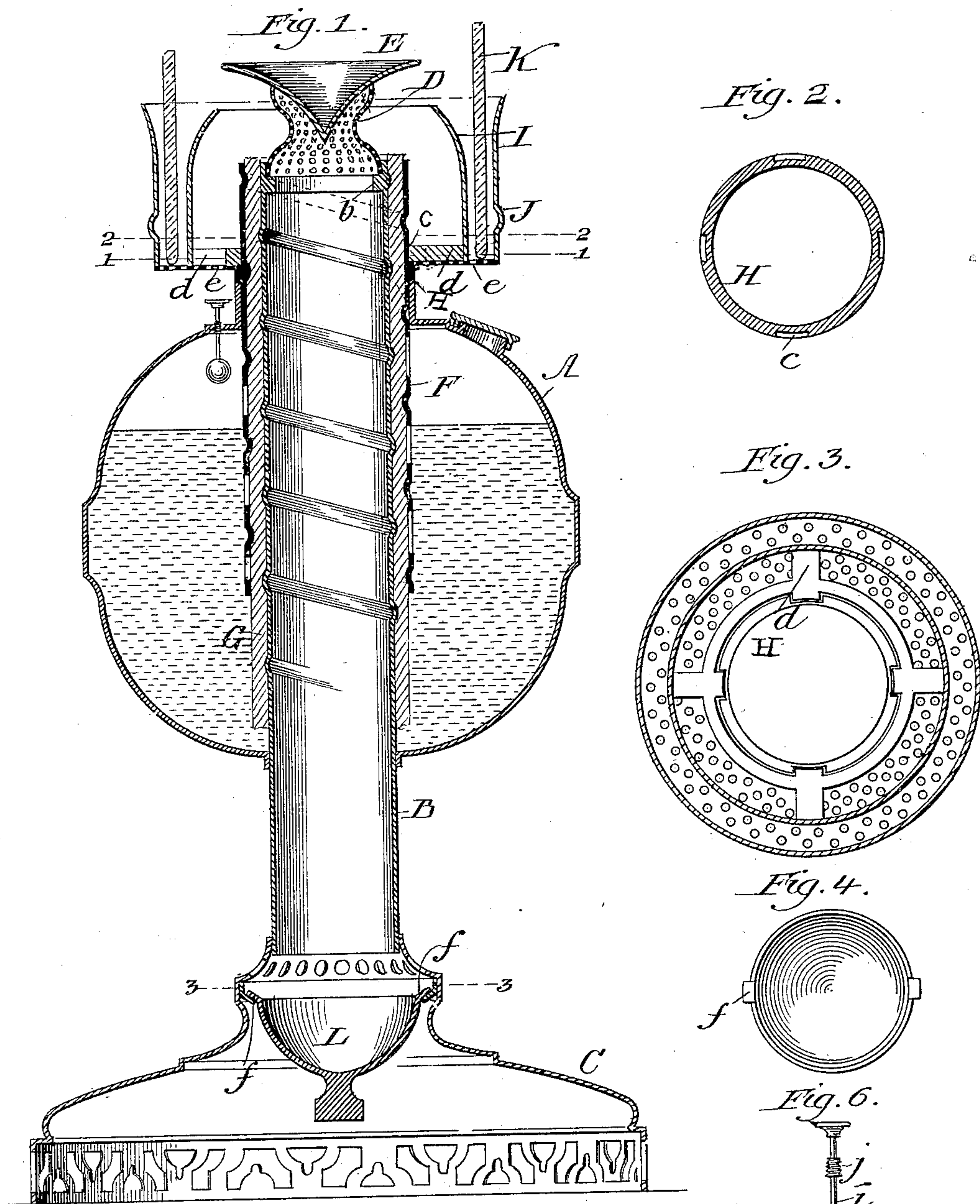


(No Model.)

W. C. THAYER.
LAMP.

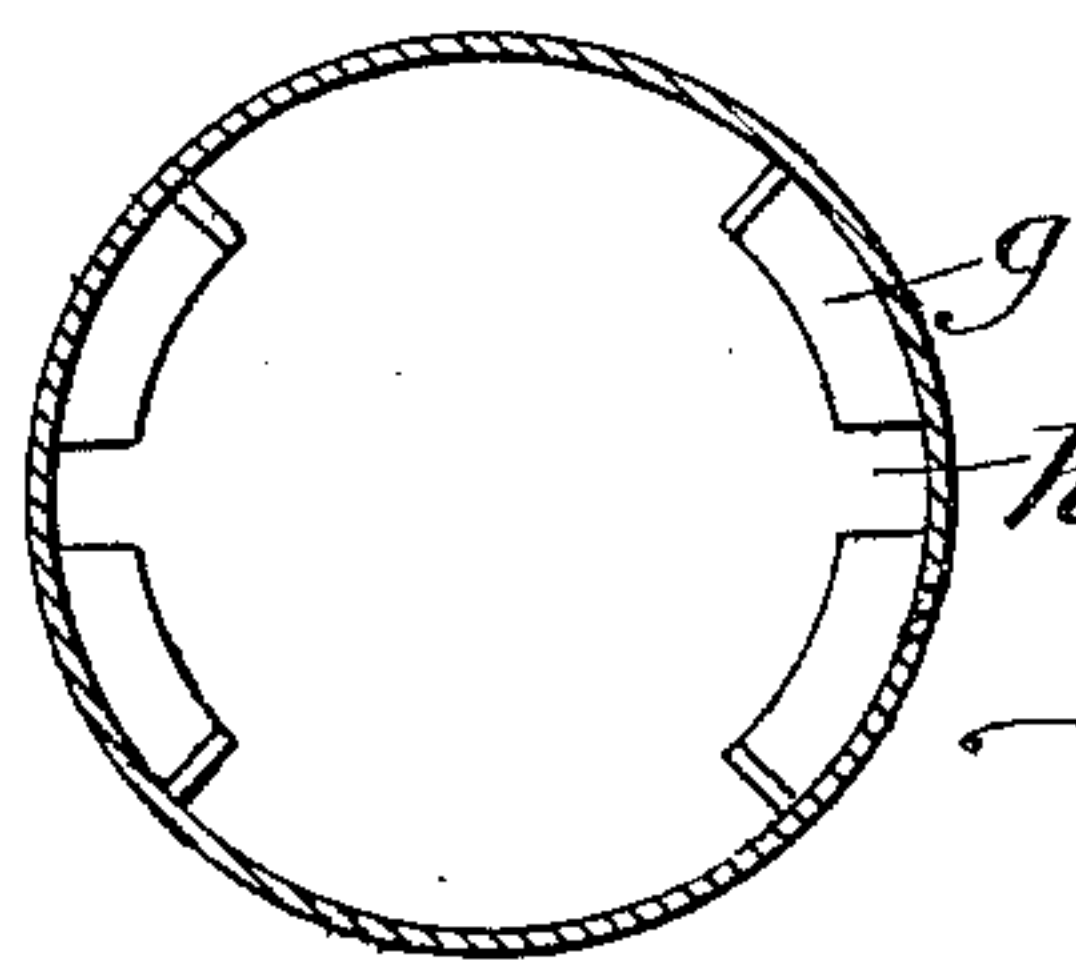
No. 318,521.

Patented May 26, 1885.



Witnesses:

Frank J. Blanchard
Wm. J. Clagett



Inventor

William C. Thayer

By Wm H. Lotz
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM C. THAYER, OF CHICAGO, ILLINOIS.

LAMP.

SPECIFICATION forming part of Letters Patent No. 318,521, dated May 26, 1885.

Application filed March 5, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. THAYER, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Lamps, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in lamps.

The object of the invention is to improve the general construction of lamps; and to that end it consists, first, in the novel means employed for supporting the deflector for spreading the flame, and in the novel construction and arrangement thereof, whereby the construction of the lamp is simplified and combustion improved; second, in the novel construction of the cone of the lamp and the novel arrangement of the chimney in connection therewith; third, in the novel means employed for operating the wick to increase or diminish the flame; fourth, in the novel drip arrangement; fifth, in the novel arrangement and construction of the oil-indicating float; and, sixth, in the novel devices and combination of devices employed in carrying out the invention.

Reference will be made to the accompanying drawings, in which Figure 1 is a sectional view of the lamp; Fig. 2, a section through a notched collar or ring placed around a revolving wick-raising tube; Fig. 3, a section on line 2 2, same figure; Fig. 4, a top plan of the drip-cup; Fig. 5, a section on line 3 3, and Fig. 6 a detail.

Like letters refer to like parts in each view.

A represents the oil-fount or body of the lamp, and B a tube passed therethrough. At its lower end tube B is made flaring to form the base C of the lamp, which is provided with perforations for the admission of air through tube B to the flame; or, if to be used as a hanging lamp, the tube B may be cut off slightly below fount A and screw-threaded, to be screwed to any suitable support.

Upon the interior of tube B, and at a point near the upper end thereof, is formed a circular lug or ring, b, upon which a perforated ring, D, rests. Ring D, which is preferably of

the shape shown, projects above the upper end of tube B, and upon its upper edge the deflector E is formed or rests. Through the perforations in ring D air rising in tube B passes to the flame and helps combustion. By means of the construction thus far described the tube now in common use for supporting deflector E is done away with and the air fed with greater regularity, preventing the flame from being affected injuriously by sudden gusts or heavy drafts; and, further, by having the air rising in tube B strike the lower pointed end of the deflector, it is more perfectly fed to the flame, and in a heated condition, because of the close proximity of said deflector to the flame. Where tube B is passed through the bottom of fount A, a close joint is made between the two, to prevent leakage; but the opening in the top of the fount is sufficiently large to allow of the insertion of a tube, F, between which and tube B a sufficient space is left for the insertion of the wick G, the upper edge of the two tubes being on the same plane and the upper edge of the wick, when ignited, protruding thereabove.

Passed around and secured to tube F, above fount A, is a collar, H, at suitable points in which notches c are formed, the number of such notches being determined by the number of arms projecting inwardly from cone I, as will now be described.

Secured to the inner face of cone I are a series of inwardly-projecting arms, d, each one of said arms resting in one of the notches c above referred to, this arrangement giving a support for the cone, and at the same time providing for the revolution of collar H and tube F, to which said collar is secured, upon the revolution of said cone, the object of which will be described. A ring, J, surrounds cone I, there being sufficient space between the two for the insertion of chimney K, and said ring and cone being secured at their lower edges to a perforated disk, e, in the center of which is formed an opening for the passage there-through of tubes B F, the cone, ring J, and disk e all forming, when constructed and arranged as described, one piece, or the cone, ring, and the arms d may be formed of a single sheet of metal, if desired. Through the perforations

in disk *e* air is admitted to the flame to assist combustion. Tube F is provided on its inner surface with a female screw, and tube B, upon its outer surface, with a male screw, or vice versa, and the wick confined between said tubes is raised or lowered upon the revolution of said tube F, through the medium of cone I and the connections described.

L represents an inverted cone-shaped drip-cup upon the upper edge, and on diametrically-opposite sides of which are formed lugs *f*, Fig. 4.

Secured to the inner face of base C are two ledges or lugs, *g*, each provided with a notch, *h*, arranged to be diametrically opposite each other. By passing the lugs of drip-cup L through notches *h* and partly turning said cup it will be supported removably upon ledges *g*, the parts being so arranged that the cup will occupy a position directly below tube B and catch all drip.

It will be understood that in place of ledges *g* a continuous ring may be employed; but in such case it would be necessary to provide perforations therein to allow of the passage of the air-currents.

M represents a float, situated within the fount and secured to a stem, *i*, passed through a screw-threaded opening formed therein. For a short distance I provide stem *i* with a screw-thread, as at *j*, Fig. 6. By this arrangement, when the float is to be used as an indicator it will be free to rise and fall with the oil; but when not in use a perfectly close joint can be formed between it and the fount, to prevent the escape of odors from the fount.

I am aware of the existence of Letters Patent No. 268,856, issued on the 12th of December, 1882, to Blackman, and therefore disclaim all features thereof. The Blackman patent shows a construction wherein the use of a rod or tube passing down through the central air-

tube for the support of the deflector is necessitated, an arrangement which is avoided by the use of my ring and perforated collar, serving as a support for the deflector and avoiding the use of such rod or tube.

What I claim is—

1. The combination, with a main air-supply tube provided near its upper end with a suitable support, of a perforated ring resting on said support and a deflector supported by said ring, as and for the purpose set forth.

2. The combination, with a stationary and revolving tube provided with male and female screws, of a notched collar secured to the revolving tube and a burner-cone provided with inwardly-projecting arms resting in said collar, as and for the purpose set forth.

3. In a lamp, a drip-cup provided upon diametrically-opposite sides with suitable lugs, and situated within the interior of the base of said lamp, in combination with said base provided with notched ledges, as set forth.

4. The combination, with cone I, provided with inwardly-projecting arms *d*, ring J, surrounding said cone, and perforated disk *e*, of notched collar H, revolving tube F, stationary tube B, and wick G, tubes B and F being provided with male and female screws, as and for the purpose set forth.

5. The fount A, provided with a screw-threaded opening, in combination with stem *i*, provided with a screw-threaded section, *j*, and float M, secured to said stem, as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM C. THAYER.

Witnesses:

M. J. CLAGETT,
LOUIS NOLTING.