

L. J. ATWOOD.
Lamp-Burner.

No. 162,004.

Patented April 13, 1875.

Fig. 3.

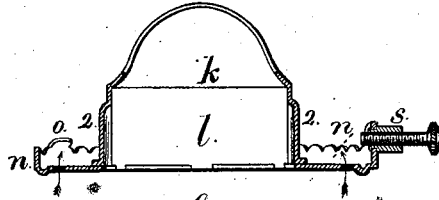


Fig. 4.

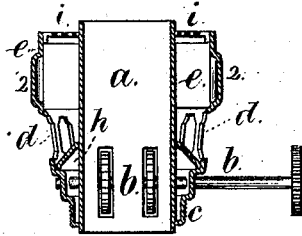


Fig. 1.

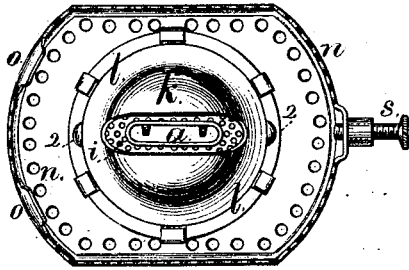
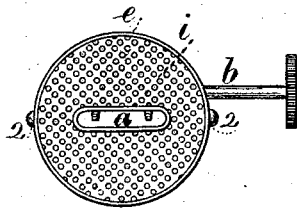


Fig. 2.



Witnesses,

Chas. H. Smith
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per L. W. Serrell

att'y

UNITED STATES PATENT OFFICE.

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

IMPROVEMENT IN LAMP-BURNERS.

Specification forming part of Letters Patent No. 162,004, dated April 13, 1875; application filed
March 2, 1875.

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 specification:

The cone or deflector is made with or connected to a cylinder, at the base of which is the chimney-holder, and these are supported by the base of the deflector resting upon the top of a cylinder that surrounds the wick-tube, and within which is the air-distributor. By this construction the chimney, its holder, and the deflector are removable from the other parts of the burner, leaving the wick and wick-tube free, so as to allow the lamp to be cleaned, trimmed, or lighted, and the chimney replaced, without risk of extinguishing the flame, and the chimney and holder are held very firmly when placed upon the burner, because the chimney-rest and parts are suspended below the top of the wick-tube by the metal at the bottom of the deflector resting upon the top of the stationary cylinder surrounding the wick-tube.

In the drawing, Figure 1 is a plan of the burner complete. Fig. 2 is a plan of the wick-tube, air-distributor, and cylinder; and Figs. 3 and 4 are vertical sections of the two parts separately.

The wick-tube *a* and wick-raiser *b* are of ordinary construction.

The burner-shell is composed of the screw *c*, open gallery *d*, and cylinder *e*, which may be of one or more pieces of metal, and the ratchet-cap *h* is within the gallery *d*.

The air-distributor *i* is made of a foraminous plate, and is preferably at the upper part of the cylinder *e*, so that there will not be any receptacle for particles of carbon from the wick.

The deflector *k* is made with the usual flame slot, and below it is the cylinder *l*, that is of a size to fit upon the cylinder *e*; and there are ribs and grooves, *2*, upon the respective parts, to prevent the deflector being placed in a wrong position relatively to the wick. When in place the removable portion of the burner is sustained by the metal at the base of the deflector *k*, resting upon the upper end of the cylinder *l*.

Around the base of the cylinder *l* is the chimney-holder *n*, with chimney-clips *o* and screw *s*, to hold the base of the chimney. I have shown this holder as adapted to an oblong chimney-base; but the shape of the holder will conform to that of the chimney.

The chimney, chimney-holder, cylinder *l*, and deflector can be removed from the other parts of the burner or replaced at pleasure.

I do not claim the chimney-holder and deflector removable from the wick-tube, as the same are shown in my Patent No. 91,590, and in the patent of G. Neilson, No. 75,960. In the last-named patent the removable portion of the burner and the chimney are unsteady, because the support does not extend sufficiently high within the cylinder.

I claim as my invention—

The cylinder *e*, surrounding the wick-tube, and extending nearly to the top of the same, and containing the air-distributor, in combination with the removable cylinder *l*, deflector *k*, and chimney-holder *n*, which are supported, when in place, upon the upper end of the cylinder *e*, substantially as specified.

Signed by me this 19th day of February,
A. D. 1875.

L. J. ATWOOD.

Witnesses:

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