

(No Model.)

G. W. WOODWARD.
LAMP.

No. 539,467.

Patented May 21, 1895.

Fig. 1

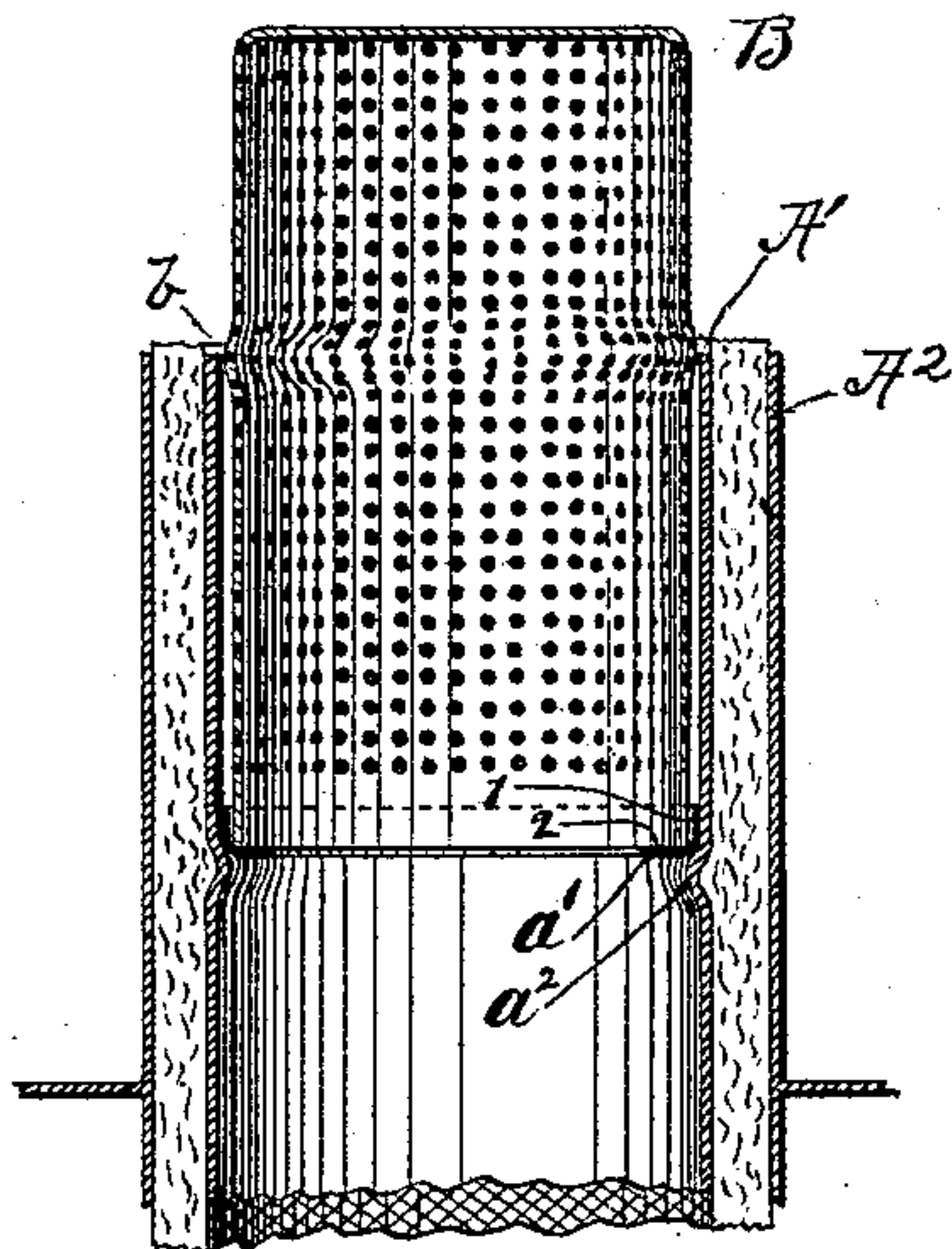


Fig. 2

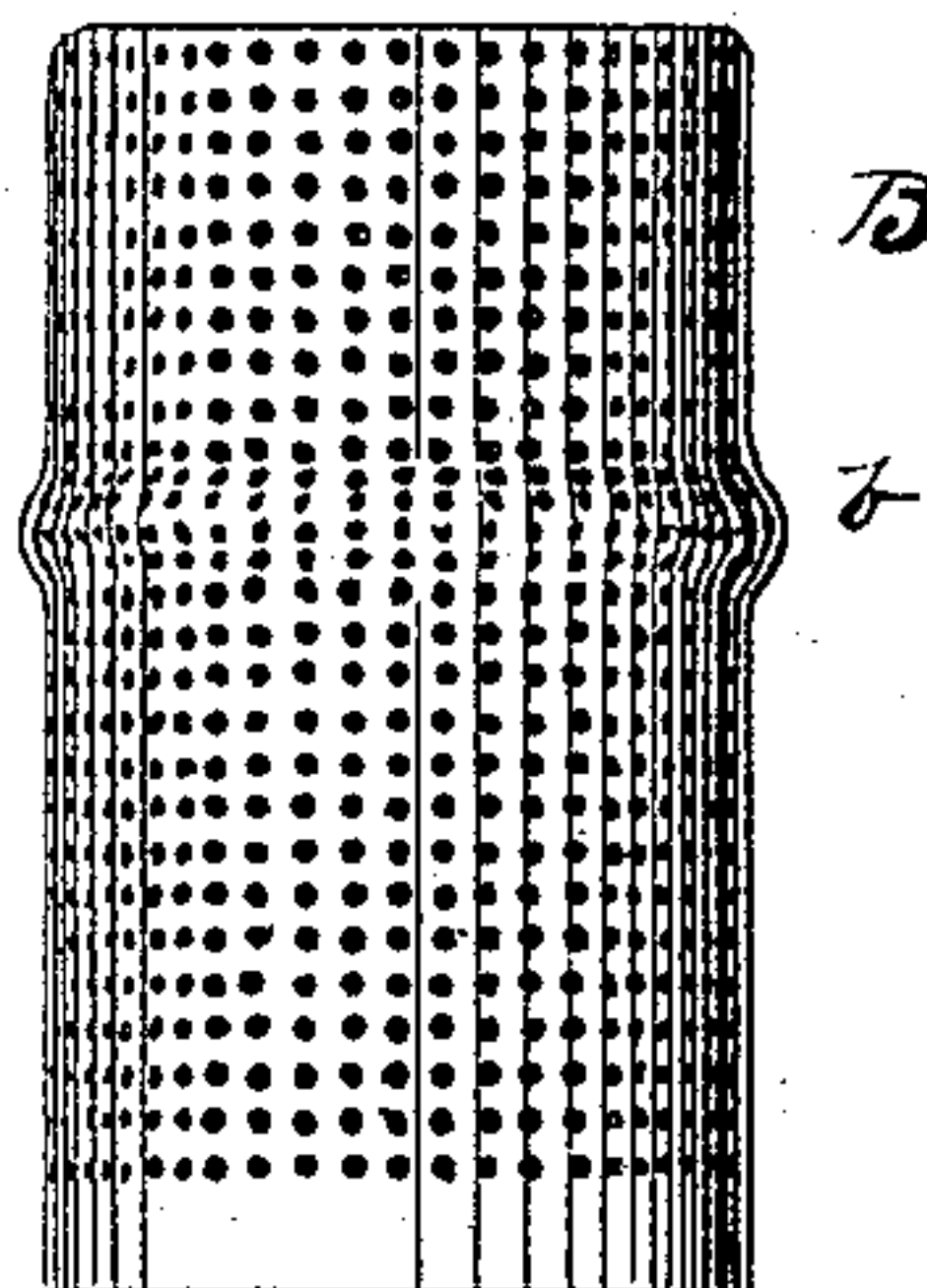


Fig. 3

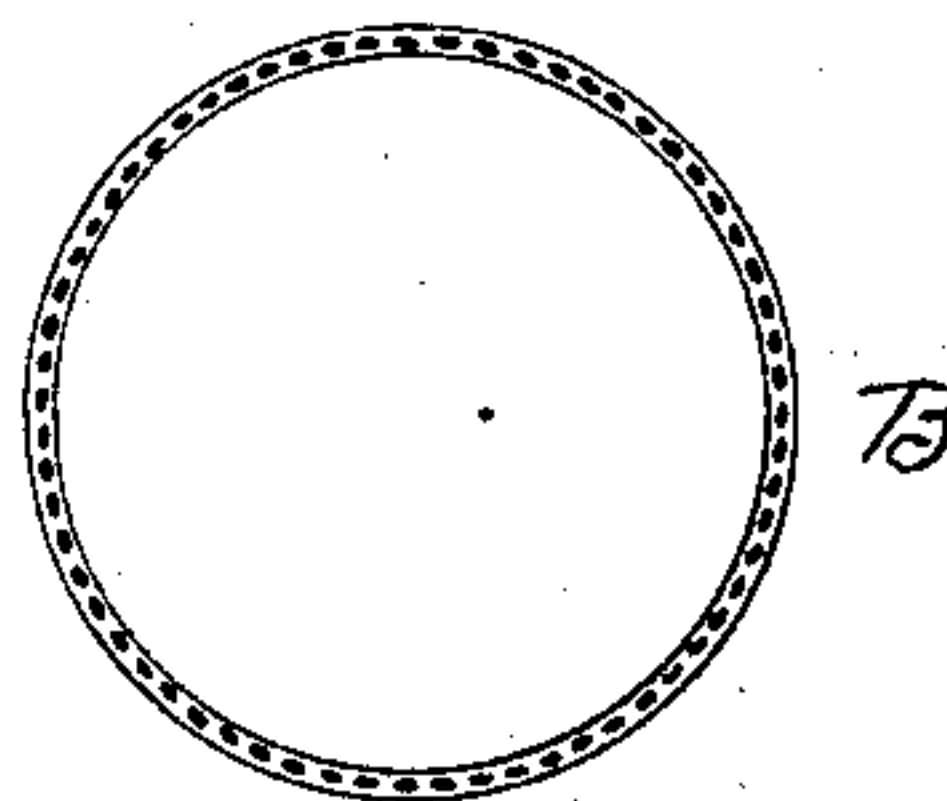


Fig. 5

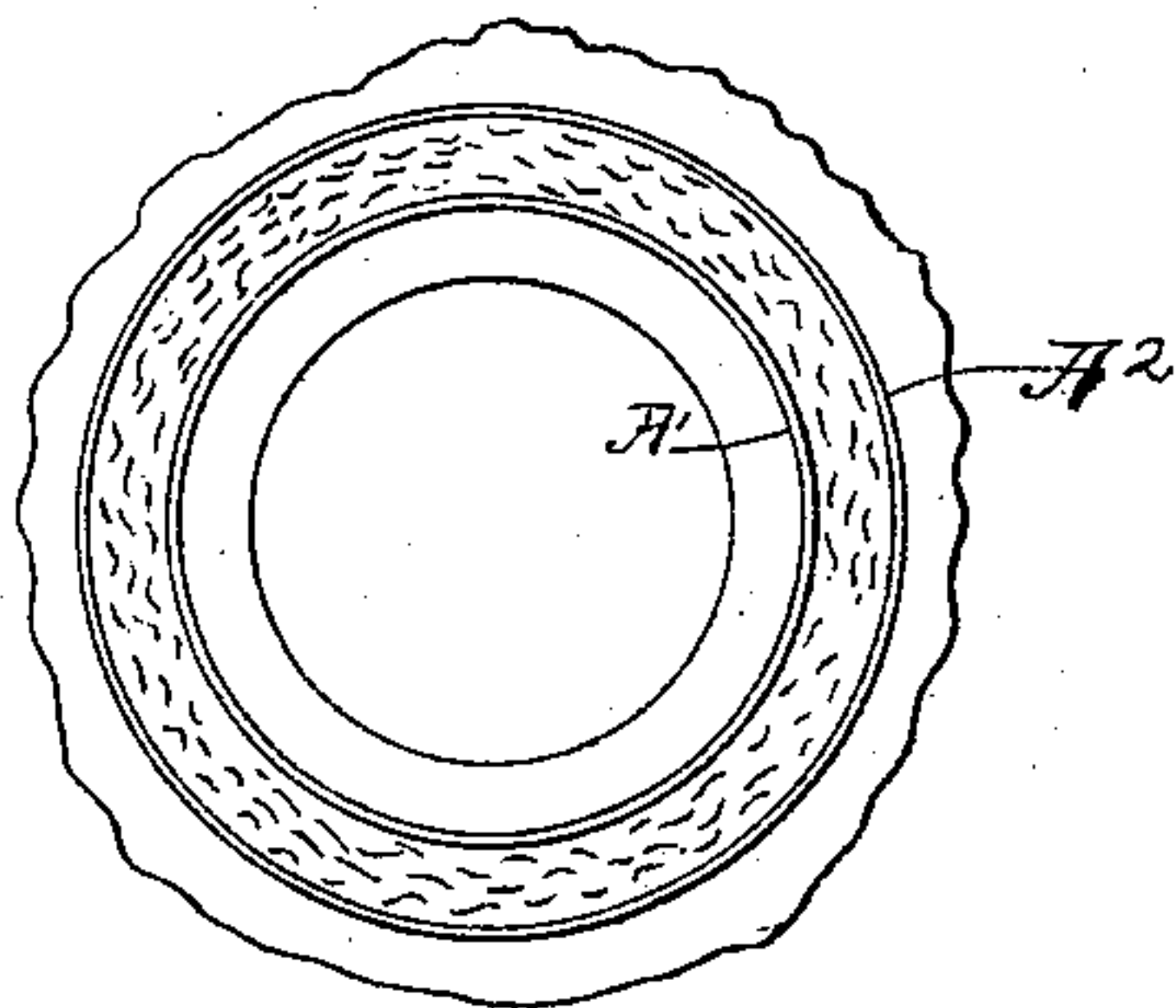
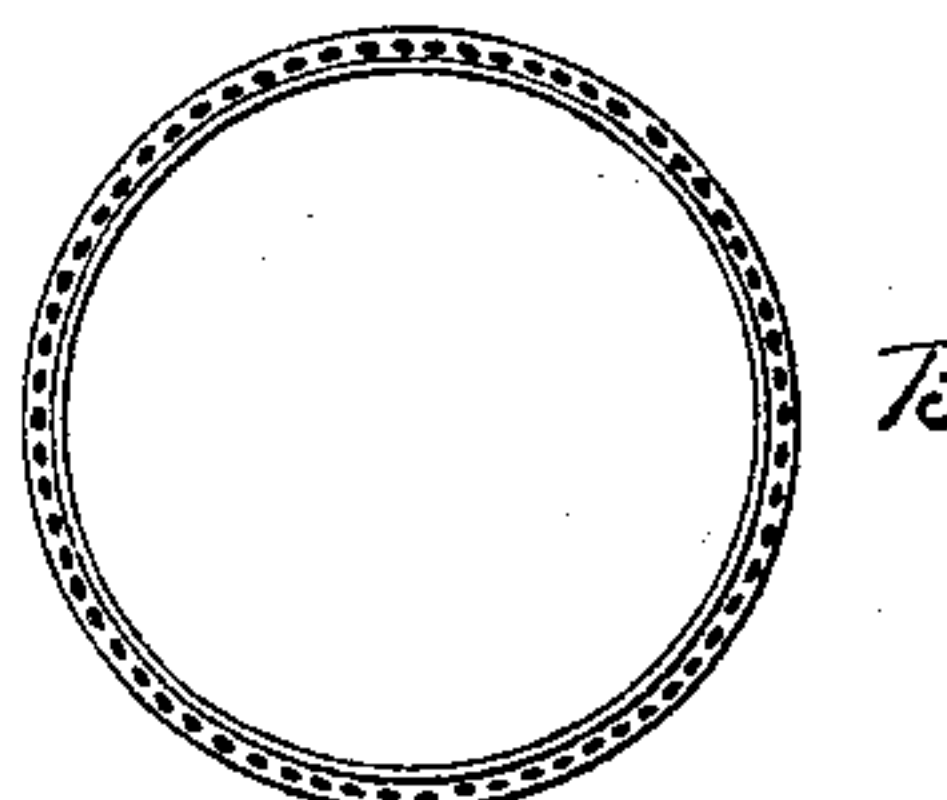


Fig. 4



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE W. WOODWARD, OF BROOKLYN, ASSIGNOR TO THE ANSONIA BRASS AND COPPER COMPANY, OF NEW YORK, N. Y.

LAMP.

SPECIFICATION forming part of Letters Patent No. 539,467, dated May 21, 1895.

Application filed September 7, 1889. Serial No. 323,273. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. WOODWARD, of Brooklyn, Kings county, and State of New York, have invented a certain new and useful Improvement in Lamps, of which the following is a specification.

My improvement relates to Argand lamps of the kind having combined with the central draft tubes thimbles which are perforated above the tubes to distribute air to the inner surface of the flames.

The object of my improvement is to provide a simple and effective manner of combining such a thimble with the central tube of a lamp.

The improvement consists in the combination with the central tube in an Argand lamp, of a thimble supported by a projection extending from the central tube and having a circumferential bead which fits within the upper part of the central tube.

In the accompanying drawings, Figure 1 represents a central vertical section of the upper portion of the wick-tube of an Argand lamp and a thimble embodying my improvement. Fig. 2 is a side view of the thimble. Fig. 3 is a top view of the thimble. Fig. 4 is a bottom view of the thimble. Fig. 5 is a top view of the wick-tube.

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

A' A² designate two cylindric shells arranged one concentrically within the other so as to leave between them a space capable of accommodating a circular wick. The inner shell A' forms the central draft tube of the lamp. It will be seen that the inner shell A' is provided with an inwardly extending projection a'. As here shown, this projection consists of a shelf having a vertical portion 1, fitting tightly within the tube A' and a horizontally extending portion, 2. This shelf may rest upon a bead a² formed in the tube A' if desired.

B designates a thimble. It is shown as made of cylindric form perforated from near the lower edge to the top but made imperforate at the top. The bottom is entirely open and the bottom edge rests upon the horizon-

tal portion of the shelf or projection a'. In this way the thimble is supported vertically. It will be seen that the thimble extends considerably above the tip of the tube A'. This enables it to distribute air, rising through the central draft tube, upon the inner surface of the flame. This thimble has a circumferential bead b, which, it will be seen, extends entirely around it and has its greatest projection at a point about level with the tip of the tube A' and is perforated in all its parts. It is, however, essential to my improvement that the bead shall be of such diameter as that it will fit within the tube A' and that it shall be located at the upper portion of the tube A', and within said tube.

I do not wish to here lay claim to a thimble having a bead made of such diameter as that it will rest upon the top of the central draft tube in an Argand lamp. A bead fitting within the upper portion of the central tube is, in many respects, advantageous. It steadies and maintains the thimble at an upright position without being liable to interfere with the wick. It prevents dirt and like matter from the wick from falling into the central tube. It does not divert the draft passing up through the central tube as do a number of isolated projections extending from a thimble into contact with the central draft tube. When the bead is perforated, air passing into the space between the lower portion of the thimble and the wick tube may pass through the bead at a great number of points and out of the bead to the flame. If the bead does not fit closely within the central draft tube air may, of course, escape between it and the tube into the flame.

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

1. The combination with the central draft tube of an Argand lamp, of a perforated thimble having a circumferential bead fitting against the inner surface of said central draft tube, and having its greatest projection at a level with the top of said tube and perforated in all its parts, substantially as specified.

2. The combination with the central draft tube of an Argand lamp, of a perforated thimble having a perforated circumferential bead fitting against the inner surface of said cen-

tral draft tube, and having its greatest projection on a level with the top of said tube, substantially as described.

3. The combination with the central draft
5 tube of an Argand lamp, of a perforated thimble having a circumferential bead fitting against the inner surface of said central draft

tube, and having its greatest projection at a level with the top of said tube, substantially as specified.

GEORGE W. WOODWARD.

Witnesses:

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