

L. J. ATWOOD.

Lamp Burner.

No. 78,637.

Patented June 9, 1868.

FIG. 1.

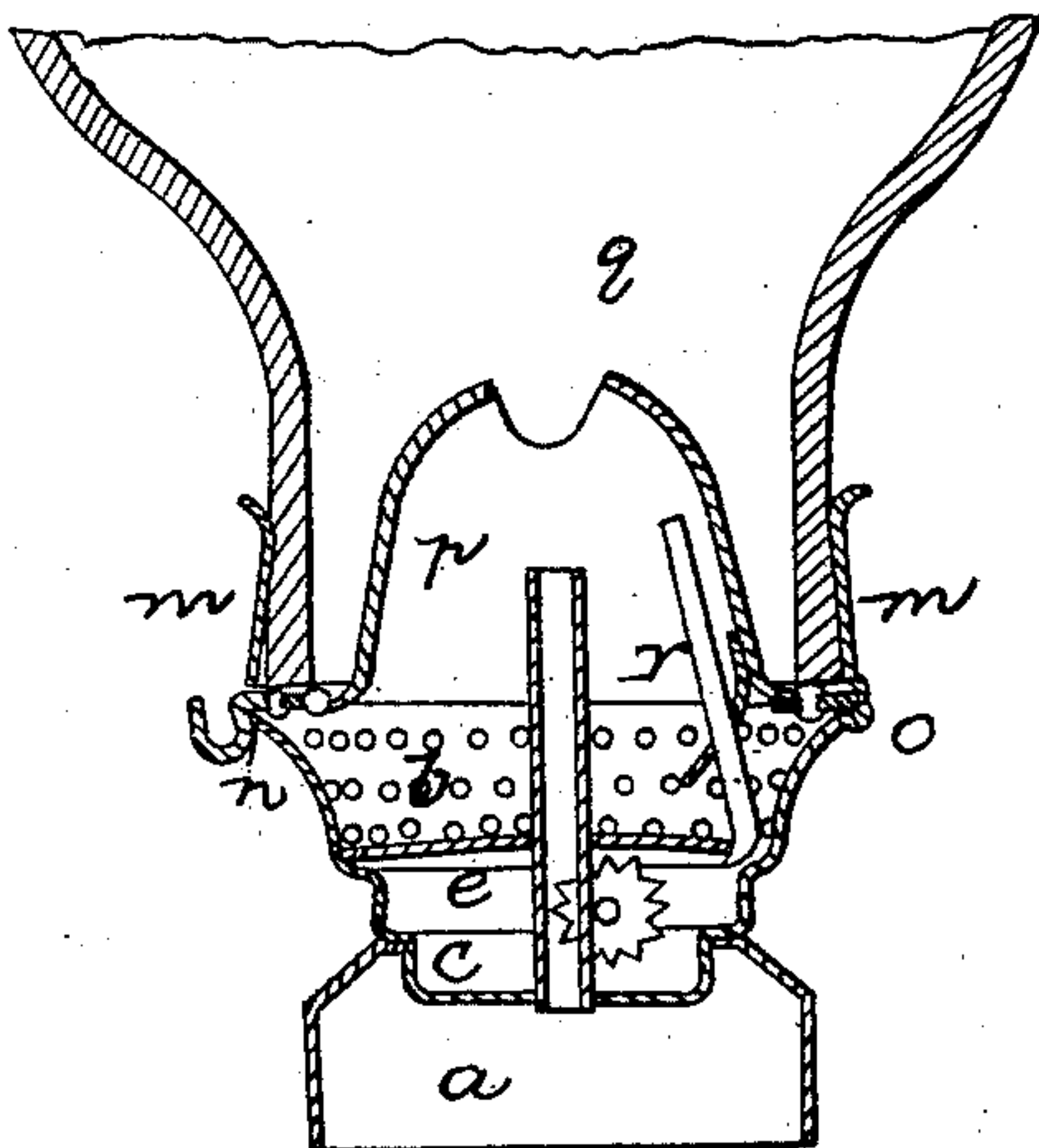


FIG. 2.

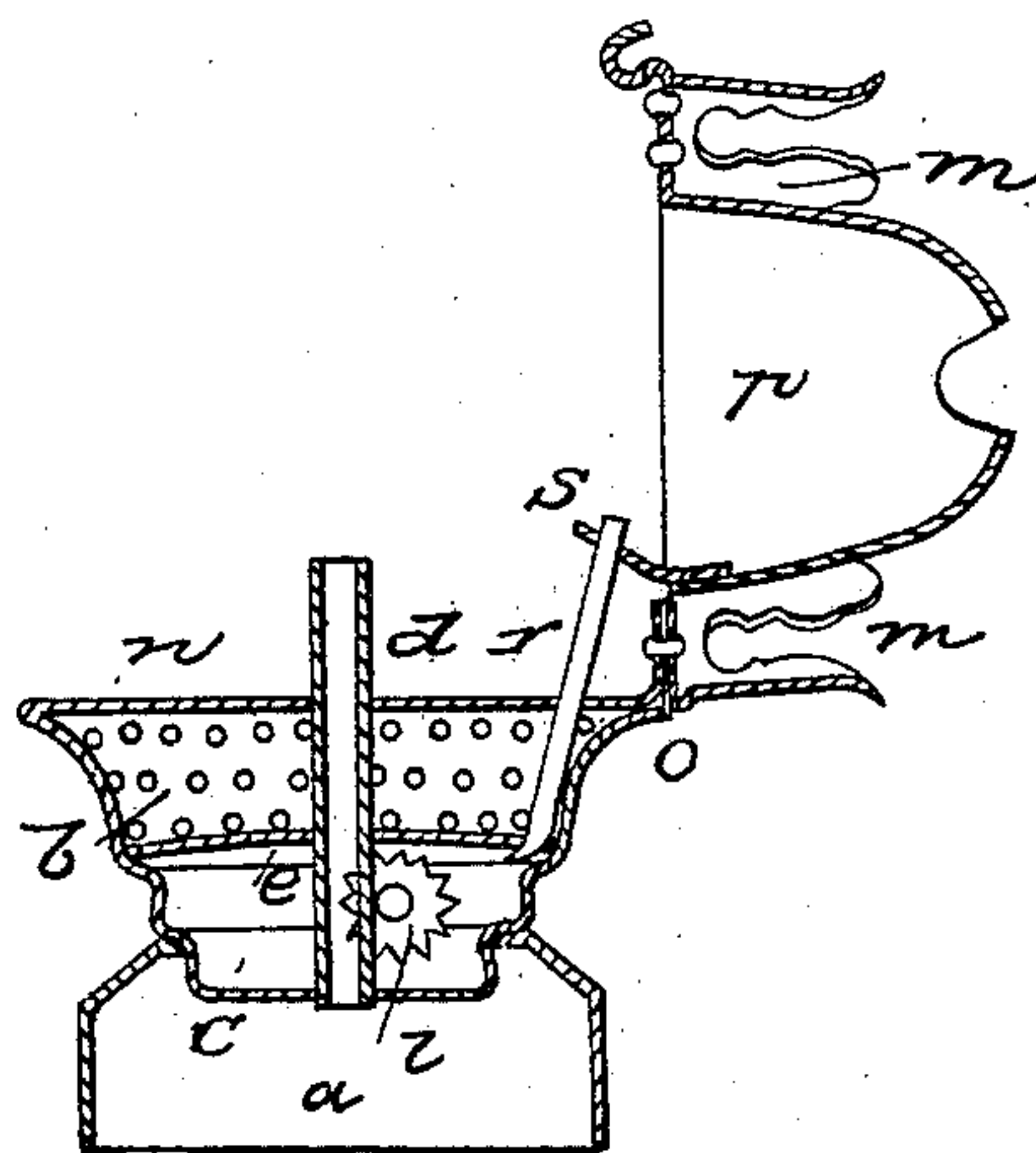
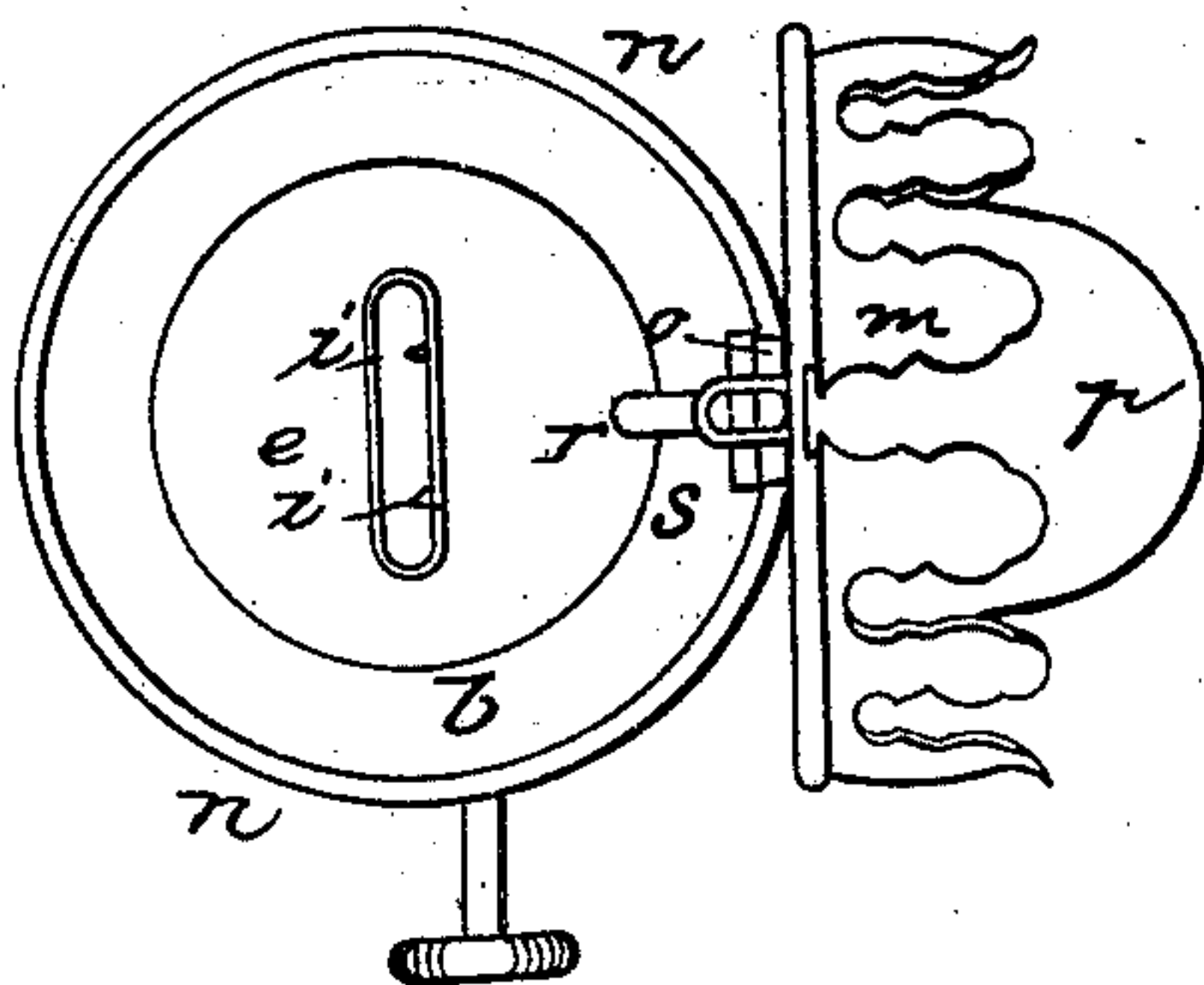


FIG. 3.



WITNESSES

Chas H Smith
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INVENTOR

Louis J. Atwood
per L. W. Serrell
att'y

UNITED STATES PATENT OFFICE.

L. J. ATWOOD, OF WATERBURY, CONNECTICUT, ASSIGNOR TO HIMSELF AND HOLMES, BOOTH & HAYDENS, OF SAME PLACE.

IMPROVEMENT IN LAMP-BURNERS.

Specification forming part of Letters Patent No. 78,637, dated June 9, 1868.

To all whom it may concern:

Be it known that I, LEWIS J. ATWOOD, of Waterbury, in the county of New Haven and State of Connecticut, have invented, made, and applied to use a certain new and useful Improvement in Lamps; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is a vertical section of my improved lamp-burner as closed. Fig. 2 is a similar view with the deflector and chimney-holder thrown back, and Fig. 3 is a plan of said burner in the last-named position.

Similar marks of reference denote the same parts.

Lamp-chimneys have heretofore been received within a metal cylinder slotted at one or more of its points to prevent the chimney being broken by expansion. This, however, did not allow for the variations in the sizes of the glass chimney resulting from inaccuracy of manufacture.

Lamps have also been made with a series of springs around the upper edge of the burner-shell for receiving the chimney; but in that case the cone or deflector was a separate piece, and both chimney and deflector had to be removed from the burner to give access to the wick-tube in trimming or lighting.

The nature of my said invention consists in a cone or deflector around the base of which is a circular range of springs to clamp the chimney, in combination with a perforated burner, shell, and hinge connecting said chimney-clamp to the burner, and I form the edge of said burner as a ring turned over out of the sheet metal, which also becomes the hinge-pin.

In the drawings, *a* is the screw-collar for the reservoir; *b*, the burner-shell, formed with fine perforations in its upper portion, and with the screw-thread at *c* to take the collar *a*.

d is the wick-tube, and *e* the ratchet-cap.

i is the ratchet, formed of sheet-metal wheels with tapering points, and said points are tapered in all directions by the edges of the wheels being turned down or pressed to a bevel, so that the wick will be more easily penetrated by said points and raised or lowered, instead of being compressed and injured,

as by the present character of wick-raisers with wide chisel-shaped points.

The edge of the burner-shell *b* is strengthened, rendered smooth, and beautified by the edge of said shell being turned over by dies in the form of a ring at *n*, and by cutting out a mortise at the point where the hinge *o* is applied the said ring becomes the pin for the hinge, said hinge being formed of a folded strip of metal riveted upon the under side of the chimney-holder *m*.

The cone or deflector *p* and chimney-holder *m* are formed of one piece of metal, or permanently connected, so that the chimney *q*, holder *m*, and cone *p* can be moved together. The chimney-holder *m* is formed of a circular range of spring-clamps, the upper ends of which are turned slightly outward to allow for easily pushing the base of the chimney into its place; but the range of clamps inclines sufficiently inward to grasp the chimney firmly and hold the same, so that the chimney, chimney-holder, and deflector can be moved from the wick-tube by turning the same on the hinge or raising the parts, so as to give access to the wick for trimming or lighting. The chimney-holder is prevented from turning back too far by the swinging post *r*, held at its lower end by its notched sides entering within a notch in the edge of the ratchet-cap, and a loop, *s*, attached to the deflector *p*, keeps the chimney-holder from turning farther back, as seen in Fig. 2. When the chimney-holder is turned over upon the burner-shell this post occupies the position denoted in Fig. 1.

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

1. A cone or deflector with a circular range of springs to form the chimney-holder, in combination with a perforated burner-shell, to which said deflector and chimney-holder are hinged, substantially as set forth.

2. A ring, *n*, formed around the edge of the burner-shell by the sheet metal turned over, in the manner and for the purposes set forth.

In witness whereof I have hereunto set my signature this 25th day of October, A. D. 1867.

L. J. ATWOOD.

Witnesses:

JAS. M. ABBOTT,

JOSIAH MCWHINNIE.