

L. J. ATWOOD.

Lamp-Burners.

No. 133,397.

Patented Nov. 26, 1872.

Fig. 2.

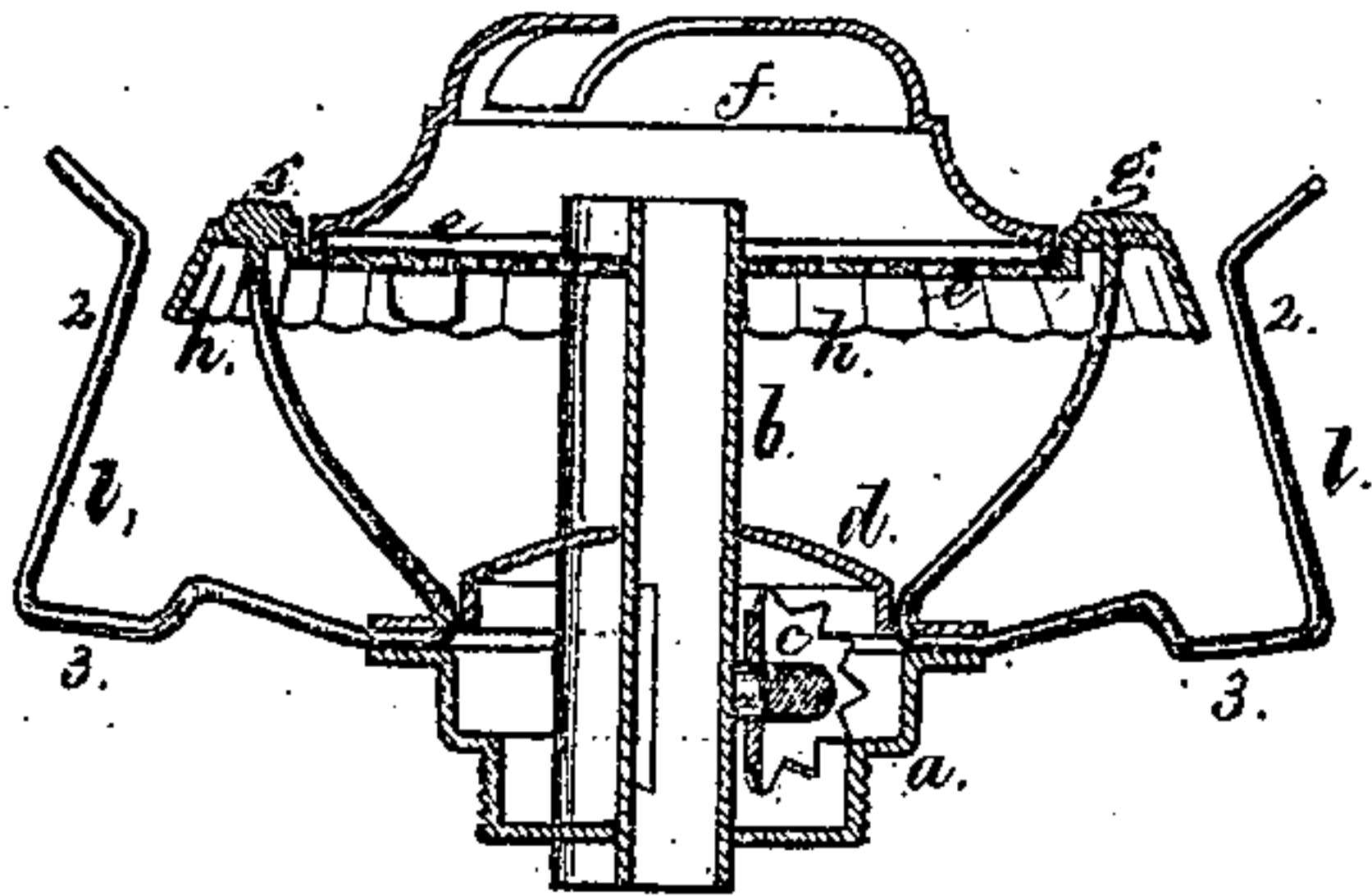
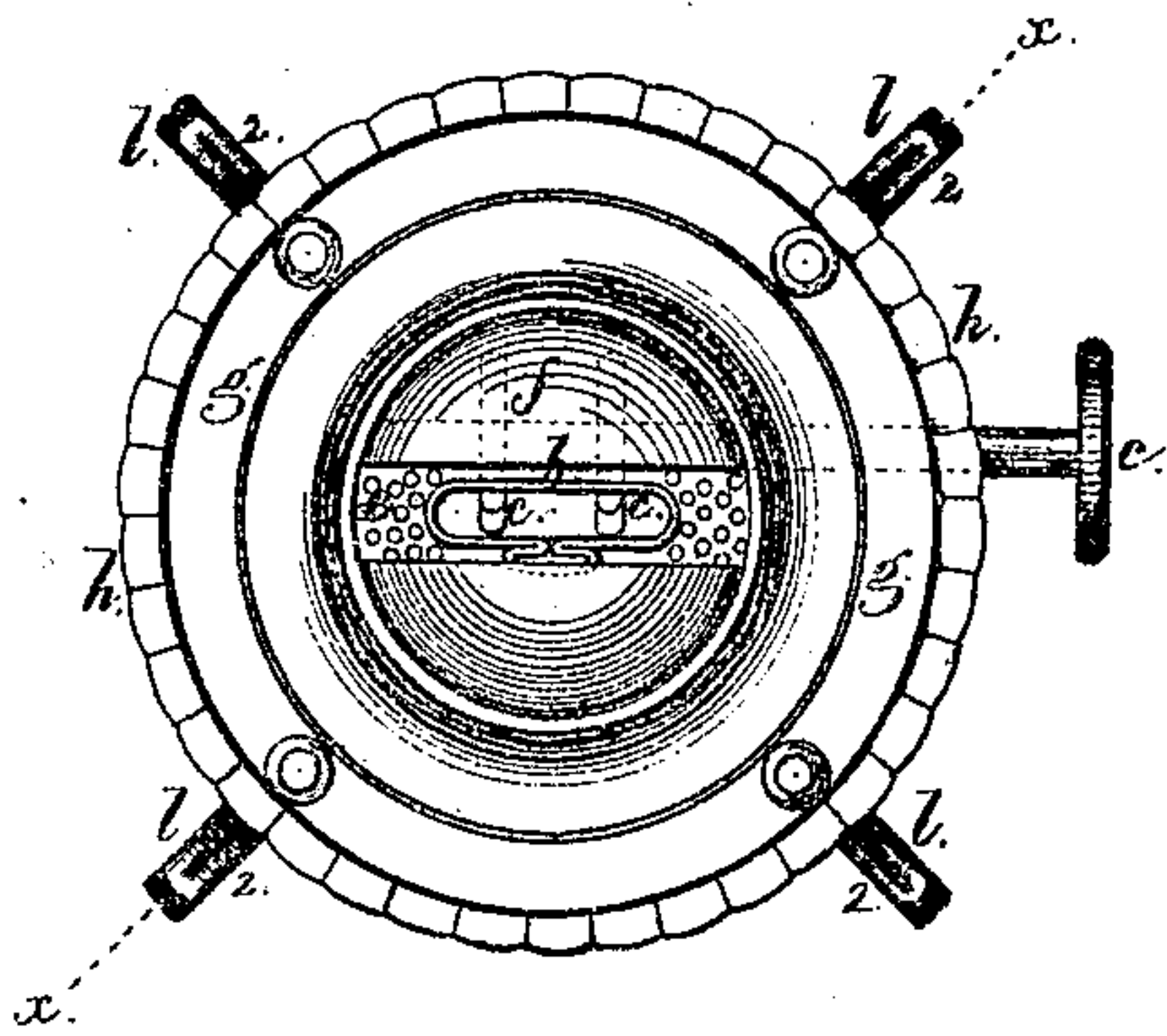


Fig. 3.



Fig. 1.



Witnesses,

Charles Smith
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Inventor

Lewis J. Atwood
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att'y

UNITED STATES PATENT OFFICE.

LEWIS J. ATWOOD, OF WATERBURY, CONNECTICUT, ASSIGNOR TO PLUME
AND ATWOOD MANUFACTURING COMPANY, OF SAME PLACE.

IMPROVEMENT IN LAMP-BURNERS.

Specification forming part of Letters Patent No. 133,397, dated November 26, 1872.

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 an Improvement in Lamps, of which the following is a correct description:

This lamp belongs to the class in which there is an air-distributor around the upper portion of the wick-tube and a draft-plate within the chimney, so that the lower edge of that chimney is some distance below that air-distributor and draft-plate. I make use of a draft-plate that has a conical corrugated edge that stiffens and strengthens the plate and prevents it from being bent and injured in handling, and allows for the use of thinner metal than that required for draft-plates and deflectors with peripheral springs, thereby lessening the cost and preventing heat being conveyed as rapidly to the wick-tube and reservoir by conduction. The supports that are employed for the chimney are made of double wires passed through openings in the metal of the ratchet-cap and bent up as spring chimney-holding hooks.

In the drawing, Figure 1 is a plan of the burner complete. Fig. 2 is a vertical section at the line *x x*, and Fig. 3 is a horizontal section of a portion of the corrugated conical edge of the draft-plate.

The ratchet-case *a*, wick-tube *b*, wick-raisers *c*, and ratchet-cap *d* are of any ordinary size or character, and require no further description, except as to the peculiarity of the ratchet-cap hereafter named. The air-distributor *e* and removable deflector *f* are substantially the same as in Letters Patent No. 106,303.

The edges of the air-distributor extend in the form of an annular draft-plate, *g*, with a conical corrugated or fluted edge, *h*. These parts, being all formed out of one piece of sheet metal, stamped up, are very strong and rigid, and can be made out of sheet metal that is thinner than that usually employed. The wires *l* that support the chimney are three or more in number, and each is made double. The portion 2 becomes a clamping-spring, pressing against the outside of the chimney. The part 3 is a rest for the chimney, and the same resembles a spring-hook.

In order to obtain a reliable attachment for the draft-plate and an easily-yielding spring I pass the wires between the ratchet-cap *d* and the ratchet-case *a*, the parts being grooved for that purpose; and said wires go through openings in the ratchet-cap, and their upper ends are soldered upon the under side of the draft-plate.

I claim as my invention—

1. The air-distributor *e* and annular draft-plate *g*, made of thin sheet metal and strengthened and stiffened by the conical corrugated or fluted edge *h*, as set forth.

2. The wires *l*, each attached at one end to the draft-plate, and passing through a hole between the ratchet case and cap to hold the draft-plate permanently in place, and extending to form the chimney-clamping spring 2, as and for the purposes set forth.

Signed by me this 8th day of August, 1872.

L. J. ATWOOD.

Witnesses:

GEO. T. PINCKNEY,
CHAS. H. SMITH.