

J. H. PURDY.
LAMP.
APPLICATION FILED JAN. 3, 1910.

959,804.

Patented May 31, 1910.

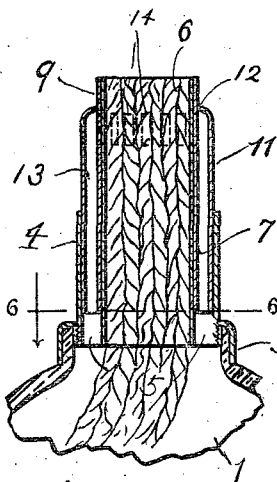


Fig. 2.

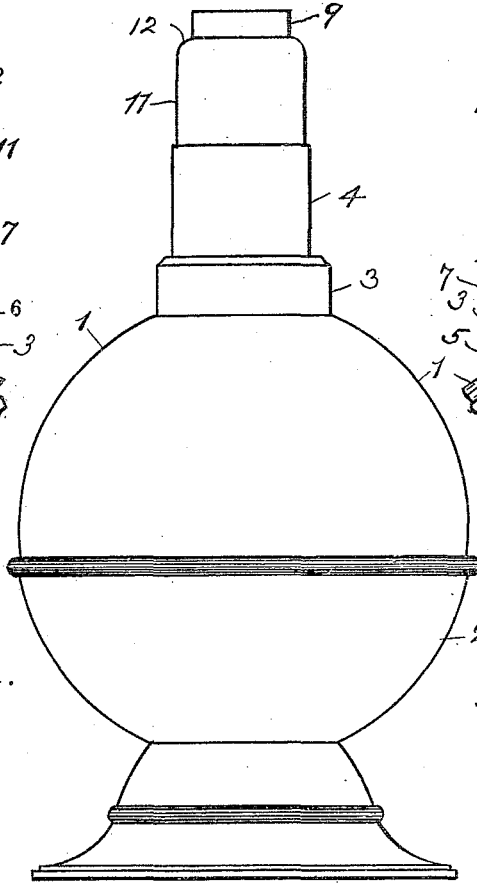


Fig. 1.

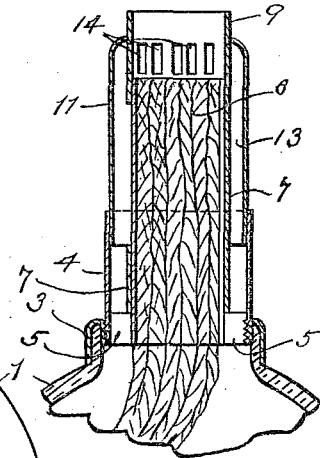


Fig. 3.

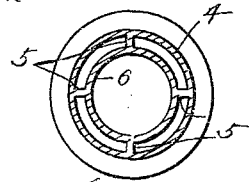


Fig. 6.

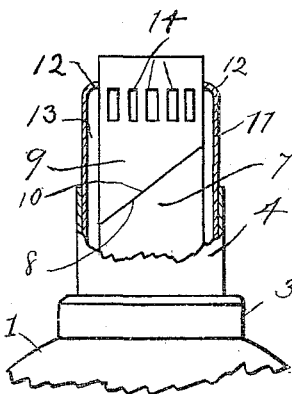


Fig. 4.

Witnesses:
L. B. Brownson
Charles Johnson.

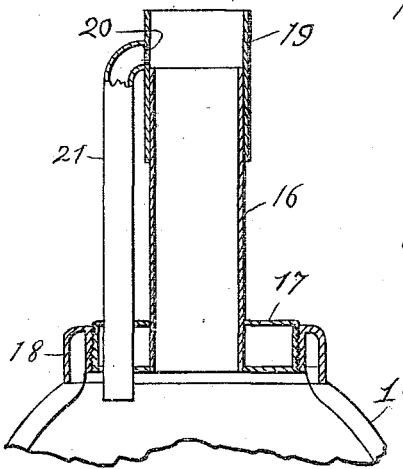


Fig. 7.

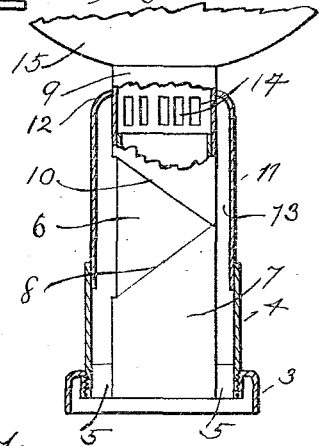


Fig. 5.

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UNITED STATES PATENT OFFICE.

JOHN H. PURDY, OF CHICAGO, ILLINOIS.

LAMP.

959,804.

Specification of Letters Patent. Patented May 31, 1910.

Application filed January 3, 1910. Serial No. 536,188.

To all whom it may concern:

Be it known that I, JOHN H. PURDY, a citizen of the United States, 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 description, reference being had to the accompanying drawings, forming a part of this specification, in which corresponding numerals of reference in the different figures indicate like parts.

The object of my invention is to provide a lamp with a wick holding portion which shall be so constructed that the lamp may be readily filled without removing the wick and without danger of spilling the liquid.

To these ends my invention consists in the combination of elements hereinafter more particularly described and definitely set forth in the claims.

In the drawings,—Figure 1 is an elevation of a jeweler's lamp embodying my improvement; Fig. 2 is a central vertical sectional view of a burner and a part of the font, showing the parts in their respective normal positions; Fig. 3 is a like sectional view showing the parts in the respective positions in which they would appear when filling the lamp; Fig. 4 is a view of the burner as it would appear when the parts are in their respective normal positions, with a portion broken away; Fig. 5 is a like view showing the parts in reversed positions, the outer walls being sectioned; Fig. 6 is a sectional view in plan, taken upon the line 6—Fig. 2; and Fig. 7 is a central vertical sectional view of a burner showing a modified construction.

My invention is intended more especially for application to jewelers' lamps, and in the example illustrated, 1 represents the body of a well known type of alcohol lamp, said body being spherical in form and loosely supported in a cup-shaped base 2, to enable the burner to be adjusted at will to varying angles of inclination.

Attached to the font in the ordinary way and surrounding the usual opening therein, is an ordinary collar or thimble 3, having an interior screw-thread for the reception of an open-ended tube 4, which is threaded upon its lower end. Supported within the tube 4 by means of radial arms 5, or any analogous means by which the two may be rigidly connected so as to leave an annular space between them, is a wick-tube 6 of con-

siderably less diameter than that of the tube 4. Fitted upon the lower outer portion of the tube 6 and rigidly attached thereto, is a tube 7 the upper end of which is cut obliquely to its axis upon the line 8, as shown in Figs. 4 and 5. The part 7 forms the counterpart of a telescoping tube 9 which is loosely fitted upon the tube 6 and has its lower end cut obliquely to its axis upon the line 10, so that when in its normal position the obliquely cut ends will fit against each other as indicated in Fig. 4, while the upper ends of the tubes 6 and 9 will be even. When, however, the loose tube 9 is turned upon its axis, the oblique edges 8 and 10 slide upon each other with a cam-like action which causes the tube 9 to be lifted so that when a full half turn is made said tube will stand with its upper end raised above that of the tube 6, as indicated in Fig. 5.

Surrounding the tube 9 is a tube 11 of larger diameter, which I term the conduit tube, the upper end of which is drawn inwardly, preferably as shown at 12, and soldered or otherwise permanently attached to the tube 9 somewhat below the upper end of the latter. The diameter of the tube 11 is such as to enable it to fit closely within so as to telescope with the tube 4, the lower end of said tube 11 being open. An annular space 13 is therefore formed between the tubes 11 and 9 which is in direct communication with the font.

One or more, but preferably a series, of perforations 14, shown in Figs. 3, 4 and 5, and indicated in dotted lines in Fig. 2, are formed in the tube 9 just below the point of connection between it and the tube 11. The parts are so adjusted with reference to the wick-tube 6, that when the tube 9 is in its normal position, the perforations will be below the level of the upper end of the wick-tube, as indicated in Fig. 2, but when the tube 9 is rotated so as to stand in the position shown in Figs. 3 and 5, the openings 14 will be exposed so as to be in communication with the space 13. Liquid poured into the upper end of the tube 9 upon the upper end of the wick when the tube 9 is so raised will flow laterally through said openings into the annular space 13, and thence into the font.

In order to facilitate the pouring of liquid into the tube 9, I provide a funnel 15, Fig. 6, the body of which is semi-spherical, so that it may be kept within the part 2 when not in use, the size being such as to fit the

outer surface of the spherical font. Said funnel is provided with a very short nozzle so as to fit within the upper end of the tube 9 without closing the openings 14.

5 Not only does the tube 9 serve as a means for filling the lamp without interfering with the wick or removing the tube 4, but it may be used as well for regulating the flame. The advantages of the device are too obvious
10 to require special mention.

Instead of providing the tube 7 and cutting it and the tube 9 obliquely as described for raising and lowering the tube 9, it is obvious that the outer tube may be formed in a
15 similar manner with a like result.

In Fig. 7, I have shown a modification of said invention, in which the outer telescoping tubes are dispensed with, while the tube upon the wick-tube is made to slide without
20 rotation. In this construction the wick-tube 16 is rigidly secured within a fitting 17 adapted to screw into an enlarged collar 18 upon the lamp reservoir. A tube 19 is arranged to slide upon the upper portion of
25 the wick-tube, and has an opening 20 therein around which is fitted the end of a bent tube or conduit 21, the lower end of which passes loosely through an opening in the fitting 17. The tube 21 is of such length as to enable its
30 lower end to be in communication with the font when the tube 19 is raised to its full height. When so raised the opening 20 will stand above the top of the wick-tube and the lamp may be filled by raising the tube 19
35 and pouring the liquid therein, when it will pass through the opening 20 and conduit 21 into the font. Inasmuch as the primary object is to provide a temporary cup or cavity above the wick which may communicate directly with the reservoir so that the liquid
40 may enter the latter when poured upon the top of the wick, it is obvious that the tubes 19 and 21 may be made stationary and that the wick-tube 16 may be slidably connected
45 with the part 17, so that when the former is lowered the opening 21 may be exposed, and

when raised the ends of the two tubes may be even. In such case the wick-tube should be made somewhat longer.

Having thus described my invention, I 50 claim:—

1. A filling device for lamps in which is combined a wick-tube, a telescoping tube mounted upon said wick-tube, a tube of larger diameter than that of said telescoping 55 tube, the same being connected therewith at the top but open at the bottom, another tube extending upwardly from the reservoir opening to receive the lower end of said last-named tube, said telescoping tube being per- 60 forated to provide communication between its interior and the annular space between said telescoping tube and the one by which it is surrounded.

2. A filling device for lamps comprising a 65 wick-tube inclosed within an outer tube secured within the font opening, a telescoping tube mounted upon said wick-tube, and a conduit tube arranged to telescope with said outer tube, the lower end of said conduit 70 tube being open while the upper end thereof is closed around said first named telescoping tube, which latter is perforated below the level of said connection.

3. A filling device for lamps comprising a 75 wick-tube and an inclosing tube, the two being arranged to telescope, and a conduit in communication with the reservoir and the outer tube, whereby when one of said telescoping tubes is moved longitudinally with respect 80 to the other a cavity or receiving chamber may be formed above the wick for the reception of liquid to flow therefrom into the reservoir.

In testimony whereof, I have signed this 85 specification in the presence of two subscribing witnesses, this 30th day of December 1909.

JOHN H. PURDY.

Witnesses:

D. H. FLETCHER,
CARRIE E. JORDAN.