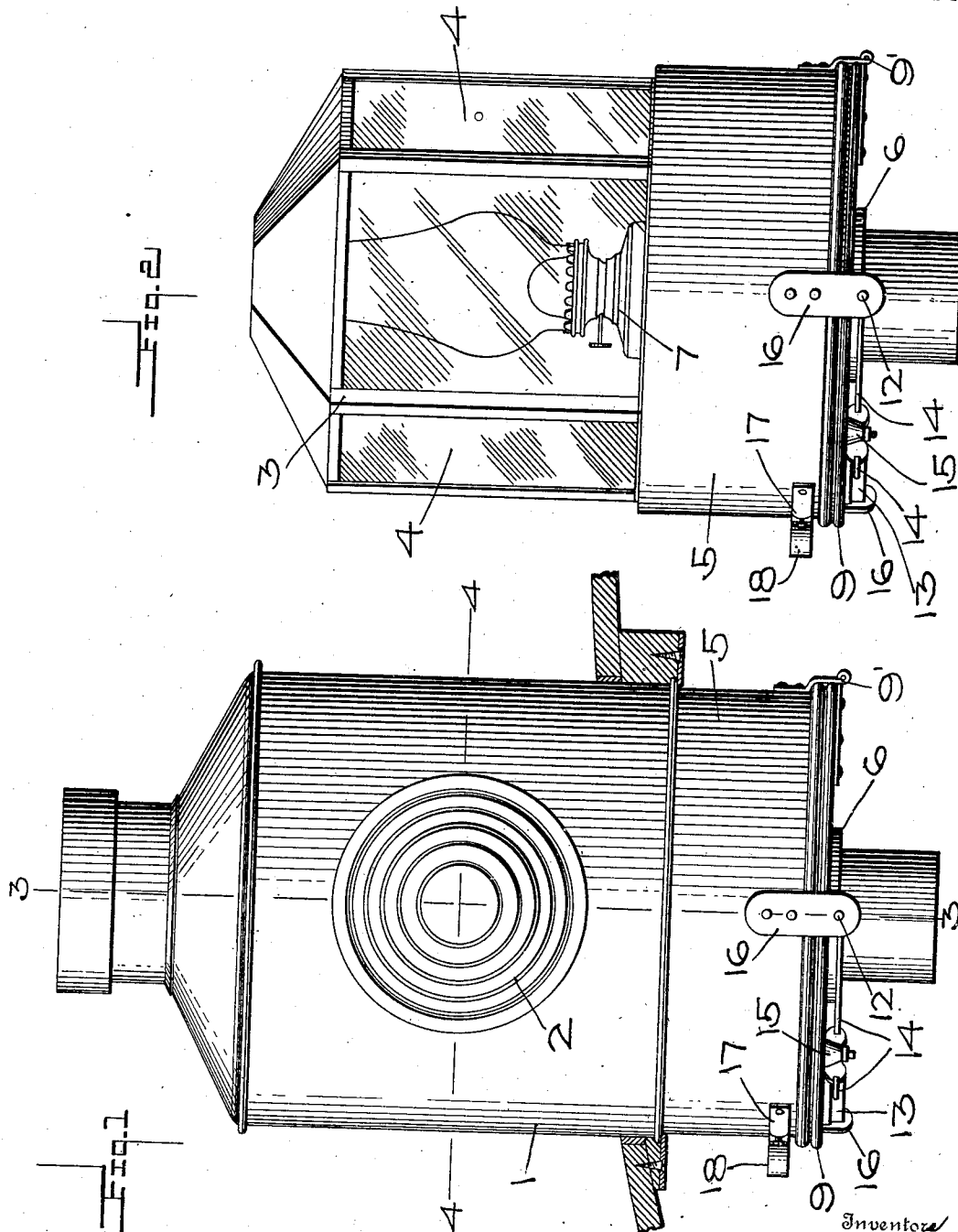


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H. G. POTTS & C. HAUBER.
SIGNAL LANTERN.
APPLICATION FILED APR. 10, 1909.

Patented Oct. 19, 1909.
2 SHEETS—SHEET 1.



Witnesses
Ed. L. Lushy
E. L. Chandler

Inventors
Harry G. Potts and
Christian Hauber
By
Woodward & Chandler
Attorney

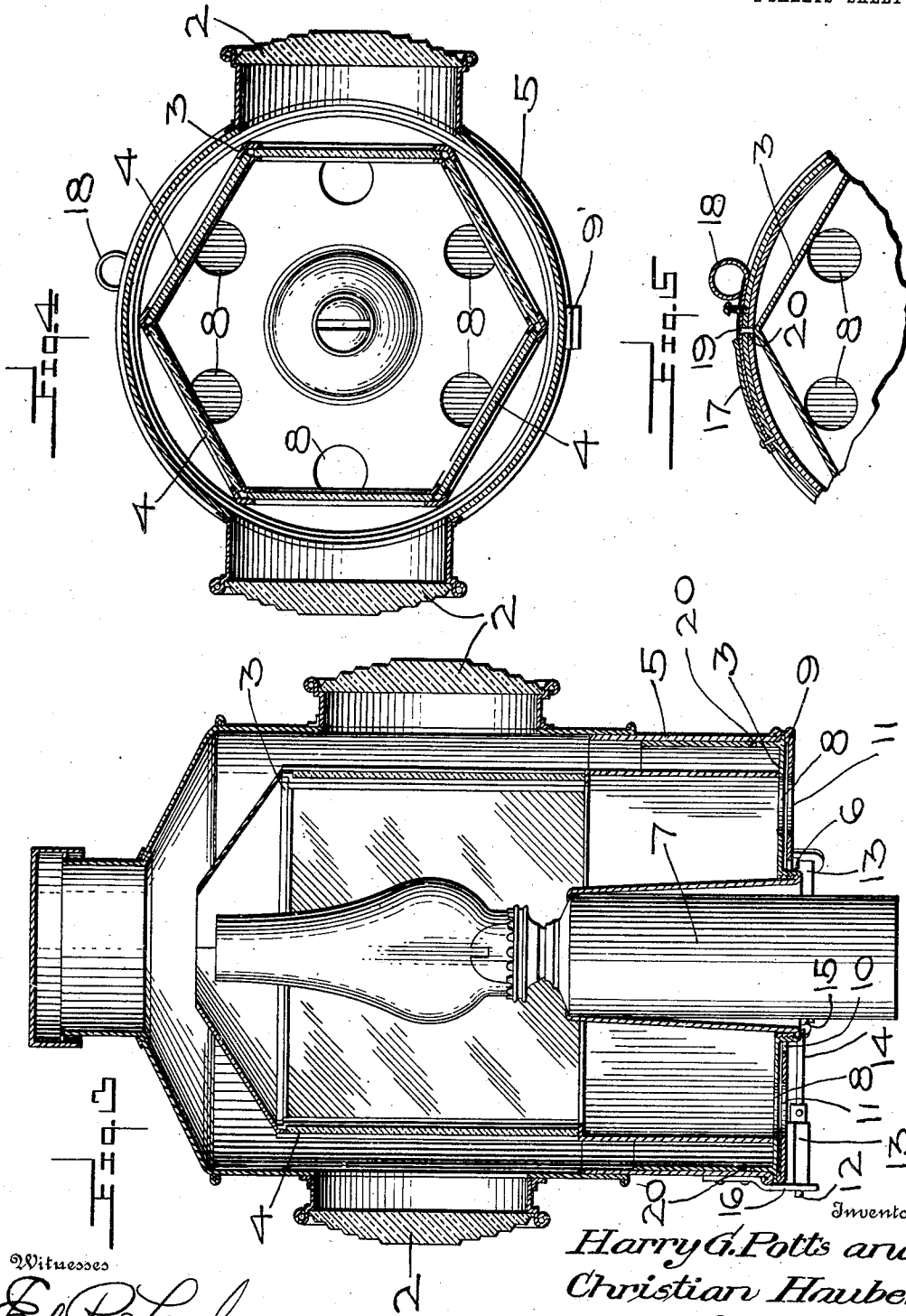
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UNITED STATES PATENT OFFICE.

HARRY G. POTTS AND CHRISTIAN HAUBER, OF FRANKFORT, INDIANA.

SIGNAL-LANTERN.

937,646.

Specification of Letters Patent.

Patented Oct. 19, 1909.

Application filed April 10, 1909. Serial No. 489,044.

To all whom it may concern:

Be it known that we, HARRY G. POTTS and CHRISTIAN HAUBER, citizens of the United States, residing at Frankfort, in the county of Clinton and State of Indiana, have invented certain new and useful Improvements in Signal-Lanterns, of which the following is a specification.

This invention relates to signal lanterns and more particularly to that class of signal lanterns which are used upon railway trains.

The object of our invention is to provide a lantern of this class having one or more lenses suitably secured in a casing permanently attached to the car and in which the lamp and its holder may be inserted from the interior of the car.

Another object is to provide a plurality of glass plates of different colors, any one of which may be moved in front of the lens at the option of the trainman.

A further object is to provide means for reflecting the light through the bottom of the lamp holder thus allowing the signals to be seen by the trainman without his leaving the car.

A still further object is to provide improved means for locking the various parts in their assembled position.

With these and other objects in view the present invention consists in the combination and arrangement of parts as will be hereinafter more fully described, and particularly pointed out in the appended claims, it being understood that changes in the specific structure shown and described may be made within the scope of the claims without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation of our improved signal lantern, showing the same in position upon the caboose of a railway train, Fig. 2 is a similar view with the outer casing removed, Fig. 3 is a vertical section taken on the line 3—3 of Fig. 1, Fig. 4 is a horizontal section on the line 4—4 of Fig. 1, Fig. 5 is a detail sectional view

through a portion of the bottom of the lamp holder and the outer shell, illustrating the means for locking the same in position.

Referring to the drawings, 1 indicates the outer casing of our improved lantern and 2 the lenses thereof, oppositely disposed and secured in the casing in any approved manner. This lens casing is permanently secured over an opening in the top of the cupola of the caboose of a railway train.

A hexagonal frame 3 is provided with a plurality of lens plates 4 of different colors, the lower portion of this frame being cylindrical in form, the purpose of which hereinafter appears. The plate holder 3 is provided with a plurality of openings 8 in the bottom thereof and also with a central depending screw threaded flange 6 which receives the screw threaded portion of the lamp 7. A cylindrical shell 5 secured in the lower end of the casing 1 and projecting some distance above the top of the car is provided with a hinged bottom plate 9. This plate 9 has a central opening 10 through which is adapted to depend the lower portion of the oil cup of the lamp 7, and is hinged as at 9' to the shell. Also formed in the plate 9 at diametrically opposite points are the openings 11, which are adapted to register with any two of the openings in the bottom of the plate holder. By this means, the light will be reflected through the bottom of the plate holder and the trainman may readily observe which of the colored lights are opposite the lenses. The hinged plate 9 is securely locked to the shell by the bolts 12 which are slidably mounted in boxes 13 secured to the plate. To the inner ends of the bolts 12 are secured arched arms 14 which are pivoted to either end of the member 15, which is in turn pivoted to the plate 9. The lower edge of the shell 5 is provided with depending perforated lugs 16 which are adapted to receive the bolts 12 when the member 15 is turned. To the outer circumference of the shell is secured the flat spring 17, having a finger hold 18 at one end and an inwardly projecting pin 19 which extends through the casing and enters any one of a series of perforations 20 provided in the lower cylindrical portion of the

frame 3, thus holding the frame in any desired position so that the proper signal shall be shown. When it is desired to change the color of the signal lights, it is only necessary to pull the spring member 17 outwardly until the pin 19 is entirely out of the perforations 20, when the plate frame may be freely rotated until a light of the desired color is shown. As the pin 19 again enters one of the perforations, the plate frame will be securely held against accidental rotation. The oil cup of the lamp is extended below the threaded portion thereof and depends through the central opening 10 provided with the hinged plate 9. It is by means of this extension that the plate frame is turned from the inside of the car. The member 5 extends into the casing 1 when the parts are assembled, and projects some distance above the roof of the car.

The hinged plate 9 will, when closed and locked by means of the bolt 12, support the plate-holder and lamp within the outer casing 1. Thus the holder will be maintained in its proper position at all times within the casing 1, the light rays being reflected through the openings 8 in the bottom thereof and the registering openings 11 in the plate 9.

From the foregoing description, it will be seen that we have provided a signal lantern in which the lamp may be inserted, and the various colored plates operated from the interior of the car. It will also be noted that we have devised a very simple and effective means of locking the parts in their assembled position.

Our improved lantern is very simple in construction, the parts are readily assembled and secured in position, and the signals may be altered without the necessity of the trainman leaving the car.

What we claim is:—

1. In a signal lantern, the combination with a casing provided with a lens, of a depending shell secured in the bottom of said casing, a plate holder rotatably mounted in said casing, the lower portion of said holder being cylindrical in form, means for supporting a lamp in said holder, means for reflecting light through the bottom of said plate holder, and means for locking the parts in their assembled positions, substantially as and for the purpose set forth.

2. In a signal lantern, the combination with a casing, provided with oppositely disposed lenses, of a depending shell secured in the bottom of said casing, a hexagonal plate holder rotatably mounted in said casing, the lower portion of said plate holder being cylindrical in form, a central depending screw threaded flange on the bottom of said holder, a central opening in the bottom of said shell, means for reflecting light through the bot-

tom of said plate holder, and means for locking the parts in their assembled position substantially as and for the purpose set forth.

3. In a signal lantern, the combination with a casing provided with oppositely disposed lenses, of a depending shell secured in the bottom of said casing, a hexagonal plate holder rotatably mounted in said casing, the lower portion of said holder being cylindrical in form, a central depending screw threaded flange upon the bottom of said holder, a plurality of openings arranged in the bottom of said holder, a central opening in the bottom of said shell, openings formed in the shell on either side of said central opening and adapted to register with said openings in the plate holder, and means for locking the parts in their assembled position substantially as and for the purpose set forth.

4. In a signal lantern, the combination with a casing, provided with a lens, of a depending shell secured in the bottom of said casing, a plate holder rotatably mounted in said casing, the lower portion of said holder being cylindrical in form and provided with a plurality of perforations, a leaf spring having one of its ends secured to the outer circumference of the shell and provided adjacent to its other end with an inwardly projecting pin, a perforation in the shell, said pin being adapted to extend through the perforation in said shell and to enter any one of the perforations in the lower portion of said plate holder, means for supporting a lamp in said holder, means for reflecting light through the bottom of said plate holder, a bottom plate hingedly secured to said shell, and means for locking the same in closed position substantially as and for the purpose set forth.

5. In a signal lantern, the combination with a casing provided with oppositely disposed lenses, of a depending shell secured in the bottom of said casing, a hinged bottom plate secured to said shell, lugs depending from said shell and provided with perforations, bolts adapted to enter said perforations and provided on their inner ends with operating rods, a plate holder rotatably mounted in said casing, a central depending screw threaded flange at the bottom of said holder, a lamp adapted to have threaded engagement with said flange and a portion of the same depending through the bottom of said plate holder, and means for reflecting light through the bottom of said plate holder substantially as and for the purpose set forth.

6. In a signal lantern, the combination with a casing provided with oppositely disposed lenses, of a depending shell secured in the bottom of said casing and provided with a hinged plate, said shell having depending

perforated lugs secured thereto, said lugs being adapted to receive locking bolts slidably mounted in boxes upon the bottom of said plate, arcuate arms secured to the inner ends
5 of said locking bolts and pivotally secured to the end of a pivoted finger piece, a plate holder rotatably mounted in said casing, the lower portion of said holder being cylindrical in form, means for supporting a lamp
10 in said holder, means for reflecting light through the bottom of said plate holder and

means for locking the parts in their assembled positions, substantially as and for the purpose set forth.

In testimony whereof we affix our signatures, in presence of two witnesses.

HARRY G. POTTS.
CHRISTIAN HAUBER.

Witnesses:

WALTER L. BROWN,
THOS. A. GILLERIE.