

(No Model.)

W. C. BAIRD.

LAMP.

No. 355,908.

Patented Jan. 11, 1887.

Fig. 1.

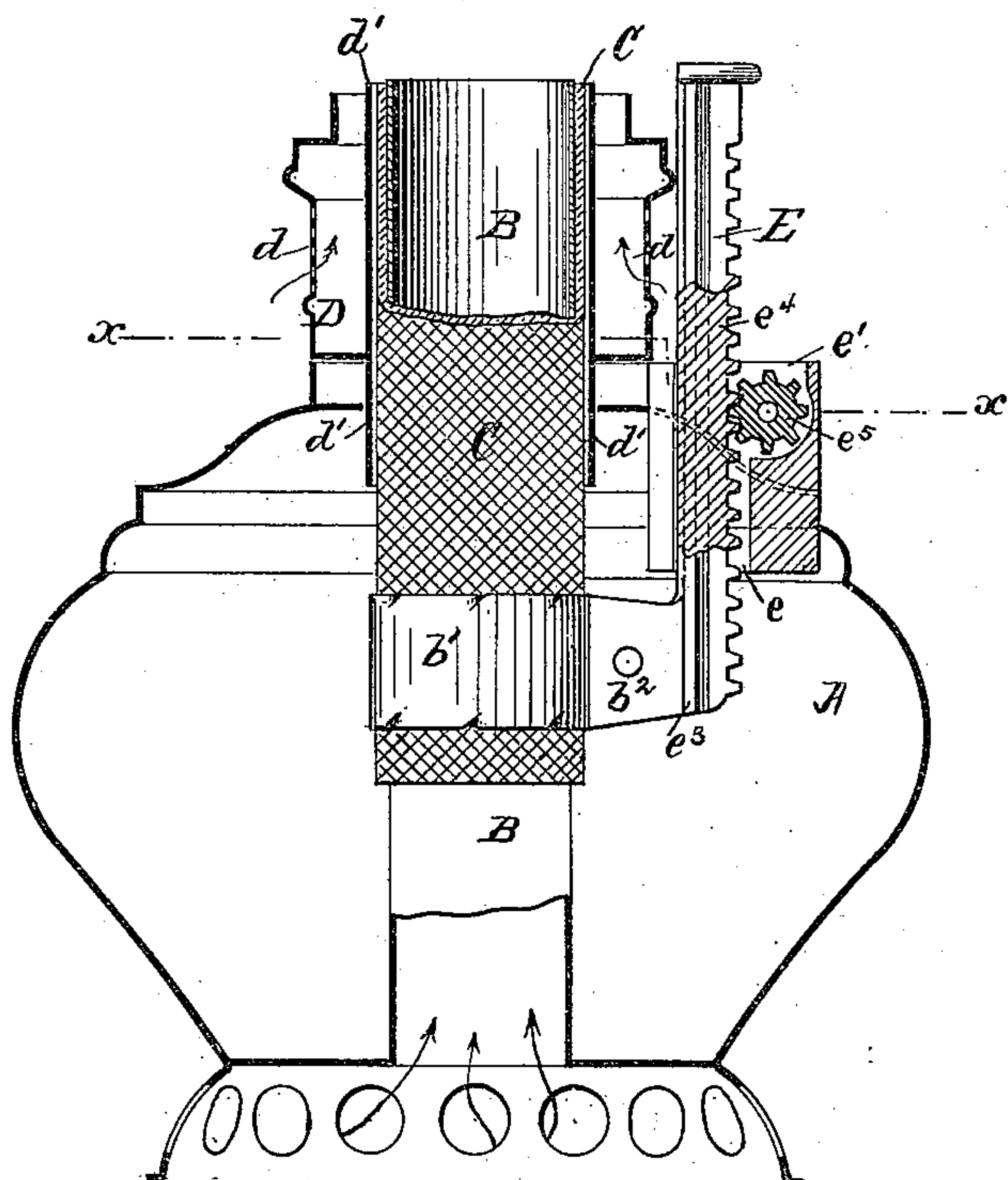
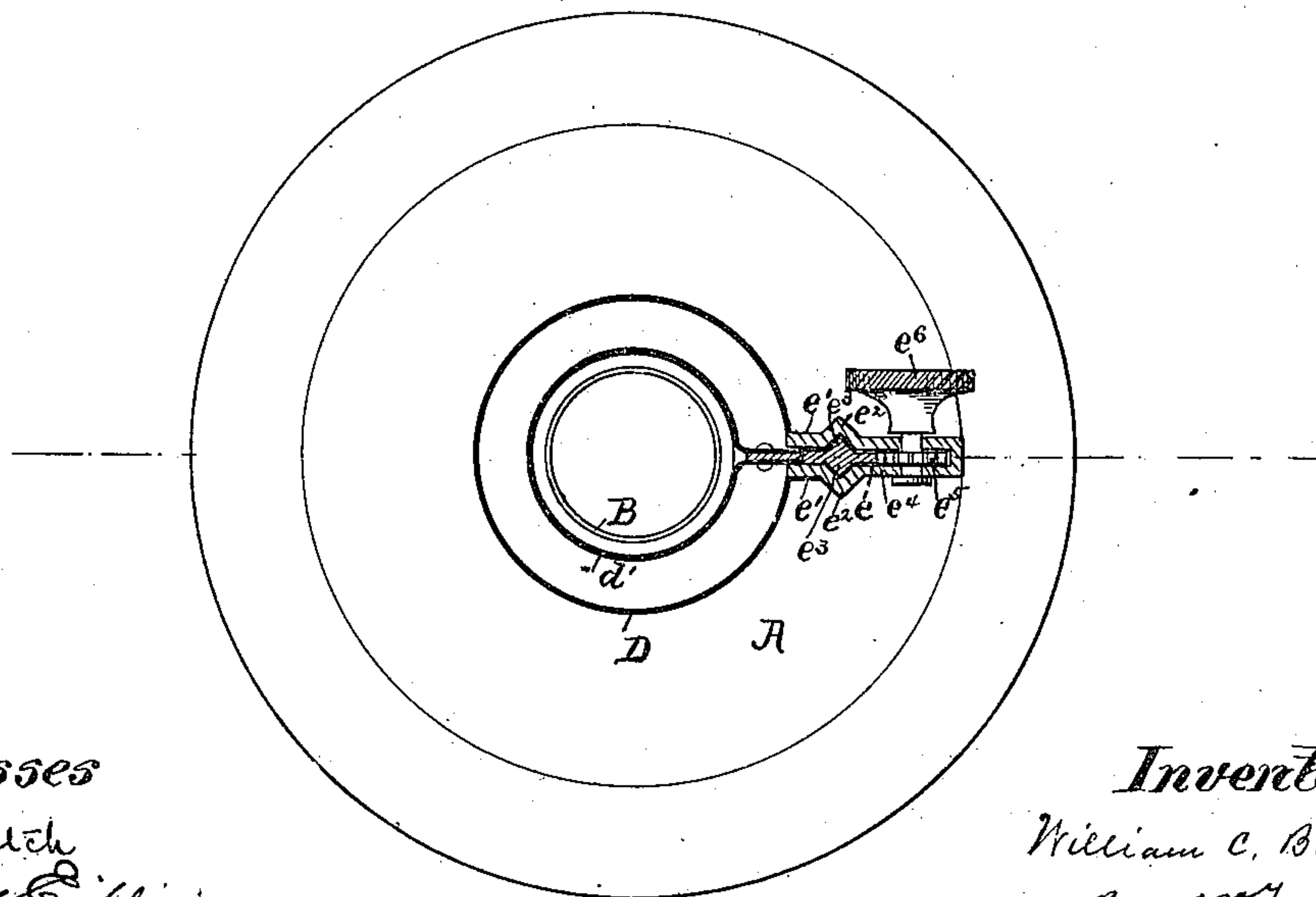


fig. 2.



Witnesses

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LAMP.

SPECIFICATION forming part of Letters Patent No. 355,908, dated January 11, 1887.

Application filed August 4, 1886. Serial No. 210,033. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. BAIRD, of Scarborough, Westchester county, State of New York, and a citizen of the United States, have
5 invented certain new and useful Improvements in Lamps, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

10 My invention relates to Argand lamps; and it consists in the improvement herein described and claimed.

The general construction of the Argand lamp to which my improvement is applied does not
15 differ materially from that in common use, as will be seen by the accompanying drawings, forming a part hereof, in which—

Figure 1 is a vertical central section, and Fig. 2 a plan view, of a lamp embodying my
20 improvement.

A is the body or fount; B, the wick-tube, open at the top and bottom, secured to the bottom of the body A, and extending upward above the top of the same.

25 C is the cylindrical wick on wick-tube.

b' is the wick-shifter, consisting of a band or ring surrounding the lower end of the wick, fitting snugly to it, and made to take hold of
30 it by means of spurs or otherwise, so that when the ring is raised or lowered it will carry the wick with it.

E is a bar or rod that is connected to the ring b' by an arm, b^2 . The bar extends upward above the top of the body A, through a radial slot or opening, e , in the said top. This slot e
35 extends from the interior of the neck of the lamp outward far enough to contain the said bar and permit it to move up and down freely in it, the slot also permitting the arm b^2 to pass
40 through it, so that the wick-shifter, with the arm b^2 and bar E, may be introduced into and removed from the lamp at pleasure. By taking hold with the hand of the upper end of the bar E and lifting it up or pressing it down-
45 ward, the wick will be raised or lowered to adjust it for burning, or removed from the lamp.

This lamp, so far as I have now described it, is not new; but in the movement of the wick-shifter b^2 by means of the bar E, as described,

a difficulty is experienced which it is the purpose of my improvement to remedy.

It will be observed that the bar E is held and supported in the slot e only on its sides, and possibly on its outer edge, it being left free to move toward the wick-tube B, and this
55 is necessarily so, as the slot e must be unobstructed between the said bar and tube to permit the arm b^2 to pass through it. When the top end of E is pushed over toward B, (and this is very likely to occur whenever the bar is
60 pulled upward or pressed downward,) the band b' is tilted on the wick-tube, and thereby made to bind thereon, and thus the easy and accurate adjustment of the wick is interfered with. To obviate this difficulty I provide ways for
65 guiding the bar E that insure the vertical movement of the bar parallel to the tube B. To this end I secure in the radial slot e two guide-plates, e' , between which the bar runs. These plates extend above (and preferably also
70 below) the top of the fount A sufficiently to furnish a suitable support to the said bar. In the inner faces of these plates are made vertical grooves or ways e^2 , and on the said bar guide-ribs e^3 , fitted to run in said ways, so that
75 the bar will be prevented, while moving up and down, from being tilted over toward the tube B, thereby preventing the ring b' from binding on tube B and causing it to slide truly and freely thereon, while the slot e is left un-
80 obstructed, to permit the arm b^2 to pass through it in putting in and taking out the wick and wick-shifter.

e^4 is a rack formed on the bar E, and e^5 is a toothed pinion, the shaft of which is journaled
85 in the plates e' , the pinion meshing with the rack. On said shaft is a milled head, e^6 , for convenient rotation of the pinion. When this rack and pinion are employed to raise and lower the bar E, the action of the pinion on the
90 rack tends to thrust the bar away from the pinion and out of parallel to the tube B, and thus cause the band b' to bind on the tube. The described ways and ribs hold the bar against this thrust. The said guideways and
95 ribs are preferably triangular in form, as shown in the drawings; but they may be of any other suitable form. By their means the movement

of the said bar E and the ring b' accurately parallel to the tube B is insured, and the binding of said ring on the tube is prevented, while, as before stated, the slot e is left unobstructed, 5 to permit the arm b' to pass through it in putting in and taking out the wick.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In combination, in an Argand lamp, the 10 fount provided with a slot, e , the guide-plates e' , secured on the top of the fount, one on each side of said slot, and provided with a groove, e^2 , the wick-tube B, the wick-shifter b' on said tube and fitted to sustain and hold the wick C, 15 the bar E, connected by an arm, b^2 , to the wick-shifter and extending upward above the top of the fount between the plates e' , and provided with a rib, e^3 , fitted to slide in said groove, whereby said bar and wick-shifter in their ver- 20 tical movement are held parallel to the tube B,

while the slot is unobstructed, to permit the wick-shifter, arm, and bar to be introduced into and removed from the lamp, all as and for the purpose described.

2. The combination, in an Argand lamp, 25 with the fount A, provided with the slot e , the guide-plates e' , secured on the top of the fount, one on each side of said slot, and provided with a groove, e^2 , the wick-tube B, wick-shifter b' on said tube, bar E, connected by arm b^2 to the 30 wick-shifter and extending upward above the top of the fount between the plates e' , and provided with a rib, e^3 , fitted to slide in groove e^2 , of the described rack and pinion, adapted to raise and lower the said bar and wick- 35 shifter, all as and for the purpose described.

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Witnesses:

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