n , the same serving as means to strengthen, protect, and render more durable the inner globe, as manifest.

The special utility of what may be termed the "compound" or "duplex" lantern described is more especially found where the lanterns are used on railroads, one of these serving the purposes of both a white and a colored lantern of the ordinary kind.

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

1. A lantern having the usual outer globe, and therewithin a movable secondary glass shell or globe of a different color, and provided with a depending stud b ; the lower por-

tion of which is wedge-shaped, a rod or member d having its upper end portion formed tubular and longitudinally split, and within which the wedge-shaped extremity of the said stud b is entered and pivotally connected, and a guide-opening, through the bottom of the lantern, in which said jointed parts b d may slide substantially as and for the purpose set forth.

2. A lantern having the usual outer globe, and therewithin a movable secondary globe or annular glass shell of a different color, a device having a connection with the lower portion of the inner globe, and adapted for a sliding movement through, and accessible below, the bottom of the lantern and comprising a joint whereby a portion thereof may be swung from a vertical to a horizontal position, a catch for retaining said device in its elevated position, a catch for engaging said device in its lower horizontally-swung position for the confinement thereof, and the steadying lug or brace m^2 provided at and depending below the bottom of the lantern, on which the horizontally-swung portion of said jointed device bears, substantially as described.

3. In a lantern of the character described in combination the lantern-base provided with the annular upstanding guard-wall, the depending central clip or catch, the depending tubular guides, the catch or catches side-wise located at and below the bottom, the usual globe, the inner secondary globe of a different color, having the depending studs b b with wedge-shaped extremities f , the bail having the extremities of its upstanding members longitudinally split and formed tubular, within which said parts f are entered and to which they are transversely pivoted, substantially as and for the purposes set forth.

Signed by me at Springfield, Massachusetts, in presence of two subscribing witnesses.

PORTER C. BEMIS.

Witnesses:

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