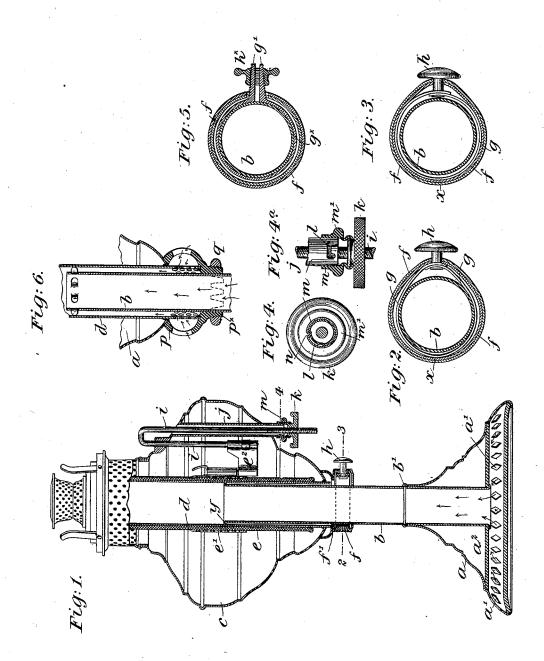
(No Model.)

## J. F. PLACE.

No. 422,537.

Patented Mar. 4, 1890.



INVENTOR:

WITNESSES:

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## UNITED STATES PATENT OFFICE.

JAMES F. PLACE, OF MONTCLAIR, NEW JERSEY, ASSIGNOR TO HOLMES, BOOTH & HAYDENS, OF NEW YORK, N. Y.

## LAMP.

SPECIFICATION forming part of Letters Patent No. 422,537, dated March 4, 1890.

Application filed June 14, 1889. Serial No. 314,203. (No model.)

To all whom it may concern:

Be it known that I, James F. Place, a citizen of the United States, and a resident of Montclair, Essex county, New Jersey, have invented certain Improvements in Lamps, of which the following is a specification.

My invention relates to central-draft lamps; and the object of my invention is, in part, to provide a telescopic stem for the lamp, whereto by the reservoir and the burner thereon may be raised or lowered and fixed at any height desired, and in part to improve the wick-operating mechanism.

My invention will be fully described here-15 inafter, and its novel features carefully de-

fined in the claims.

In the accompanying drawings, illustrative of my invention, Figure 1 is a vertical axial section, on a small scale, of a central-draft lamp embodying my improvements. Figs. 2 and 3 are detached sectional views on a scale double that of Fig. 1, illustrative of the construction and operation of the clamping device. The plane in which these sections are taken is indicated by the line 2 3 in Fig. 1. Figs. 4 and 4° are views on a scale double that of Fig. 1, illustrating the construction of the wick-controlling device. The plane in which the section, Fig. 4, is taken is indicated by the line 4 in Fig. 1. Figs. 5 and 6 illustrate modified constructions that will be hereinafter described.

In the ordinary central-draft lamp the body or reservoir of the lamp is fixed to the stem, which latter rises from the foot or base, and the burner is of course always at the same distance above the table upon which the lamp rests. It is well understood by lamp users that this unalterability of the burner or point of illumination is objectionable, and in some classes of table-lamps the reservoir and burner have been made adjustable on the stem. The main purpose of my present invention is to apply this principle of vertical adjustability to that style of central-draft stand-lamps wherein the supporting stem, which is usually tubular and forms an airpassage, has its axis aligned with that of the wick-tube; and in earrying out my invention in its simplest form I provide a hollow base

or foot a, having apertures a' for the admission of air, and mount on this base a tubular stem b, which opens into the hollow of the foot a at its lower end. The reservoir or body c of the lamp is provided with the usual 55 central tube d, which is embraced by the tubular wick e. This central tube d, which forms the passage for the air that provides the lamp with a central draft, opens out at the bottom of the reservoir c and the tubular 60 stem b enters it. The construction of the tubes b and d is telescopic, and permits the reservoir to be raised or lowered on the stem to any height desired within limits. Usually this limit will be governed in this manner: 65 When the reservoir is lowered until it rests upon the foot a, the upper end of the stem bwill stand just below the upper end of the central draft-tube d.

In order to clamp the reservoir to the stem 70 b at any height at which it may be set, I provide the lamp with a suitable clamping device, which may be constructed in various ways.

I will describe the form of clamp I prefer, 75 which is automatic, and requires only a moderate pressure of the thumb to release it.

At the base of the reservoir c is an annular casing f, which forms an annular chamber about the tube b, as best seen in Figs. 2 and 80 3. In this chamber is placed a steel springclamp g, in the nature of a hoop having an elliptical or oval form, and adapted normally to embrace and clasp the stem b on opposite sides with sufficient force to prevent the res- 85 ervoir from slipping on the stem, as seen in Fig. 2. This elliptical spring is loosely confined edgewise in the casing f, and can have no vertical play independently of the reservoir. To the spring g is secured a push-but- 90 ton h, the stem of which passes through the wall of the casing f. The attachment of the button to the spring is made at the point where the oval spring stands off from the stem b, and opposite to this point of attach- 95 ment—namely, at x in Figs. 2 and 3—the spring bears on or against the wall of the casing f. Fig. 2 shows the spring as clamping on the stem b. When the button h is pressed, the loop of the spring g will be expanded, as 100 422,537

shown in Fig. 3, assuming more nearly a circular form, and being thus expanded and moved out of contact with the stem b the reservoir may be moved freely up or down on the stem. As soon as the pressure is removed from the button the spring will again contract and clasp the stem.

I prefer to attach the oval spring to the pushbutton and to leave said spring unattached 10 to the easing, as this mode of construction enables the parts of the lamp to be assembled the more conveniently; but the ordinary skill and judgment of the mechanic will suggest other equivalent modes of construction.

In order to prevent the user from lifting the reservoir entirely off from the stem b, I prefer to make the stem a little less in diameter than the tube d, but of the proper diameter to fit snugly within the aperture in the casing 20 f. After assembling the parts the reservoir is pushed down as far as it will go, and a tool is inserted at the top of the tube d, and the upper end of the tubular stem flanged or flared outward, as seen at y in Fig. 1. This 25 flange serves as a stop, and when the reservoir is lifted until this stop engages the upper margin f' of the casing f the reservoir can be lifted no higher. The tube d rests at its base on the margin f'.

The tubular stem b is provided with a bead b', which rests upon the foot a, and its lower extremity passes through an aperture in a disk  $a^2$ , which forms a part of the foot, and is clinched thereon by flaring its extremity,

35 as shown in Fig. 1.

In a pending application, Serial No. 305,260, filed March 23, 1889, I have set forth a means whereby the lamp may be extinguished by the sudden drawing down of the ignited por-40 tion of the wick within the annular space between the inner and outer wick-tubes. I have shown in the present application another and somewhat simpler device for accomplishing the same result, and this I will now 45 describe with especial reference to Figs. 1, 4, and 4ª.

The tubular wick e is embraced by a wickcarrying band e', to which is detachably connected an offset handle  $e^3$ , attached to the 5° feed-screw i. This screw is a rod bent into a U form. It passes out through the crown of the reservoir c, and its outer branch passes down through a partition-tube j, which is secured in the body of the reservoir, thus 55 bringing the adjusting-nut k below the reservoir. So far as above described nothing novel is presented. The tube j projects downwardly from the reservoir, and in it is formed an Lshaped depression or slot l, (seen in Fig. 4a,) 60 which represents in elevation this pendent end of the tube. On the nut k is collared a sleeve m, which is constructed to slip over and fit on the tube j. On the inner face of the sleeve m, where it embraces the tube, is a 65 projection n. (Seen in Fig. 4.) This projec-

tion is made to engage the slot or depression

known bayonet lock or fastening. When the sleeve m is locked to the tube j, the nut k may be employed in the usual way to raise and 70 lower the wick through the medium of the screw i; but when the lamp is to be extinguished the operator imparts to the sleeve m a partial rotation in such a way as to disengage the bayonet fastening, and then draws 75 down the feed-screw as far as it can be drawn by a quick movement. This will extinguish the flame by drawing the ignited end of the wick suddenly down to an extent sufficient to deprive it of air. The sleeve m 80 is, or may be provided with a milled boss m'. as shown in Fig. 4a, to enable it to be turned the more conveniently with the thumb and finger. This form of wick-controlling device is adapted for overhead lamps as well as for 85 stand-lamps, owing to the arrangement of the nut k below the reservoir. The device illustrated in my pending application, before referred to, is best suited to stand-lamps.

In Fig. 5, which is a sectional view similar 90 to Fig. 2, I have shown another form of clamp to hold the reservoir in place on the stem. In this view b represents the tubular stem, and f the casing for the clamp. A spring-band g embraces the stem, but does not clamp the 95 stem normally. On the free ends of the bands are two studs which project from the casing f and form a conical split screw g', on which is screwed a nut  $h^{\times}$ . When this nut is screwed up, it causes the band  $g^{\times}$  to clamp on 100

the stem  $\hat{b}$ .

In Fig. 6 is illustrated a slight modification. In this construction the tubular stem b has a diameter somewhat less than that of the tube d, and a portion of the air which 105 forms the central draft of the lamp passes up between the two tubes, this portion of the air entering at apertures in a casting p, secured to the lower part of the oil-reservoir a. The tube d is fixed in this casting and has per- 110 forations in it at this point to permit the air to enter it. The clamp in this construction is formed by slitting the conical extremity  $p^{\times}$  of the casting p, where it embraces the stem b, and forming a screw-thread on this 115 conical extremity. On this screw-thread is screwed a nut q. The slitting of the cone forms spring-fingers and allows the nut to press these fingers tightly onto the tubular

Having thus described my invention, I claim-

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1. In a central-draft lamp, the combination of a reservoir having a central draft-flue, a base-piece or pedestal constructed to receive 125 air, and a telescopic tube or pillar intermediate of the base-piece or pedestal and the reservoir and communicating at one end with the base-piece or pedestal and at the other with the central draft-tube of the reservoir, 130 substantially as specified.

2. In a central-draft lamp, the combination, with a lamp comprising a central air-tube l in the tube and form therewith the well-land a base, of a pillar constructed to slide 422,537

within said air-tube, and a locking device,

substantially as specified.

3. In a stand-lamp, the combination, with the reservoir and the wick-tube therein, said tube forming the air-passage for the central draft, of the foot or base of the lamp, the stem on said foot extending up into said wicktube and telescoping therewith, and the clamp carried by the reservoir for clamping the latter to the stem.

4. In a lamp, the combination, with the reservoir, the wick-tube therein, the base or foot, and the stem telescoping with the wick-tube, of the casing of the clamp, the elliptical 15 spring therein embracing and normally clasp-

ing said stem, and the spring-actuating push-button projecting from said casing.
5. In a lamp, the combination, with the foot and the tubular stem mounted therein 20 and open to the atmosphere at its lower end, of the reservoir, the wick-tube d in said reservoir and telescoping with said tubular stem, and a clamp carried by the reservoir for clamping the latter fast to said stem.

6. In a lamp, the combination, with the reservoir provided with a partition-tube and a wick-tube and the ordinary wick-carrying band, offset handle, U-shaped feed-screw, and regulating-nut, of a sleeve m, collared on the 30 regulating-nut and detachably connected to

the depending extremity of the partitiontube, substantially as and for the purposes

set forth.

7. In a lamp, the combination, with the reservoir and wick-tube and the ordinary wick- 35 carrying band, the offset handle, the U-shaped feed-screw, the regulating-nut, and the partition-tube, of the sleeve m, collared on the nut and fitting on the projecting end of said partition-tube, the tube and sleeve being pro- 40 vided, respectively, with the elements which form a bayonet-fastening, as and for the purposes set forth.

8. In a stand-lamp, the combination, with the reservoir and the wick-tube fixed there- 45 in, said tube forming the passage for the central draft, of the foot or base of the lamp, the stem on said foot extending up into and telescoping with said wick-tube, the clamp borne by the reservoir for clamping it fast to said 50 stem, and a stop, substantially as described, on said stem to prevent the removal of the

reservoir therefrom.

In witness whereof I have hereunto signed my name in the presence of two subscribing 55

witnesses.

JAMES F. PLACE.

Witnesses: HENRY CONNETT, J. D. CAPLINGER.