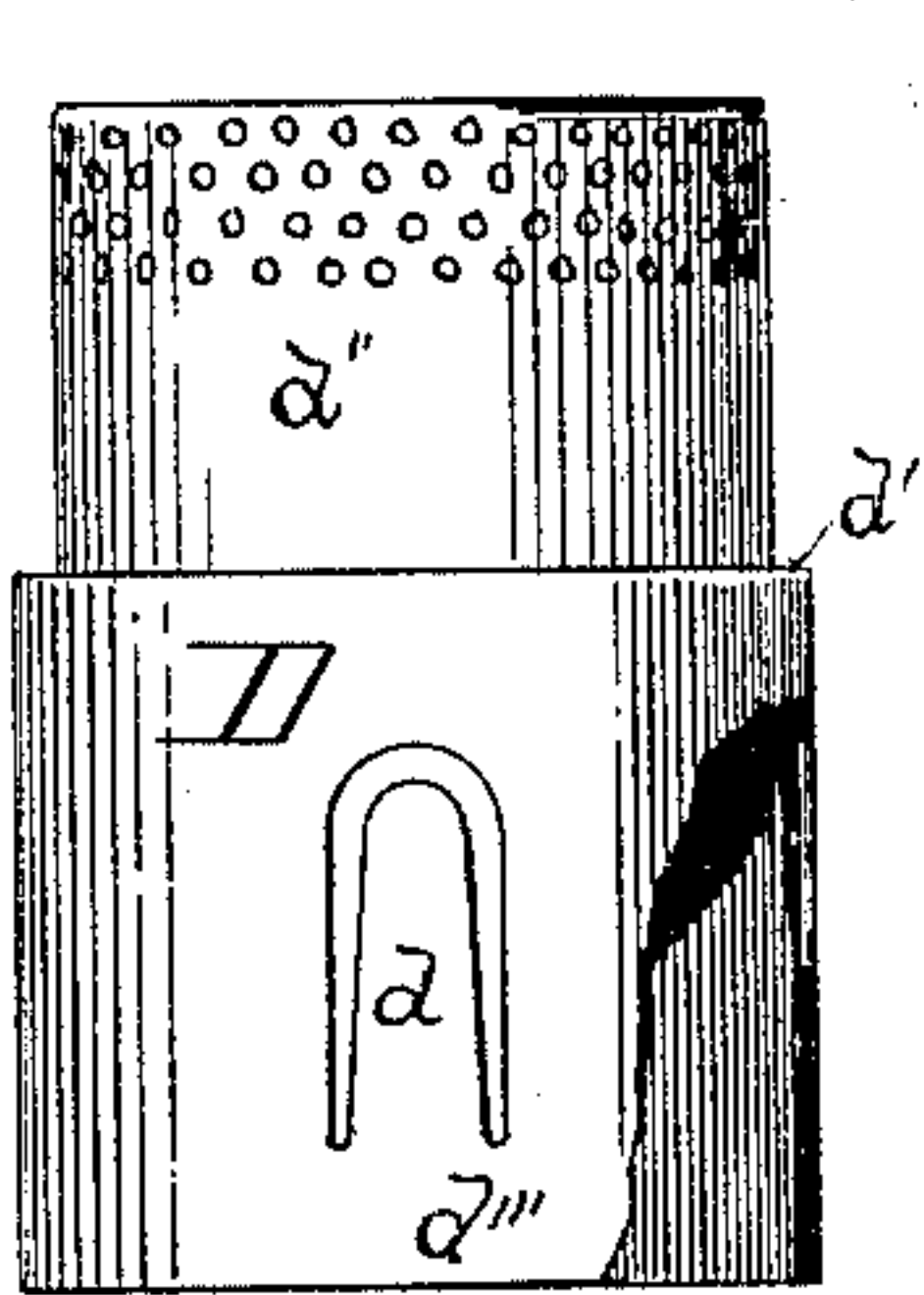


(No Model.)

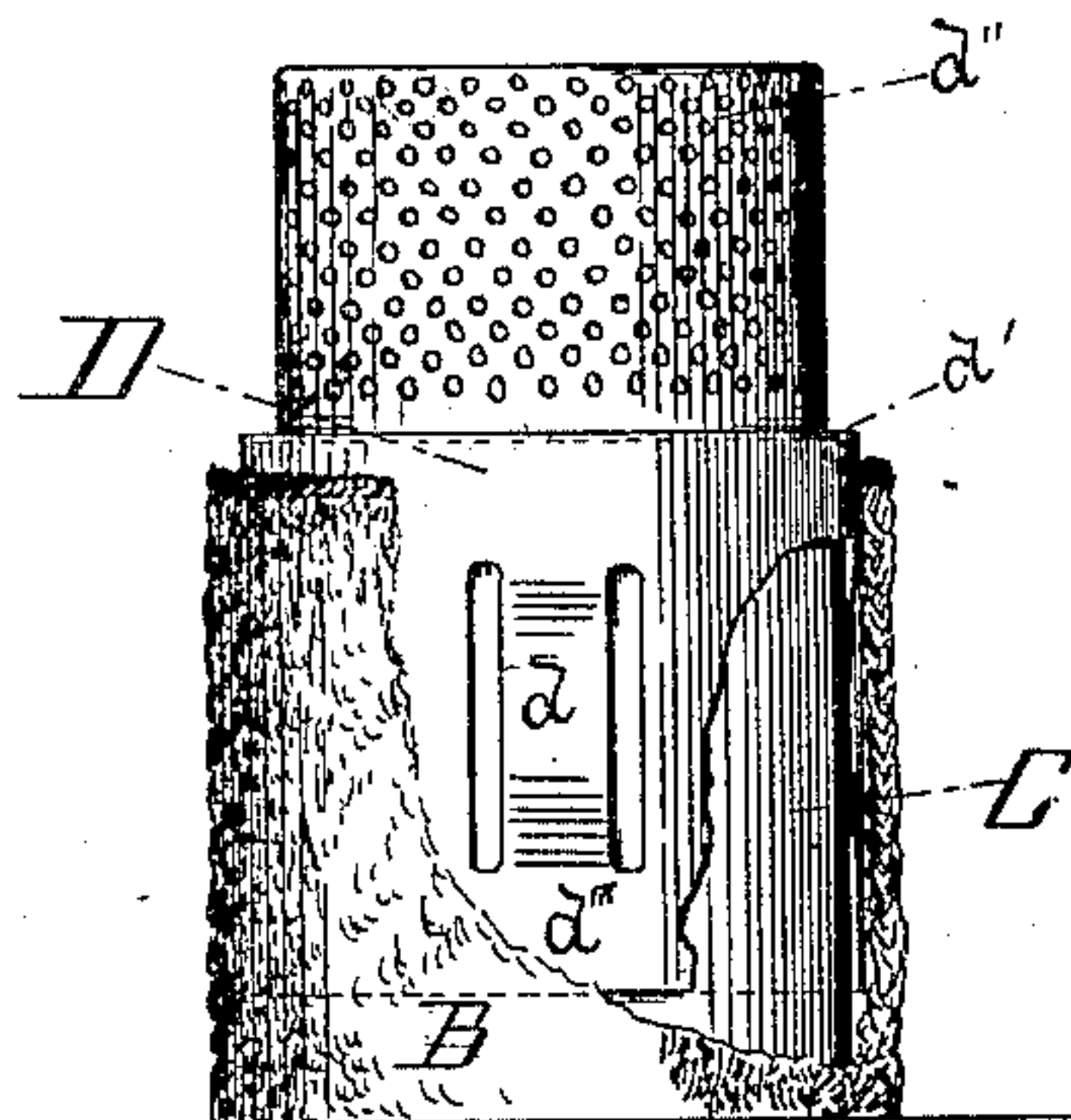
W. C. HOMAN.  
ARGAND LAMP.

No. 408,306.

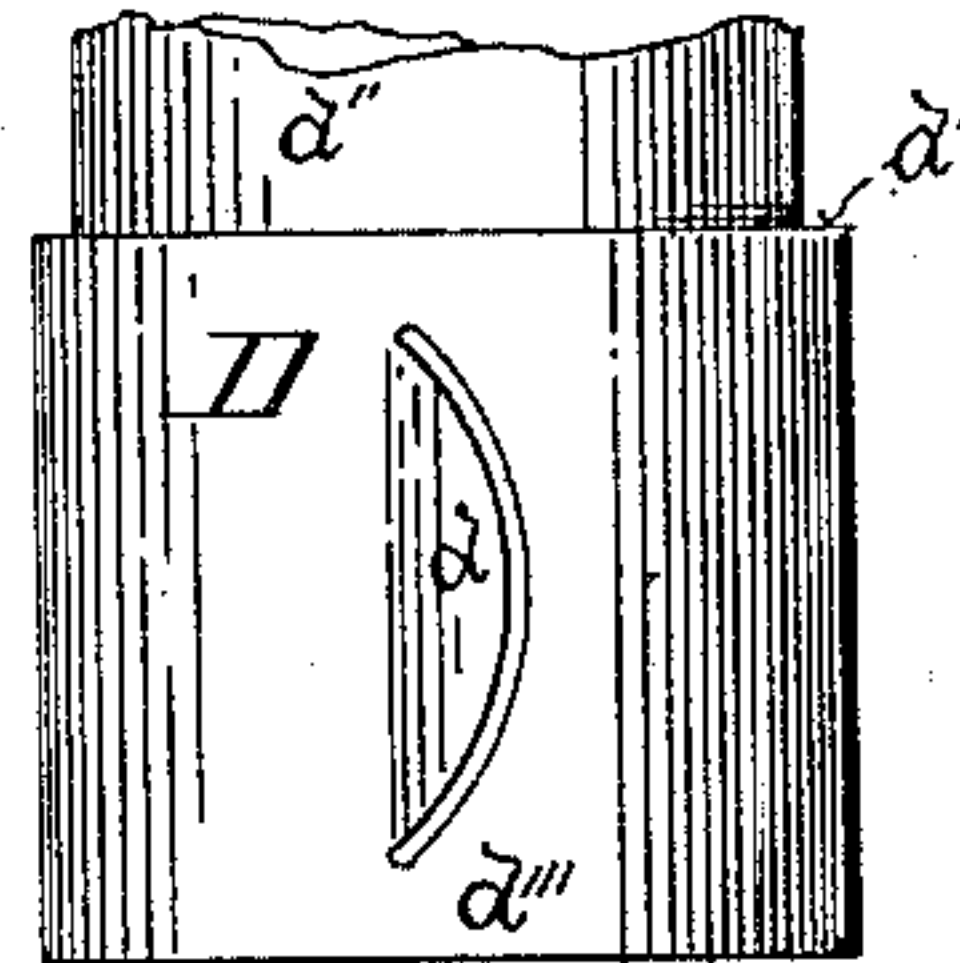
Patented Aug. 6, 1889.



*Fig. 2*



*Fig. 1*



*Fig. 3*

WITNESSES  
E. B. Hawley  
Eddy & Barnes.

W. C. Homan  
INVENTOR  
per Geo. L. Cooper atty.

# UNITED STATES PATENT OFFICE.

WILLIAM C. HOMAN, OF MERIDEN, CONNECTICUT, ASSIGNOR TO THE EDWARD MILLER & COMPANY, OF SAME PLACE.

## ARGAND LAMP.

SPECIFICATION forming part of Letters Patent No. 408,306, dated August 6, 1889.

Application filed March 2, 1889. Serial No. 302,545. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM C. HOMAN, a citizen of the United States, residing at Meriden, New Haven county, Connecticut, have  
5 invented an Improvement in Argand Lamps, of which the following is a specification.

My invention relates to that class of Argand lamps in which an inner air-distributor passes over a central air-supply tube and between  
10 said tube and the tubular wick of the lamp. It is intended to increase frictional adhesion between said distributor and said tube without interfering with the flow of oil between them, at the same time facilitating the re-  
15 moval of said distributor when desired.

In the accompanying drawings, Figure 1 represents so much of an Argand lamp as is necessary to show my invention, partly broken away to show the construction; Figs. 2  
20 and 3, modifications of the inner air-distributor.

Similar letters refer to like parts in the several views.

A designates a lamp bowl or body; B, a  
25 wick; C, a central air-supply tube; D, an inner air distributor or thimble;  $d$ , a spring;  $d'$ , an annular shoulder;  $d''$ , a perforated portion;  $d'''$ , an enlarged lower portion, the last four being parts of the thimble D.

30 The example of my invention illustrated in Fig. 1 of the drawings is constructed and operated as follows: The lamp-body A, wick B, and central air-supply tube C are of ordinary or convenient form. The inner air distributor or thimble D consists of an upper perforated portion  $d''$ , of an exterior diameter preferably less than that of the central tube C, of an annular shoulder  $d'$ , and of a lower cylindric portion  $d'''$ , of an interior diameter  
40 slightly greater than the exterior diameter of the central tube C and adapted to slip over said central tube between said tube C and the wick B. It is desirable that the annular space between the interior of the lower portion  $d'''$  of the thimble D and the upper end  
45 of the central tube C be sufficient to permit the flow of oil between them, so that any oil which may accumulate on the inner side of the thimble D may be returned to the wick-space outside of the tube C. It is also essential that sufficient frictional adhesion be-

tween the tube C and thimble D be provided to prevent the latter being displaced by the upward movement of the wick B. To provide such an oil-space, and at the same time to secure such adhesion, I cut or punch in the  
55 lower portion  $d'''$  of the thimble D one or more pairs of substantially parallel slots and indent or force inward the strip of metal between these slots so as to form one or more  
60 springs  $d$ , adapted to press inward against the outer surface of the tube C. These springs  $d$  are in practice found to fully compensate for any accidental variation in the diameter of the tube C and the lower portion  $d'''$  of  
65 the thimble D, so that the liability of the thimble D to accidental displacement is obviated without interfering with its removability. It will also be seen that a sufficient  
70 passage is provided for the return-flow of the oil between the tube C and the thimble D.

I have described the slots which define the sides of the spring  $d$  as substantially parallel; but it is evident that they may diverge considerably without altering the function of  
75 the spring.

In Fig. 2 of the drawings I have shown a modification of the form of the spring  $d$ . Instead of punching two slots in the portion  
80  $d'''$ , I punch one of an inverted U shape, leaving the spring  $d$  in the form of a tongue, the upper end of which is forced inward to secure frictional contact with the tube C.

In Fig. 3 is also shown a single arc-like slot, leaving a segment-shaped portion, the  
85 free side of which is stamped or forced inward to form the spring  $d$ . It is evident that further change may be made in the shape and position of the slot, and consequently of the spring  $d$ , without departing from my in-  
90 vention.

In construction and action the inner air distributor or thimble here shown and described is similar to the auxiliary tube described and claimed in United States Letters  
95 Patent to Rhind, No. 364,438, dated June 7, 1887. As the present invention is intended to be an improvement on the one protected by said patent, I do not wish to be understood as claiming anything therein described or  
100 claimed.

What I claim as my invention, and desire to



secure by Letters Patent of the United States, is as follows:

1. In an Argand lamp, the combination of a central air-supply tube, an inner air-distributor, the lower portion of which is of an interior diameter slightly greater than the exterior diameter of said central tube, and one or more springs formed in said lower portion, substantially as described.
2. In an Argand lamp, the combination of a central air-supply tube, an inner air-distributor, the lower portion of which is of an interior diameter slightly greater than the exterior diameter of said central tube, and one or more springs formed in said lower portion by the indentation of a strip of metal between two parallel slots, substantially as described.

3. In the inner air-distributor of an Argand lamp, the combination of a perforated cylindrical portion of an exterior diameter less than that of the central air-supply tube of the lamp, an annular shoulder, a cylindric lower portion of an interior diameter slightly greater than the exterior diameter of said central air-supply tube, and one or more springs in said lower portion adapted to frictional engagement with said central tube, substantially as described.

WM. C. HOMAN.

Witnesses:

E. B. HAWLEY,  
GEO. L. COOPER.