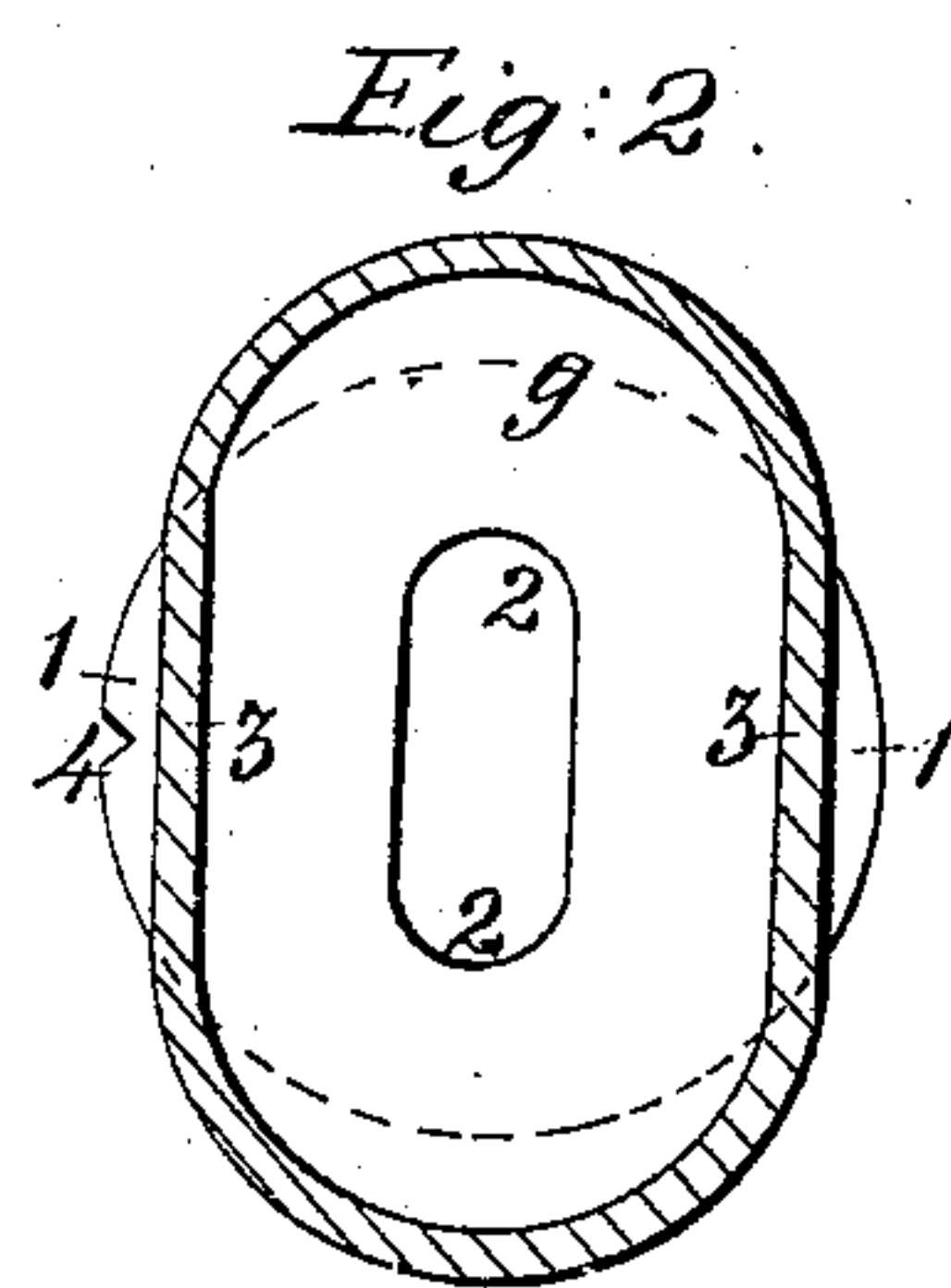
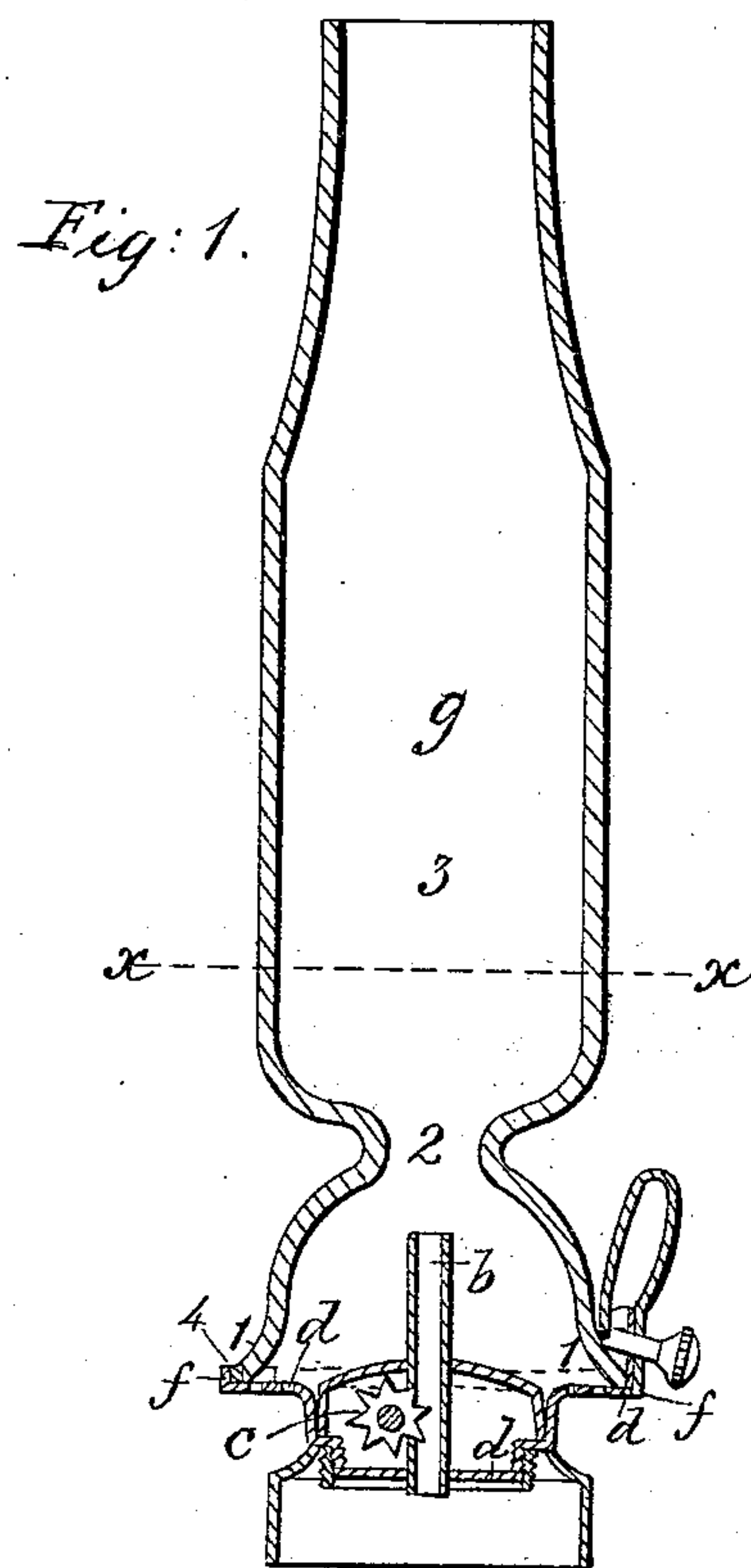


L. J. ATWOOD.  
Lamp Chimney.

No. 40,228.

Patented Oct. 13, 1863.



*Witnesses.*  
*Joseph A. Bunnell*  
*Lucia Fitchcock*

*Inventor.*  
*L. J. Atwood*

# UNITED STATES PATENT OFFICE.

LEWIS J. ATWOOD, OF WATERBURY, CONNECTICUT.

## IMPROVEMENT IN LAMP-CHIMNEYS.

Specification forming part of Letters Patent No. **40,228**, dated October 13, 1863; antedated October 11, 1863.

*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 my said invention, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is a vertical section of my chimney and burner, and Fig. 2 is a plan of the same below the line *x x* of Fig. 1.

Similar marks of reference denote the same parts.

The nature of my said invention consists in a chimney with a circular base that tapers and is contracted to an oval or oblong neck, occupying the place and discharging the functions of the metallic deflector heretofore employed in lamps for coal oil, and said chimney is enlarged above said neck into a flattened bulb. By this chimney, applied to a burner for coal-oils, the deflectors heretofore in use are dispensed with and the combustion rendered perfect. At the same time no light is lost from being below the deflector.

In the drawings, *a* is the burner screw; *b*, the flat wick-tube; *c*, the wick-raiser. *d* is the perforated air-distributor, and *f* the ring for the chimney, which parts may be of the usual character.

*g* is my improved chimney, formed with a

circular base, 1, as seen in Fig. 2, from which the glass is contracted to form an oval or oblong neck, 2, that is of the size and shape required for properly directing the draft of air upon the base of the flame, as said flame rises from the flat wick in the tube *e* and passes through said neck 2 into the flattened bulb 3 of the said chimney *g*. By this construction of chimney I am able to dispense with metallic and other deflectors that obstruct the light more or less, and at the same time obtain a perfect combustion, and my chimney is adapted to any ordinary burner. I make use of a notch, as at 4, in the base of the chimney, so as to insure a correct position of the said chimney to the wick-tube, when the said notch takes a projection in the ring of the burner. I have shown a spring, *h*, to hold the chimney in place.

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

The chimney *g*, with a circular base, 1, and contracted to the oval neck 2, below the bulb 3, for burning coal and similar oils supplied to a flat wick, and without any separate deflector, as set forth.

In witness whereof I have hereunto set my signature this 20th day of January, 1863.

L. J. ATWOOD.

Witnesses:

JOSEPH A. BUNNELL,  
LUCIA HITCHCOCK.