

UNITED STATES PATENT OFFICE.

THOMAS LANGSTON, OF MERIDEN, CONNECTICUT, ASSIGNOR TO EDWARD H. FESSENDEN AND KATE E. JACOBSON, BOTH OF BROOKLYN, NEW YORK.

WICK-TUBE FOR LAMPS.

SPECIFICATION forming part of Letters Patent No. 404,848, dated June 11, 1889.

Application filed March 29, 1888. Serial No. 268,848. (No model.)

To all whom it may concern:

Be it known that I, THOMAS LANGSTON, of Meriden, New Haven county, State of Connecticut, have invented a certain new and
5 useful Improvement in Wick-Tubes for Lamps, of which the following is a specification.

I will describe a wick-tube embodying my improvement in detail, and then point out the
10 novel features in claims.

In the accompanying drawings, Figure 1 is a longitudinal section of a wick-tube embodying my improvement, taken on the plane of the line $x x$, Fig. 3. Fig. 2 is a view of a portion
15 of a wick-tube, a portion being broken away to save space. Fig. 3 is a horizontal section thereof, taken on the plane of the line $y y$, Fig. 1.

Similar letters of reference designate corresponding parts in all the figures.

A designates the outer wall of the wick-tube. It is cylindrical and made of metal. The inner wall of the wick-tube is composed of sections B B' and is also of metal. The
25 lower of these sections, or B, is longer than the upper section B'. Near its upper end the section B is bent inwardly, as at a . Above this inwardly-bent portion the reduced conoidal portion a' of the section B extends upwardly and inwardly and, as shown, at an angle. The section B' is, as shown, cylindrical throughout its length. At its lower
30 portion it extends downwardly about the portion a' of the section B. An annular space is thus formed between the section B' and the upwardly-extending portion a' of the section B. The section B' may be secured to the section B by solder or otherwise, as desired. I have shown it secured at four places by solder, as
40 at c . The solder maintains the section B' at a slight distance from the section B, as shown more clearly in Fig. 3, whereby spaces or ports are formed through which oil passing down the inner side of section B may pass out and
45 onto the wick. In case I do not employ means for thus maintaining the section B' out of contact with the section B, I may arrange opposite the upwardly-extending portion a' of the section B holes or perforations d in the

section B'. Oil descending upon the inner
50 side of the section B' will be prevented by the upwardly-extending portion a' from passing farther down the inner wall of the wick-tube and will pass outwardly through the perforations d against the wick.

C designates a button or spreader, which I may use, although I do not wish to be confined to the use of the form shown. This button or spreader is supported upon a post C'.
55 In this example of my improvement the post C' is supported in a spider C², the horizontally-extending arms of which are supported upon the upper edge of the upwardly-extending portion a' of the section B. I have shown the arms of the spider as having upwardly-turned
60 portions c , which bear against the section B' of the inner wall of the wick-tube. By this means the spider is steadied. I do not wish to be limited to the use of a spider in this connection, as any other suitable support may be
70 used.

It will be seen that by my improvement I am enabled to utilize the upper portion of the section B of the wick-tube not only to catch the oil passing down the inner wall of the
75 wick-tube, but also as a support for the button or spreader.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In an annular wick-tube, the combination, with the outer wall and the upper inner section having the perforations, of the section having the reduced conoidal upper end seated in the upper section, forming the annular spaces, substantially as specified.

2. The combination, with an annular wick-tube consisting of an outer wall and the inner wall comprising the upper section having perforations and the lower section having the reduced conoidal portion forming a support,
85 of the spreader having the spider base adapted to rest upon said support, substantially as specified.

THOMAS LANGSTON.

Witnesses:

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JOHN E. ARNOLD.