(No Model.)

S. G. DODD.

LAMP.

No. 458,826. Patented Sept. 1, 1891.

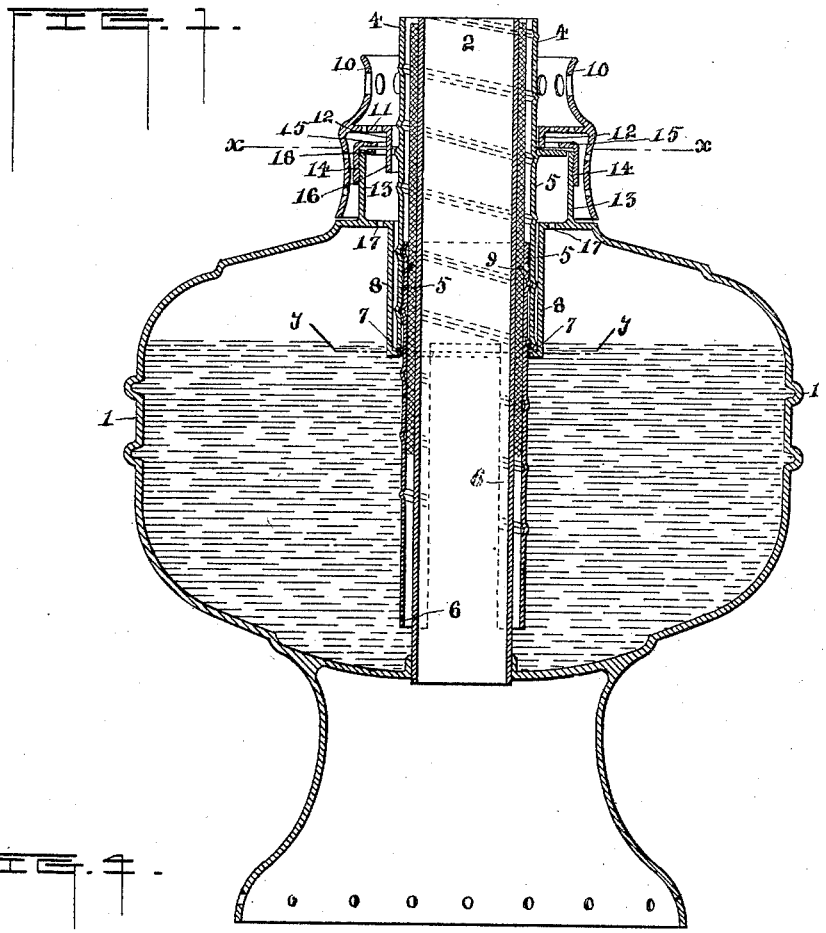


FIG. 4.

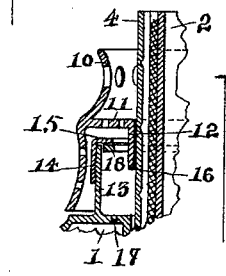


FIG. 2.

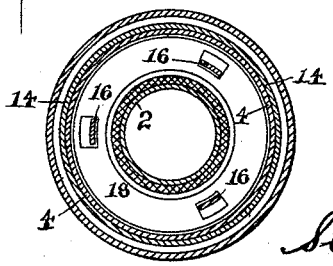
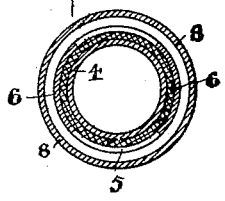


FIG. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

STEPHEN GROVER DODD, OF FORT ASSINABOINE, MONTANA.

LAMP.

SPECIFICATION forming part of Letters Patent No. 458,826, dated September 1, 1891.

Application filed February 19, 1891. Serial No. 382,042. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN GROVER DODD, a resident of Fort Assinaboine, in the county of Choteau and State of Montana, have invented certain new and useful Improvements in Lamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

The invention relates to lamps provided with annular wick-tubes and to wick-raising devices; and it consists in the construction hereinafter described, and particularly pointed out.

In the accompanying drawings, Figure 1 is a central vertical section of a lamp with my invention applied thereto. Fig. 2 is a horizontal section on line *x x* of Fig. 1. Fig. 3 is a similar view on line *y y* of the same figure looking up. Fig. 4 is a sectional detail of a modification of the screw-thread of the outer wick-tube.

Numeral 1 indicates the lamp-bowl or oil-receptacle, and 2 the central air-tube, which also constitutes the inner wick-tube.

4 denotes the outer wick-tube, which is screw-threaded and adapted to engage the similarly-threaded wick-holder 5. This is in the form of a ring, which is preferably provided with two extensions 6, that pass into or through openings 7 in the top of the lamp. In the present instance the openings are formed in the bottom of a well 8, formed in the lamp-top and into which extends the exterior wick-tube.

The wick-holder is provided with teeth of usual form to engage the wick. (Indicated by 9.)

The chimney-holder comprises a vertical perforated cylinder 10, a horizontal perforated air-distributing plate 11, which is adapted to receive the foot of the chimney, and an inner ring 12, which is fitted to the exterior wick-tube.

13 is a ring secured to the lamp-top and adapted to receive the screw-threaded ring 14, provided with an inwardly-turned flange 15. At the bottom of the inner ring 12 of the chimney-holder are projections 16, which extend downwardly a slight distance through a ring 18, fast on tube 4 and provided with perforations for air.

Air-inlets to the oil-reservoir are indicated at 17. Air enters by passing down through openings in a ring or flange 18, attached to tube 4. Oil creeping down the exterior wick-tube descends within the ring 13 and to the reservoir.

To raise or lower the wick, the chimney-holder is turned and with it the outer wick-tube, which, by reason of its connection with the wick-holder, will cause it to move in a vertical direction up or down, according to the direction of the turning. This effect results from the screw-threaded connection of the wick tube and holder and from the fact that the latter is held against rotation by its engagement with the lamp and the former against vertical movement upwardly by the ring 18 under flange 15, and against a like downward movement by reason of its feet resting upon the bottom of the well 8.

It will be noted that by the means above described the wick is moved up or down without the liability of being twisted, and that the devices for effecting the operation are simple and adapted to work steadily and with ease and uniformity.

The extensions 6 are by preference curved in cross-section and adapted to hold and guide the wick within the reservoir. Their particular form or number, however, is not essential to the use of the other parts of the improvement.

The chimney-holder and outer wick-tube and the wick-holder can all be removed by unscrewing the ring 14 for this purpose. When thus separated from the lamp a wick can readily be removed from its holder and be replaced by a fresh one, the holder having been entirely unscrewed from the wick-tube, after which the holder can be reinserted and together with said tube dropped into the top of the lamp, and thereupon the parts may be locked upon the lamp, as before described.

Having thus described my invention, what I desire to claim is—

1. The combination of a lamp-bowl, an air-tube, a screw-threaded wick-holder provided with projections to engage the bowl, the ex-

ternally-screw-threaded wick-tube, the chimney-holder connected with said wick-tube, a rim on said wick-tube, and a ring attached to the lamp, having a flange immediately above said rim, substantially as set forth.

2. The combination of a lamp-bowl provided with an air-tube and with a well or depression in its top, a wick-holder located close to the outer revoluble wick-tube, having projections extending below the bottom of the well and held against rotation thereby, the screw-threaded outer wick-tube engaging the holder and having its foot in the well and connected directly to the chimney-holder, and a device for preventing the vertical movement of said tube, substantially as set forth, whereby the outer wick-tube may be directly rotated by the chimney-gallery and the wick-holder raised without contact between said wick-tube and wick.

3. The combination of a lamp-bowl provided with an air-tube and with a well or depression in its top, a wick-holder having projections extending below the bottom of the well and held against rotation thereby, a screw-threaded outer wick-tube engaging the holder and having its foot in the well, and a flanged ring attached to the lamp-bowl for preventing the vertical movement of said tube, and a chimney-holder connected thereto, substantially as set forth.

4. The combination of a lamp-bowl provided with an air-tube and with a well or depression in its top, a wick-holder having projections extending below the bottom of the well and held against rotation thereby, a screw-threaded outer wick-tube engaging the holder and having its foot in the well, and a device for preventing the vertical movement of said tube, said device consisting of a ring fixed to the bowl and the screw-threaded and flanged ring engaging said fixed rail, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

STEPHEN GROVER DODD.

Witnesses:

SAMUEL J. HERON,

AMZI DODD, Jr.