

No. 791,276.

PATENTED MAY 30, 1905.

E. F. LONG.
MINER'S LAMP.

APPLICATION FILED AUG. 9, 1904.

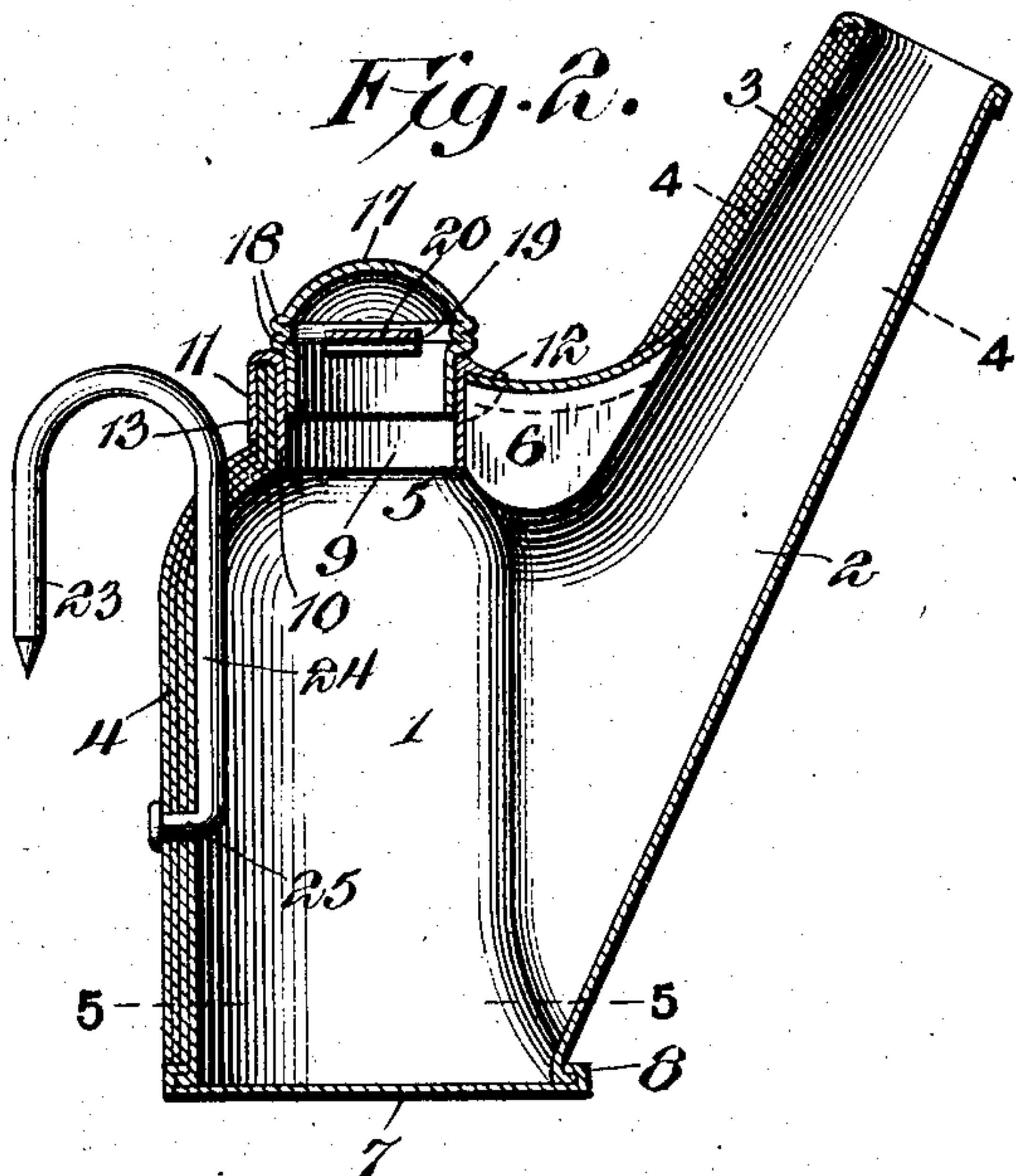
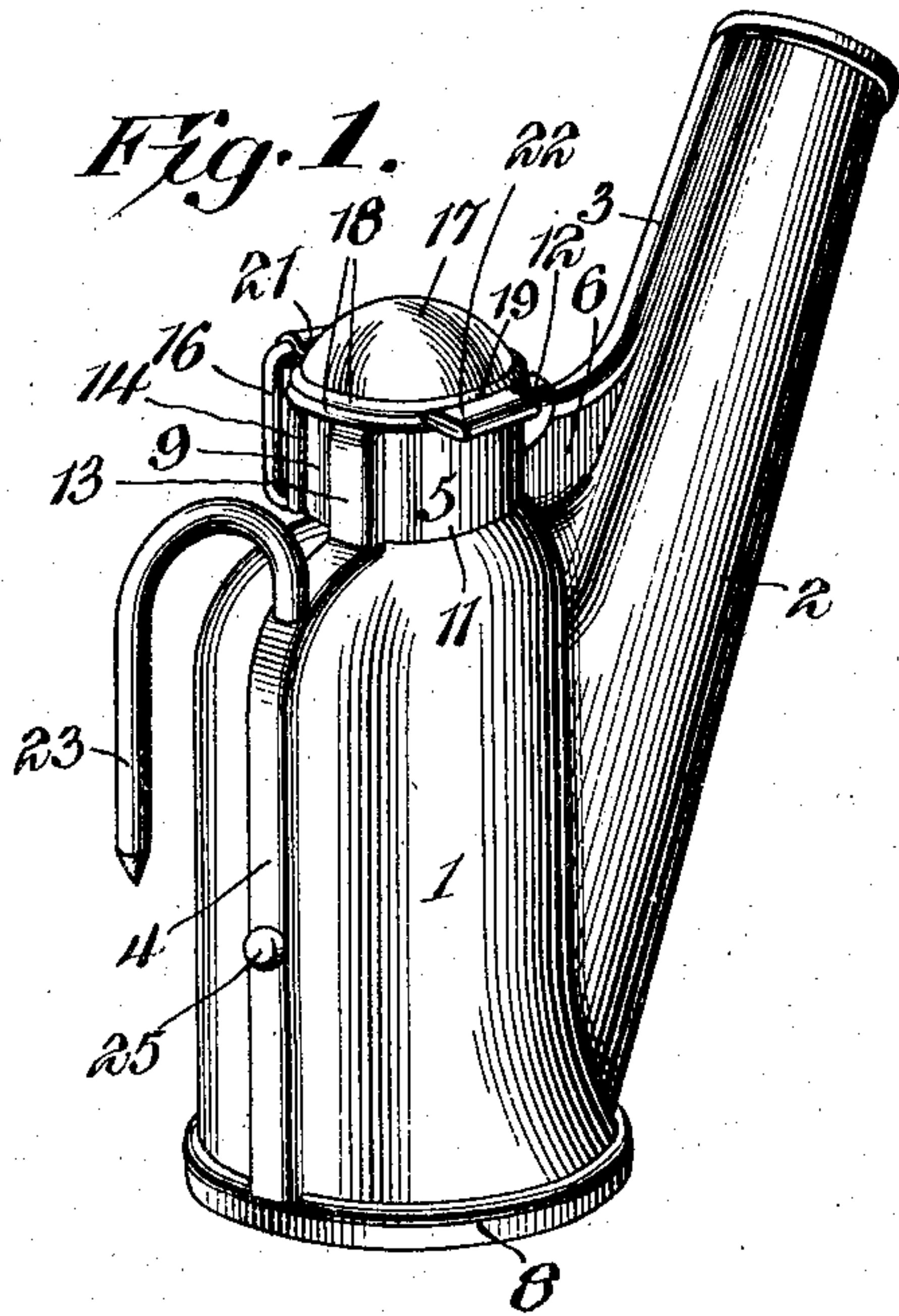


Fig. 4.

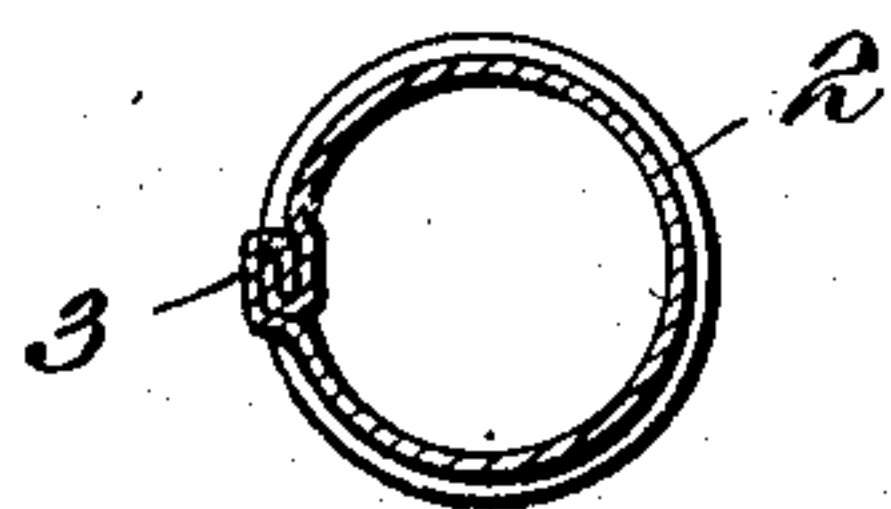


Fig. 3.

Fig. 5.

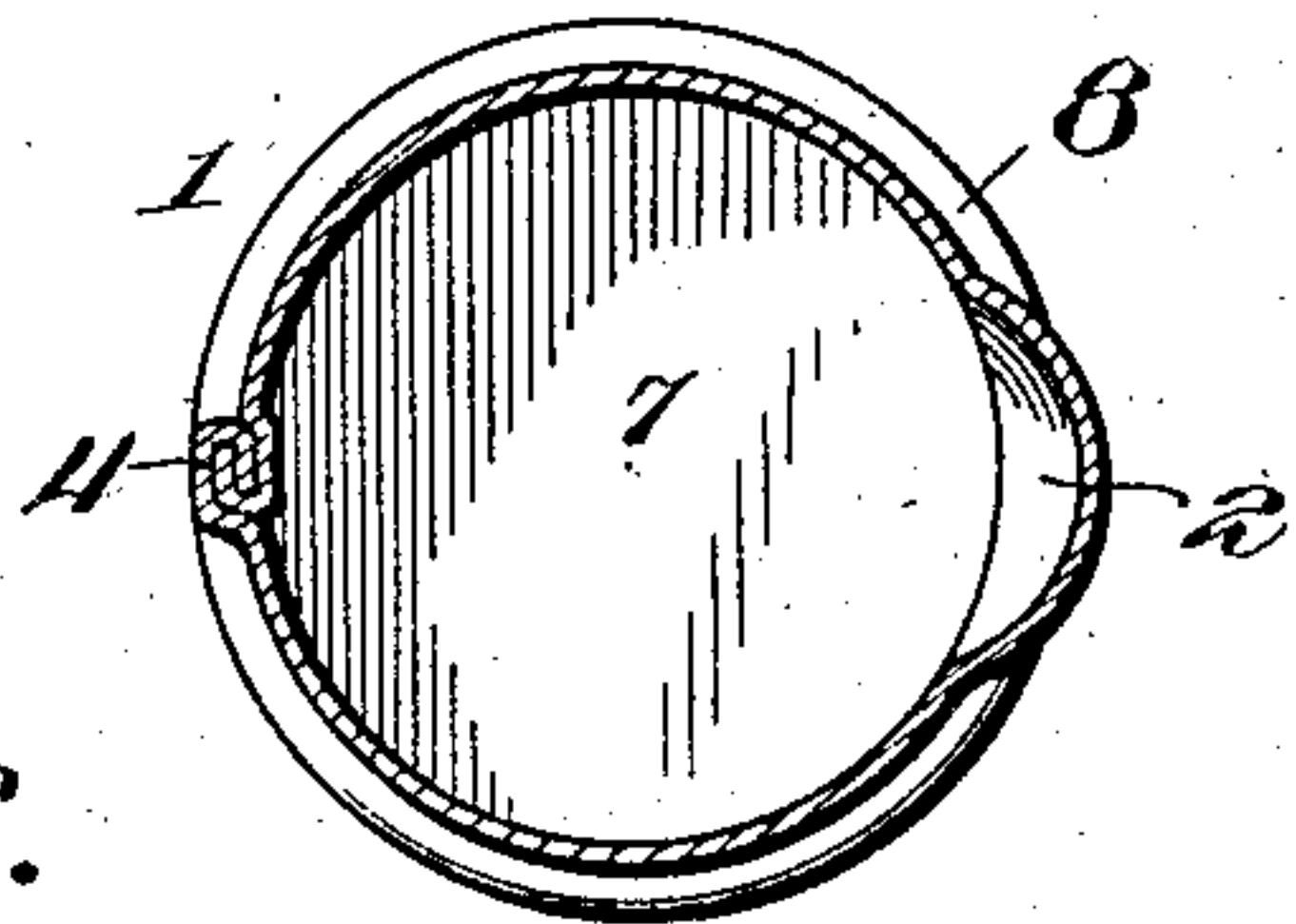


Fig. 6.

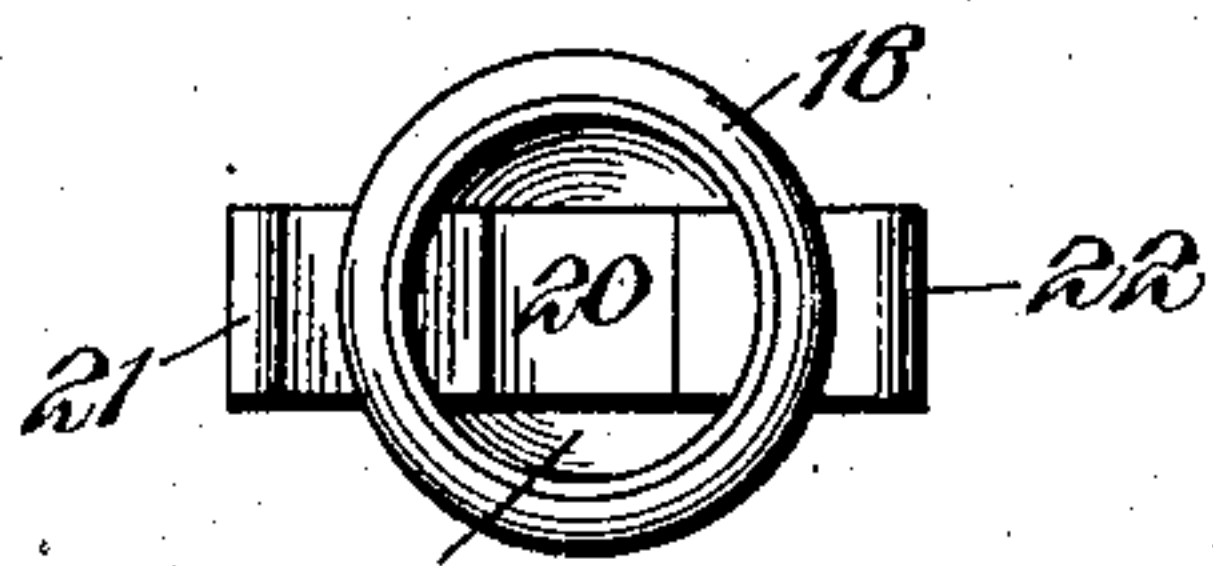


Fig. 7.

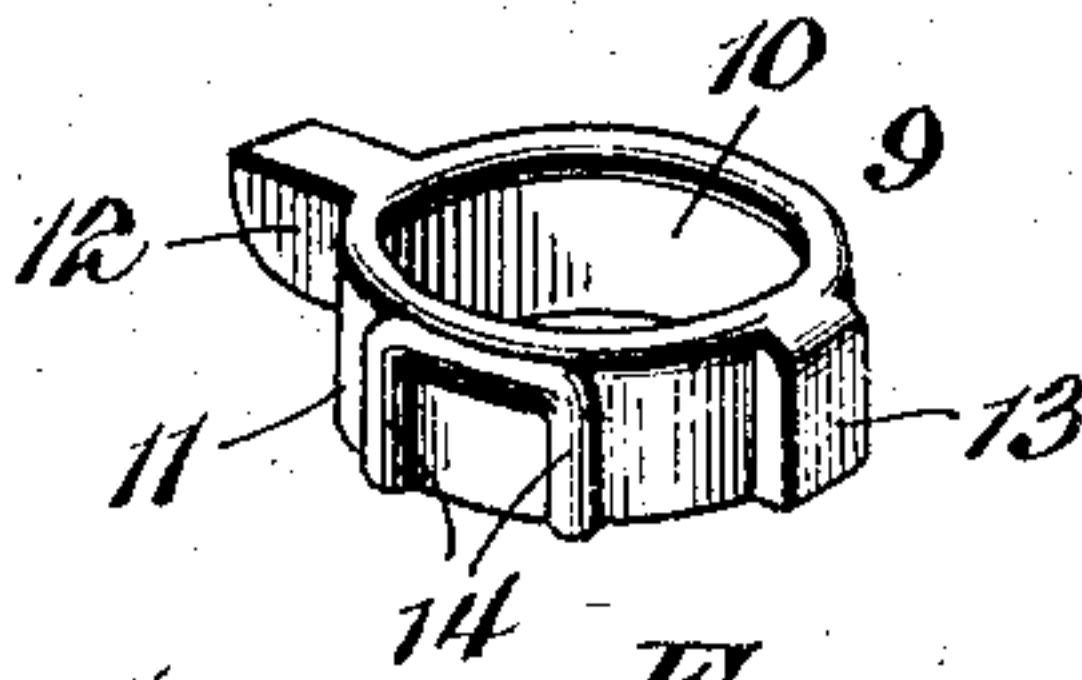
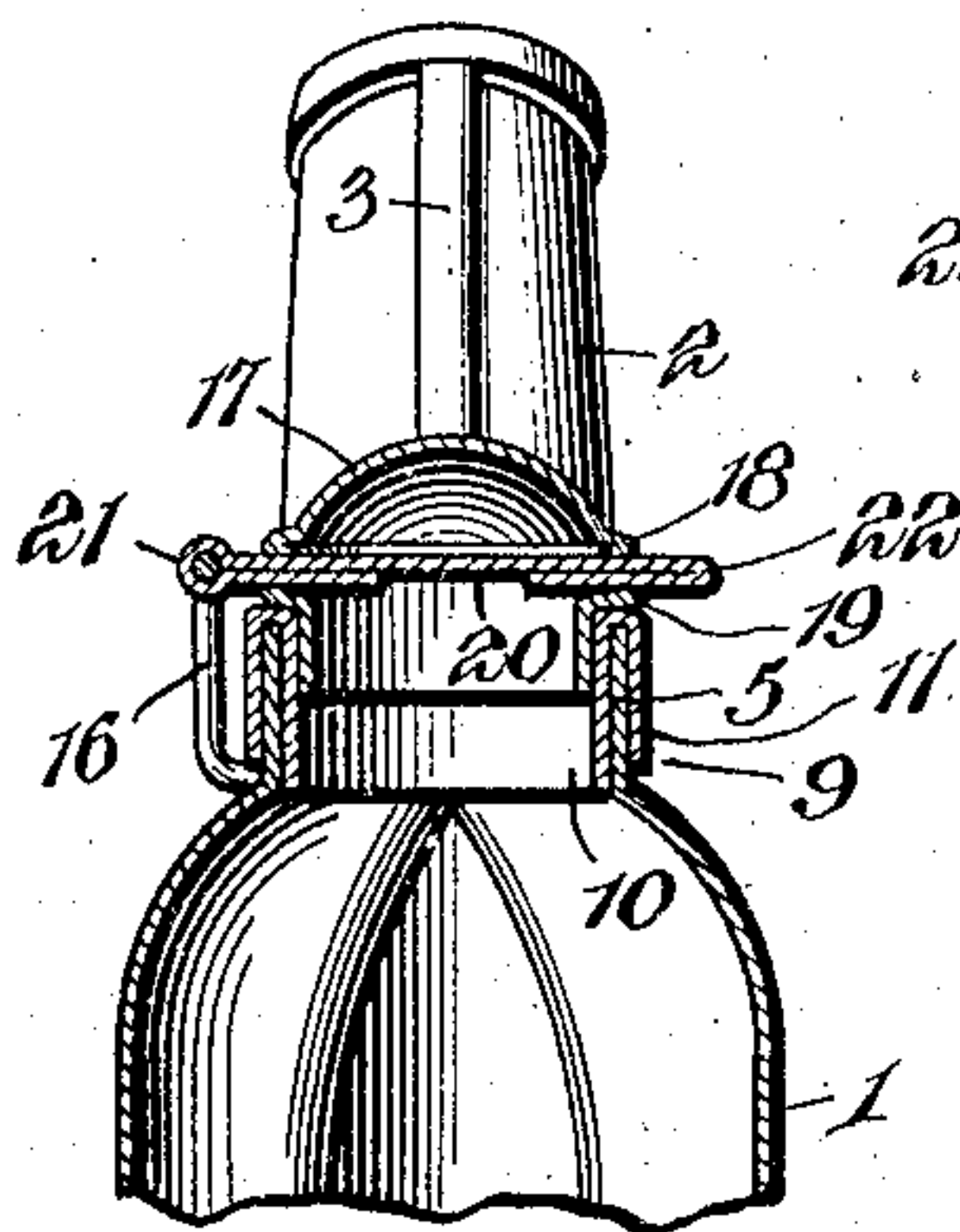
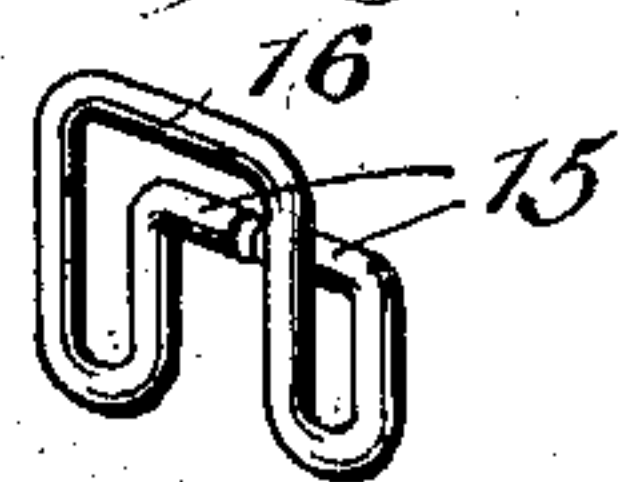


Fig. 8.



Witnesses
Howard W. Orr.
H. F. Riley

Eugene F. Long, Inventor,
By *E. G. Siggers*
Attorney

UNITED STATES PATENT OFFICE.

EUGENE F. LONG, OF SCRANTON, PENNSYLVANIA.

MINER'S LAMP.

SPECIFICATION forming part of Letters Patent No. 791,276, dated May 30, 1905.

Application filed August 9, 1904. Serial No. 220,103.

To all whom it may concern:

Be it known that I, EUGENE F. LONG, a citizen of the United States, residing at Scranton, in the county of Lackawanna and State of Pennsylvania, have invented a new and useful Miner's Lamp, of which the following is a specification.

The invention relates to miners' lamps.

The object of the present invention is to improve the construction of miners' lamps and to provide a simple and comparatively inexpensive one of great strength and durability, from which any leakage of oil will be effectually prevented.

A further object of the invention is to provide a miner's lamp in which the front, sides, and upper portions are imperforate, so that there will be no liability of the flame of the lamp melting the solder around a perforation, and thereby causing the lamp to leak.

Another object of the invention is to enable the lid of the miner's lamp to be securely hinged to the body portion without puncturing the latter.

The invention also has for its object to improve the construction of the lid and to provide a simple device for forming the eye of the hinge and the projecting portion or lip for enabling the lid to be opened and closed.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in the form, proportion, size, and minor details of construction within the scope of the claims may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a miner's lamp constructed in accordance with this invention. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is a vertical sectional view taken at right angles to Fig. 2. Fig. 4 is a sectional view on the line 4 4 of Fig. 2. Fig. 5 is a horizontal sectional view on the line 5 5 of Fig. 2. Fig. 6 is a reverse plan view of the lid. Fig. 7 is a detail

perspective view of the collar. Fig. 8 is a detail view of the pintle-rod.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates the body of the oil-receptacle of a miner's lamp, which is provided at the front with an inclined wick-tube 2, formed integral with the body portion 1, the two parts being stamped or otherwise constructed from a single piece of sheet metal. The sheet metal is connected at the back of the wick-tube by a seam 3 and at the back of the receptacle by a seam 4, double-lapped seams being preferably provided. The lower portion of the wick-tube is connected with the neck or reduced portion 5 of the body by a web or brace 6, and the upper end of the wick-tube is bent backward on the exterior to reinforce the top of the tube. The bottom 7 is connected with the lower edges of the body by a seam 8, which is formed by an outwardly-extending flange of the body and an approximately L-shaped flange of the bottom; but any other form of seam may be employed, as will be readily understood. The upper edge of the reduced portion or neck is reinforced by a collar 9, having inner and outer flanges 10 and 11 arranged at the inner and outer faces of the neck. The collar is provided at the front with a projecting portion 12, substantially U-shaped in cross-section and straddling the brace. The projecting portion is composed of two sides and a connecting top portion, as clearly indicated in Figs. 1 and 7 of the drawings. The outer flange is angularly bent or offset at the back at 13 to provide a recess for the reception of the rear seam 4, and the said outer flange 11 is also grooved at the inner face to provide approximately L-shaped seats 14 for a pair of L-shaped arms 15 of a pintle-rod 16. The L-shaped grooves consist of upright and horizontal portions, and the horizontal portions may extend in either direction, as will be readily understood. The collar, which is soldered or otherwise secured to the neck, not only reinforces and strengthens the body at the upper portion, but it also serves as means for enabling the pintle-rod to be attached to the body without perforating

the seam. This will obviate the necessity of soldering up perforations, and there will be no liability of the flame of the lamp melting such solder and exposing such perforations and endangering the wearer of the lamp by leakage of oil.

The pintle-rod, which is preferably constructed of wire or other suitable material, consists of an approximately U-shaped loop inverted and disposed vertically and the L-shaped arms 15, which are connected with the sides of the loop at the lower terminals thereof.

The lid 17, which consists of an arched or dome-shaped top portion and a vertical flange and which is constructed of a single piece of metal, as clearly shown in Fig. 2 of the drawings, is provided at the base of the arched or dome-shaped portion with a pair of exterior annular beads 18, and the metal is split between the beads at 19 to receive a transverse plate 20. The transverse plate 20, which is disposed horizontally, is constructed of sheet metal or other suitable material, and its end portions are bent or doubled upon themselves to form an eye 21 at one side of the lid and a projecting lip 22 at the opposite side of the lid, as clearly shown in Figs. 1 and 3 of the drawings. The beads are compressed against the plate, which may be soldered or otherwise secured, and it forms a tight joint, so that there is no liability of any leakage. The eye receives the transverse portion of the loop of the pintle-rod, and the lid is securely hinged to the body of the lamp without perforating the latter.

The lamp is provided with the usual hook 23, having its shank 24 mounted on the rear seam. The shank of the hook pierces the rear seam at the upper portion thereof, and is bent at its lower end to form an outwardly-extending arm or portion 25, which pierces the seam and is headed on the exterior thereof to form a rivet. The points where the rear seam is pierced by the hook will in practice be entirely beyond the reach of a flame, so that there will be no liability of the solder around the same becoming melted and the lamp leaking therefrom.

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

1. A device of the class described, comprising a body having a neck, a collar fitted on the neck of the body, a pintle-rod having an attachment portion interposed between the neck and the collar and clamped to the former by the latter, and a lid hinged to the body by the pintle-rod.

2. A device of the class described, comprising a body having a neck, a collar fitted on the neck of the body and provided with an exterior flange, a pintle-rod having its terminals extending between the exterior flange and the neck and rigidly clamped to the lat-

ter by the collar, and a lid connected with the pintle-rod.

3. A device of the class described, comprising a body, a collar fitted on the body and having an exterior flange, said flange being provided at its inner face with grooves, a pintle-rod provided at its ends with arms fitted in the said grooves and secured to the body by the collar, and a lid connected with the pintle-rod.

4. A device of the class described, comprising a body, a collar fitted on the body and having an exterior flange, said flange being provided at its inner face with substantially L-shaped grooves, a pintle-rod composed of an upright loop and approximately L-shaped arms extending from the loop and fitted in the said grooves, and a lid connected with the loop of the pintle-rod.

5. A device of the class described, comprising a body, a collar fitted on the body and having inner and outer flanges, the outer flange being offset to provide grooves, a pintle-rod secured in the grooves, and a lid having an eye receiving the pintle-rod.

6. A device of the class described, comprising a body, a pintle-rod mounted thereon, a lid, and a piece extending horizontally through the lid and held in place by the same and projecting therefrom and connected with the pintle-rod and forming the eye for the pintle.

7. A device of the class described, comprising a body, a pintle-rod mounted thereon, a lid, and a piece extending horizontally through the lid and projecting beyond opposite sides thereof, one of the projecting portions being connected with the pintle-rod and forming the eye for the pintle, and the other projecting portion forming a lip.

8. A device of the class described, comprising a body, a pintle-rod mounted on the body, a lid, and a piece extending horizontally through the lid and projecting therefrom, said piece being doubled to form an eye to receive the pintle-rod.

9. A device of the class described, comprising a body, a pintle-rod mounted on the body, a lid having contiguous annular beads, and a piece extending through the lid at a point between the beads and connected with the pintle-rod.

10. A device of the class described, comprising a body, a collar fitted on the body and having an exterior flange, a pintle-rod extending between the flange and the body and secured to the latter by the collar, a lid provided with contiguous beads, and a piece extending through the lid between the beads and connected with the pintle-rod.

11. A device of the class described, comprising a body provided with a wick-tube, said body and wick-tube being constructed of a single piece of metal and having a connecting-brace extending from the wick-tube to the

neck of the body, and a collar fitted on the neck and having a narrow projecting portion composed of two sides and a connecting top portion fitted on the brace and engaging the sides and top thereof.

12. A device of the class described, comprising a body provided at the back with a vertical seam, and a hook extending through the seam at the upper portion of the body and provided at the lower portion thereof with an arm extending through the said seam and provided with an exterior head.

13. A device of the class described, comprising a body provided with a wick-tube, said body and wick-tube being constructed of a single piece of metal and having a connecting-brace of substantially the same height as the neck extending from the latter to the wick-tube, one seam of the metal extending vertically along the back of the body and merging into the neck, and the other seam extending along the upper side of the wick-tube and merging into the said connecting-brace, and a collar fitted on the neck and having a narrow projecting substantially horizontal portion extending from the neck toward the wick-tube and embracing the sides of the said brace.

14. A device of the class described, comprising a body provided with a wick-tube, said body and wick-tube being constructed of a single piece of metal and having a connecting-brace extending from the neck of the body to the wick-tube, one seam of the metal extending vertically along the back of the body and merging into the neck, and the other seam extending along the upper side of the wick-tube and merging into the connecting-brace, and a hook extending through the seam at the upper portion of the body and provided at the lower portion thereof with an arm also extended through the vertical seam and provided with means for exteriorly engaging the same.

15. A device of the class described, comprising a body, a collar fitted on the body, a

pintle-rod composed of an upright loop and approximately L-shaped arms interposed between the collar and the body and clamped to the latter by the former and extending upwardly from the lower edge of the said collar, and a lid connected with the loop of the pintle-rod. 50

16. A device of the class described, comprising a body having a neck, a collar fitted on the neck of the body, a pintle-rod secured between the neck and the collar in grooves of one of the parts, and a lid hinged to the body by the pintle-rod. 55

17. A device of the class described, comprising a body having a neck, a collar having inner and outer flanges spaced apart at the bottom to fit over and embrace the neck and fitted snugly against the same, a pintle-rod extending between the collar and the neck and clamped to the latter by the former, and a lid hinged to the collar by the pintle-rod. 60 65

18. A device of the class described, comprising a body having a wick-tube and provided with a connecting-brace extending from the latter to the neck of the body, a collar arranged on the neck and having inner and outer flanges fitted snugly against both the inner faces of the same, said collar being also provided with a narrow projecting portion arranged on the said connecting-brace and embracing the sides thereof, and a lid hinged to the collar. 70 75

19. A device of the class described, comprising a body, a lid consisting of a single piece of metal, a piece extending horizontally through the lid and projecting therefrom, and means for hinging the said piece to the body. 80

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

EUGENE F. LONG.

Witnesses:

FREDK. FULLER,
GEORGE A. LONG.