

No. 785,956.

PATENTED MAR. 28, 1905.

R. J. KELLEY.
LANTERN.

APPLICATION FILED MAR. 10, 1904.

2 SHEETS—SHEET 2.

Fig 3

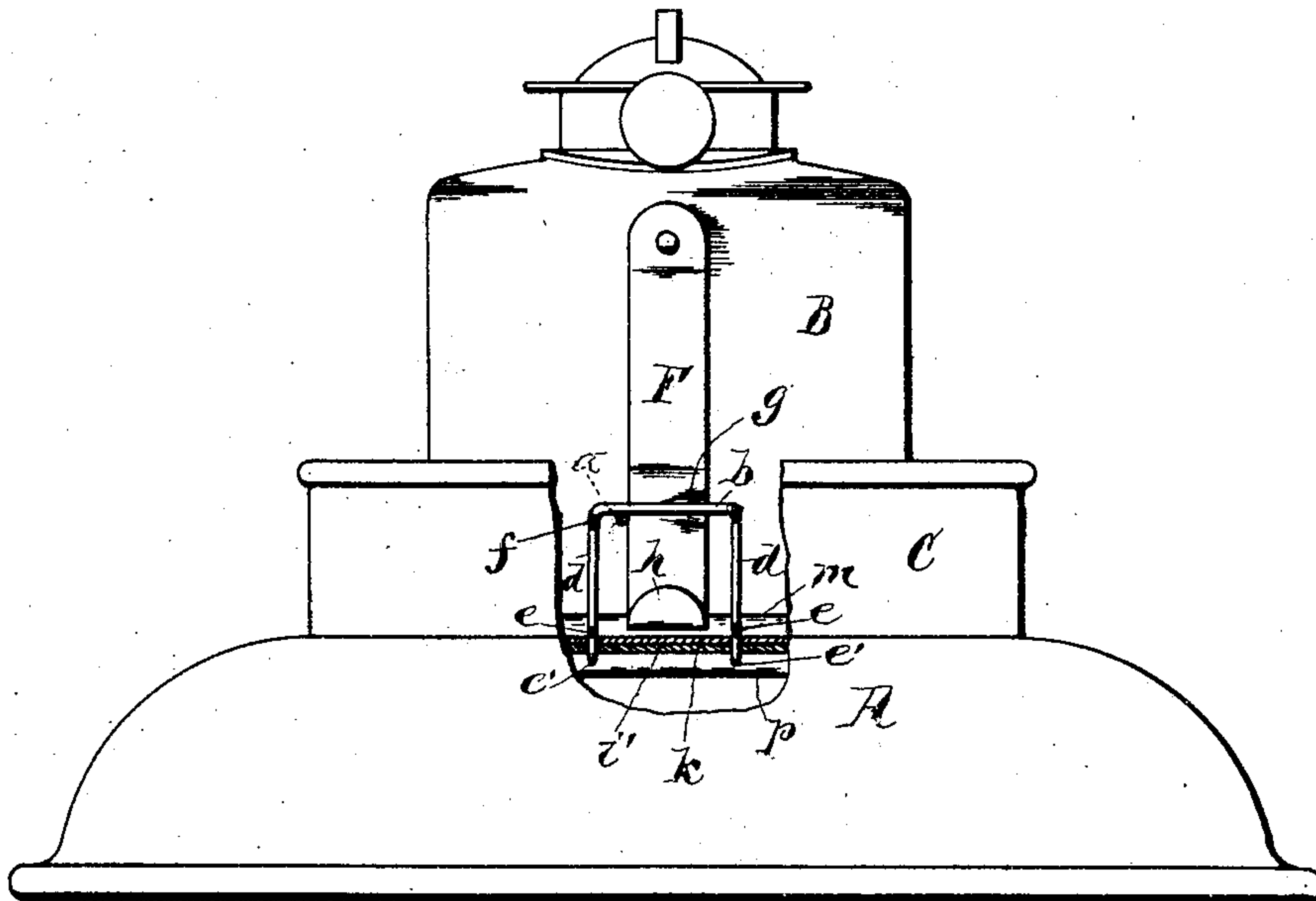
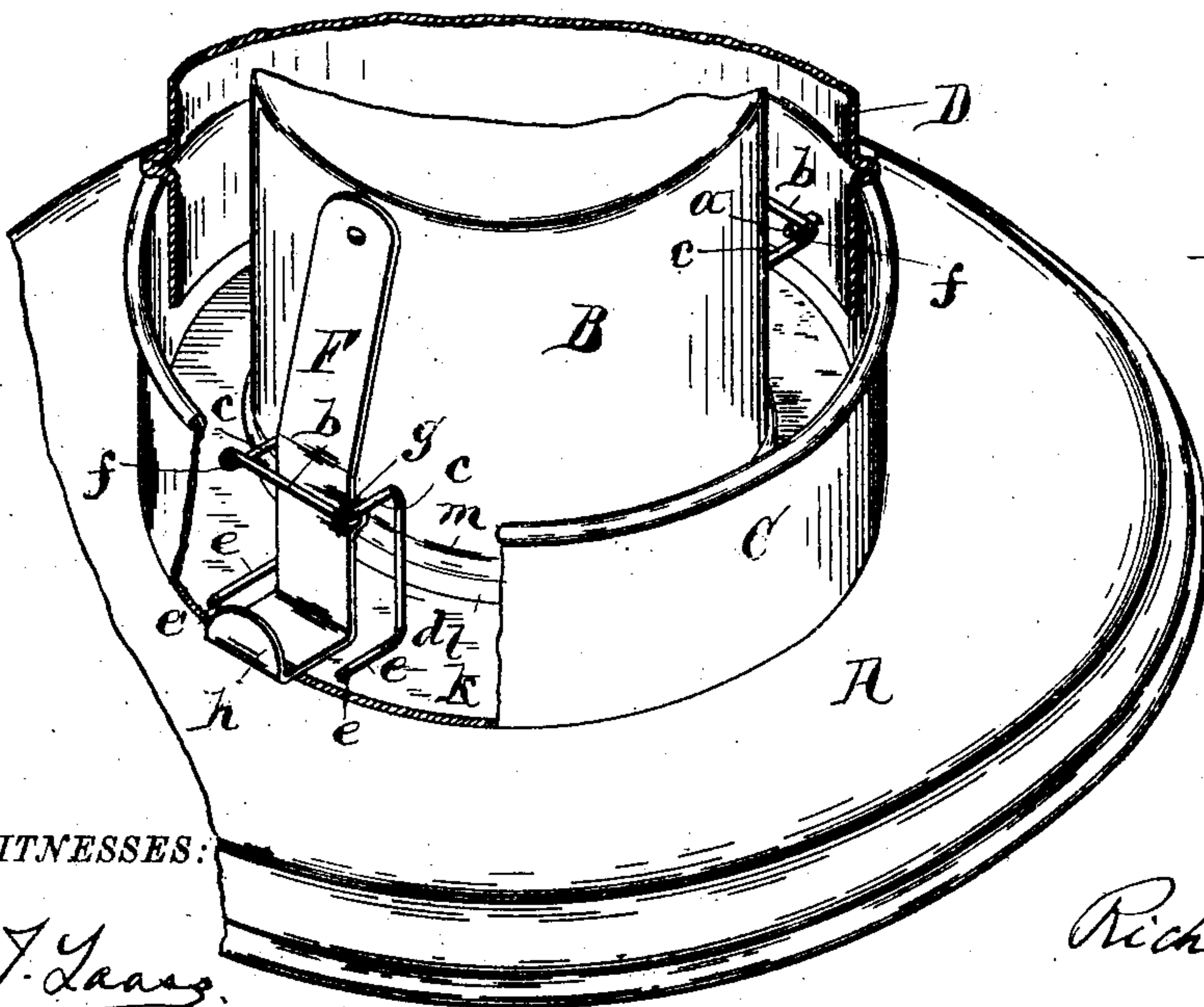


Fig 4



WITNESSES:

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LANTERN.

SPECIFICATION forming part of Letters Patent No. 785,956, dated March 28, 1905.

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To all whom it may concern:

Be it known that I, RICHARD J. KELLEY, a citizen of the United States, and a resident of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Lanterns, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to that class of lanterns in which the oil-pot is detachably secured to the lantern-frame, and more particularly to the style of lantern having its frame embodying a bottom cylindrical member which is embraced by and is seated upon a rim permanently attached to the oil-pot.

The main object of the present invention is to provide a lantern of the aforesaid class with simple, strong, and durable attaching means by which the oil-pot can be more readily and conveniently removed from and replaced in the lantern-frame and which shall at the same time be more positive and reliable in its operation and shall also cheapen the cost of manufacture of the lantern and also greatly improve the appearance thereof.

Futhermore, an object of my invention is to further cheapen the cost of manufacture and add greater strength to the structure by a novel manner of attaching the oil-pot to the rim which embraced the aforesaid cylindrical member of the frame, and by a simple and rigid attachment of said parts to the base.

To that end the invention consists in the improved construction and arrangement of the component parts, as hereinafter fully described, and set forth in the claims.

In the accompanying drawings, Figure 1 is a longitudinal section of the lower portion of a lantern embodying my invention. Fig. 2 is a transverse section on line X X in Fig. 1. Fig. 3 is a side view of the detached oil-pot, a portion of the rim and base being broken away; and Fig. 4 is a perspective view of a portion of the oil-pot and cylindrical frame member to better illustrate the attaching devices of the oil-pot.

Referring to the drawings, A represents the lantern-base, which may be of any suitable and well-known style.

B denotes the oil-pot, and C the rim, which surrounds the same and which embraces the usual cylindrical member D of the lantern-frame in the well-known manner. To the interior of said cylinder D are rigidly secured two oppositely-disposed horizontal studs *a a*, and between the oil-pot B and surrounding rim C are disposed two oppositely-arranged guards, each of which comprises, essentially, a horizontal bar *b*, constituting the guard proper. These guards are disposed parallel and at opposite sides of the oil-pot and are arranged in position to allow the aforesaid studs *a a* to pass, respectively, thereunder by the rotation of the oil-pot when the frame member D is properly seated upon the aforesaid rim C. By employing studs of sufficient length the guards may be formed straight, as shown. However, if it is desired to use shorter studs the said guards may be bent concentric with the cylinder D. The said guards may be of any suitable form or construction and may be attached to the oil-pot in any convenient manner, although I prefer to make the same each of a single piece of wire and bend the ends of the horizontal bar inwardly to produce arms *c c* and thence downwardly to form limbs *d d* and finally outwardly, as indicated at *e e*, which latter portions are securely clenched to the top of the lantern-base A, as clearly shown at *e' e'* in Fig. 1 of the drawings.

At one end of each guard is a stop *f*, formed by bending the guard slightly downward at its junction with the arm *c*. Said stops *f f* are disposed in the path of the studs *a a* and limit the rotation of the oil-pot in one direction in the operation of applying the latter to the lantern-frame.

To prevent a reverse rotation of the oil-pot and the resultant disengagement of the studs from the guards, I provide a locking-spring F, which is arranged to engage one of the studs *a*. This spring may be of any suitable form and construction, but consists, preferably, of an upright spring-bar attached at its upper end to the upper portion of the oil-pot and is disposed back of one of the guards *b* in the path of the studs. One of the side edges of the spring F is formed with a de-

pression g , which the end of one of the studs engages in the rotation of the oil-pot in applying the latter to the frame, whereby the spring is forced backward to allow the studs to engage the aforesaid stops $f f$ on the guards. When the spring is released from the stud, it moves outwardly and engages with its opposite side edge the side of the stud, and thus securely and automatically locks the stud to the guards. The said spring F is formed at its lower end with a thumb-piece h , which protrudes through an aperture h' in the rim C and is employed for pressing the spring inward and out of the path of the adjacent stud a to permit a reverse rotation of the oil-pot and disengagement of the studs from the guards, and thereby allow the oil-pot to be removed from the lantern-frame.

In constructing the lantern I employ a base A of suitable style and form and provide the same with a central annular opening in its top, as indicated at h^2 , and with an upwardly-projecting flange i , surrounding said opening, and in the said top the base is formed with an annular depression i' , which surrounds the said flange. The rim C is formed with a bottom plate k , seated in said depression, and with an upwardly-projecting flange l , embracing the aforesaid flange i and surrounding an opening l' , which coincides with the opening h^2 . The oil-pot B is formed with an external bead m , bearing upon the said flanges, and has its lower end clenched onto the under side of the top of the base A , as indicated at n .

o denotes the bottom of the oil-pot, and which is formed separate therefrom. Said bottom may be secured in position in any suitable manner. However, I prefer to clench the edge of the same onto the lower edge of the oil-pot and onto the under side of the base, as shown at p in Fig. 1 of the drawings.

It will be understood that all of the joints of the combined base, rim, and oil-pot are firmly soldered in the usual manner.

What I claim as my invention is—

1. In a lantern, the combination with the frame comprising a lower cylindrical member provided with a pair of oppositely-disposed horizontal studs on its interior, of a detachable oil-pot provided with a rim embracing said cylindrical member, means secured to the oil-pot and formed separate therefrom and engaged by said studs, and an upright spring secured to the oil-pot proper and locking said studs in their engagement as set forth.

2. In a lantern, the combination with the frame comprising a bottom cylindrical member provided with a pair of oppositely-disposed horizontal studs on its interior, of a detachable oil-pot provided with a rim embracing said cylinder, a pair of guards carried on the oil-pot and arranged to be engaged by the studs during the rotation of the oil-pot,

and a suitably-supported spring disposed between the oil-pot and frame member and locking said studs in their engagement as set forth.

3. In a lantern, the combination with the frame comprising a bottom cylinder provided with a pair of oppositely-disposed horizontal studs on its interior, of a detachable oil-pot formed with a ring embracing said cylinder, a pair of separately-formed guards on said oil-pot disposed between the oil-pot and cylinder and arranged to be engaged by the studs during the rotation of the oil-pot, stops in the path of the studs and limiting the movement of said oil-pot, and a spring attached to the said oil-pot and locking the studs in their engagement as set forth.

4. In a lantern, the combination with the frame comprising a bottom cylinder provided with a pair of oppositely-disposed horizontal studs on its interior, of a detachable oil-pot formed with a rim embracing said cylinder, a pair of guards secured to the oil-pot and arranged to be engaged by said studs during the rotation of the oil-pot, stops formed on the guards in the path of the studs and serving to limit the rotation of the oil-pot, and an upright spring attached to the oil-pot and automatically engaging one of the studs to lock the studs in their engagement with the guards, and a thumb-piece secured to spring and projecting at the exterior of the aforesaid rim and operable for releasing the studs as set forth.

5. In a lantern, the combination with the lower frame member provided with a pair of oppositely-disposed studs projecting horizontally therefrom, of a detachable oil-pot provided with a pair of wire guards disposed between the oil-pot and frame member and arranged to be engaged by the aforesaid studs, and a spring automatically locking said studs in their engagement as set forth.

6. In a lantern, the combination with the frame provided with a pair of inwardly-projecting horizontal studs, of a detachable oil-pot provided with a pair of wire guards arranged to be engaged by said studs in the rotation of the oil-pot, stops formed on said guards in the path of the studs, an upright spring attached to the oil-pot and arranged to automatically engage one of said studs to lock the studs in their engagement, and means for operating said spring to release the studs as and for the purpose set forth.

7. In a lantern, the combination with the frame provided with a pair of inwardly-projecting horizontal studs, of a detachable oil-pot provided with a pair of guards arranged to be engaged by said studs during the rotation of the oil-pot, stops in the path of the studs, and an upright spring attached to the oil-pot and disposed in the path of the studs and provided at one side edge with a depression for the passage of a stud and adapted to

engage the stud with its opposite edge for the purpose set forth.

8. In a lantern, the combination with the frame provided with a pair of inwardly-projecting horizontal studs, of a detachable oil-pot provided with a pair of wire guards arranged to be engaged by said studs in the rotation of the oil-pot and formed at one end with stops disposed in the path of the studs, and an upright spring attached to the oil-pot back of one of the guards to engage one of the studs to lock the studs in their engagement with the guards as set forth.

9. In a lantern, the combination with the frame comprising a bottom cylinder provided with a pair of oppositely-disposed horizontal studs on its interior, of a detachable oil-pot formed with a rim embracing said cylinder, an aperture in said rim, a pair of rigid guards formed of wire and disposed between the oil-pot and rim and arranged to be engaged by the aforesaid studs, and an upright spring attached to the oil-pot and adapted to engage one of said studs and formed with a thumb-piece projecting through the aforesaid aperture for the purpose set forth.

10. In a lantern, the combination with the frame comprising a bottom cylinder provided with a pair of oppositely-disposed horizontal studs on its interior, of a detachable oil-pot formed with a rim embracing said cylinder, a pair of wire guards secured to the oil-pot and each composed of a horizontally-disposed, bar and attaching-arms, a stop formed at one end of the bar of each guard and disposed in the path of the studs, and a spring attached to the oil-pot adjacent to one of the guards and engaging the stud thereat to lock the studs in their engagement with the guards as set forth.

11. In a lantern, the combination with the frame comprising a bottom cylinder provided on its interior with a pair of oppositely-disposed horizontal studs, of a detachable oil-pot, the base permanently secured to said oil-pot, a rim permanently secured to the top of the base and surrounding the oil-pot and embracing the aforesaid cylinder, a pair of guards fastened rigidly to the top of the base and disposed between the oil-pot and cylinder and engaging said studs, and a spring locking said studs in their engagement as set forth.

12. In a lantern, the combination with the frame comprising a bottom cylinder provided on its interior with a pair of oppositely-disposed horizontal studs, of a detachable oil-pot, the base permanently secured to the oil-pot, a rim permanently secured to the top of the base and surrounding the oil-pot and embracing the aforesaid cylinder, an aperture in said rim, a pair of guards rigidly secured between said oil-pot and rim and arranged to be engaged by said studs in the rotation of

the oil-pot, stops disposed in the path of said studs to limit the rotation of the oil-pot, and an upright spring secured to the oil-pot and arranged to automatically engage one of the studs to lock the studs in their engagement with the guards, and means for operating said spring to release said studs as set forth.

13. In a lantern, the combination with the bottom cylindrical frame member, of a detachable oil-pot provided with a rim engaging said frame member, said rim being formed with a bottom plate provided with a central annular opening and with an upwardly-projecting flange surrounding the opening, the oil-pot disposed in said opening and formed with an external bead bearing upon said flange and having its lower end portion clenched onto the under side of said plate as set forth.

14. In a lantern, the combination with the bottom cylindrical frame member, of a detachable oil-pot provided with a rim engaging said frame member, said rim being formed with a bottom plate provided with a central annular opening and with an upwardly-projecting flange surrounding the opening, the oil-pot disposed in said opening and formed with an external bead bearing upon said flange and having its lower edge clenched onto the under side of said plate, and the bottom of the oil-pot formed separate and clenched onto the same as set forth.

15. In a lantern, the combination of the base formed with a central annular opening in its top and with an upwardly-projecting flange surrounding said opening, a rim formed with a bottom plate having a coinciding opening and seated upon the base and formed with a flange embracing the aforesaid flange, the oil-pot disposed in said openings and formed with an external bead bearing upon said flanges and having its lower end portion clenched onto the under side of the base as set forth.

16. In a lantern, the combination of the base formed with a central annular opening and with an upwardly-projecting flange surrounding said opening and an annular depression surrounding said flange, a rim formed with a bottom plate seated in said depression and provided with a coinciding opening and an upwardly-projecting flange embracing the aforesaid flange, the oil-pot disposed in said openings and formed with an external bead bearing upon said flanges and having its lower end clenched onto the under side of the base, and the oil-pot bottom formed separate and suitably secured in its position as set forth.

RICHARD J. KELLEY. [L. s.]

Witnesses:

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