

J. E. LEIGHTON.  
Lamps.

No. 138,509.

Patented May 6, 1873.

FIG. 1.

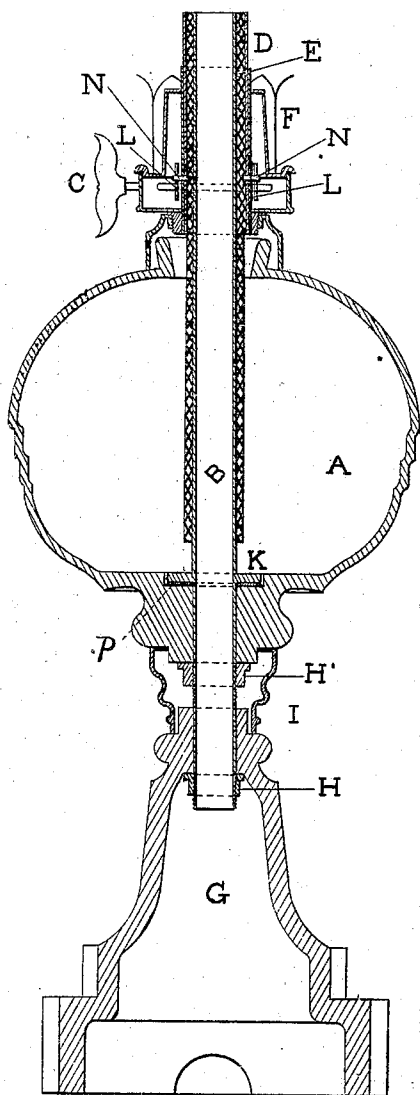


FIG. 3.

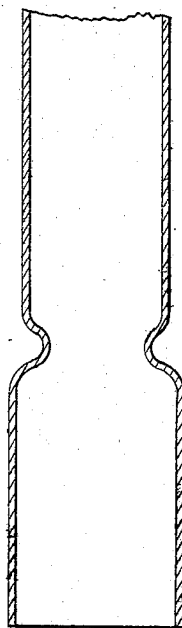
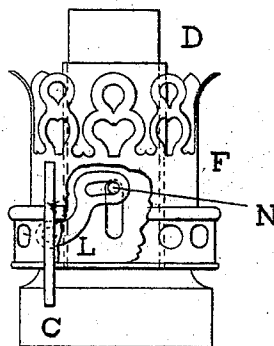


FIG. 2.



Witnesses  
L. Bonlan  
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Inventor,  
James E. Leighton by  
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# UNITED STATES PATENT OFFICE.

JAMES E. LEIGHTON, OF LOWELL, MASSACHUSETTS.

## IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. **138,509**, dated May 6, 1873; application filed January 18, 1873.

*To all whom it may concern:*

Be it known that I, JAMES E. LEIGHTON, of Lowell, in the county of Middlesex and Commonwealth of Massachusetts, have invented certain Improvements in Lamps, of which the following is a specification:

The first part of my invention relates to the combination of the center draft-tube, having upon the same a washer and one lock-nut, with a bowl of a lamp; the object of this part of my invention being to firmly and easily secure a center draft-tube to a lamp having no stand. The second part of my invention relates to the combination of certain operating parts for diminishing or increasing the combustion on the wick in such a manner that the wick is stationary, the regulating-tube working on the outside of the wick; the object of this part of my invention being to regulate the amount of combustion without disturbing the wick. The third part of my invention relates to the combination of the center draft-tube, having upon the same a washer and two lock-nuts, with the bowl and stand of the lamp; the object of this part of my invention being easily and firmly to secure the bowl and stand of the lamp together.

The accompanying drawing represents my invention.

Figure 1 is a section of my invention. Fig. 2 represents the cap to the lamp, showing the construction of my regulating device. Fig. 3 represents a glass chimney broken away at top.

A is the bowl of the lamp, secured firmly to the stand by means of the draft-tube B, having upon the same the washer K and lock-nuts H H'. C is the thumb-rod, extending through the cap at the rear of the draft-tube and connected with the eccentrics L L, by means of which the regulating-socket is operated. E is the outside tube of the cap, between which and the regulating-socket D is placed the wick. F is the outside casing of the cap. G is the stand of the lamp. H H' are two lock-nuts, operating in connection with the washer K upon the draft-tube B for the purpose of securing the bowl to the stand. I is a collar for the purpose of "break-

ing" the connection of the bowl and stand. K is a washer securely fastened to the draft-tube B, and under which is placed a leather or other suitable washer for the purpose of preventing the escape of the fluid from the bowl. N N are two pins firmly secured to the regulating-socket D, said pins operating in the slot of the eccentrics L L. P is a leather washer, inserted between the washer K and the bowl of the lamp to prevent the escape of the fluid in the lamp.

Many lamps are made without a stand; and in order to hold the draft-tube securely in its place I make use of one lock-nut, H, in combination with the washer K.

By means of the straight center draft-tube extending through the bowl and stand a perfectly-steady draft of air is furnished, however much the lamp may be used or moved about. This is not the case when the tube does not extend through the bowl and stand, but where the supply of air to support combustion is received through openings in the side of the tube. In this latter case every moving of the lamp produces a "flickering" of the flame.

By means of the draft-tube, in connection with the washer and lock-nuts, a simple and effective device is created for securing the bowl and stand together, and also securing firmly in its place the draft-tube.

I claim as my invention—

1. The center draft-tube B extending through the bowl of a lamp, when combined with the lock-nut H, packing P, and washer K, as and for the purpose specified.

2. The combination of the thumb-rod C, eccentrics L L, eccentric-pins N N with the regulating-socket D, as and for the purpose set forth.

3. The combination, with a center draft-tube of a lamp, of the lock-nuts H H', packing P, and washer K, as and for the purpose specified.

JAMES E. LEIGHTON.

Witnesses:

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ABEL T. ATHERTON.