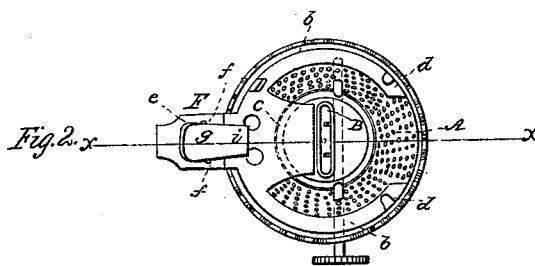
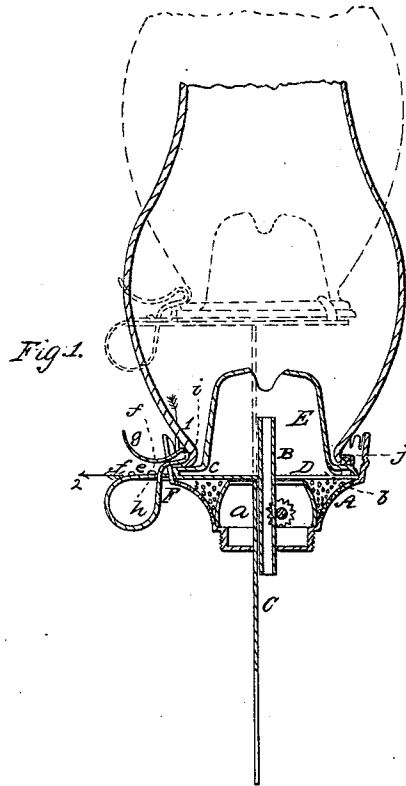


J. R. BAKER.
Lamp Chimney.

No. 41,048.

Patented Jan. 5, 1864.



Witnesses:

J. W. Coombs
G. W. Reed

Inventor:

James R. Baker
per *Wm. H. C.*
Attorneys

UNITED STATES PATENT OFFICE.

JAMES R. BAKER, OF KENDALLVILLE, INDIANA.

IMPROVEMENT IN LAMP-BURNERS.

Specification forming part of Letters Patent No. 41,048, dated January 5, 1864.

To all whom it may concern:

Be it known that I, JAMES R. BAKER, of Kendallville, in the county of Noble and State of Indiana, have invented a new and Improved Lamp-Burner; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side sectional view of my invention, taken in the line *xx*, Fig. 2. Fig. 2 is a plan or top view of the same with the chimney and cone removed.

Similar letters of reference indicate corresponding parts in both the figures.

This invention relates to an improvement in that class of lamp-burners which are constructed with a view to the adjustment of the cone and draft-chimney to admit of the wick being trimmed and lighted without detaching the chimney from the burner, and also with a view of admitting the lamp to be filled or replenished with oil without detaching the burner therefrom.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the lower and principal part of the burner, which may be constructed in the usual way, with the exception that it has a hole or opening, *a*, in its bottom to admit of oil being poured into the lamp without unscrewing the burner.

B is the wick-tube, which is fitted in the burner as usual, and C is a slide, which is fitted vertically in the burner and allowed to slide freely up and down therein.

D is an annular plate, which is attached to the upper end of the slide C. This plate does not form a complete circle, but has two arms, *b b*, of semicircular form and a centrally-projecting plate, *c*, between them, as shown clearly in Fig. 2, the inner end of *c* forming a junction with the upper end of the slide C. The slide and annular plate are cut out of a single piece of sheet metal, and the plate D bent at right angles with C.

The projecting plate *c* is directly over the opening or oil-feeder *a* in the burner, and serves as a cover for said opening when the burner is in use. (See Fig. 1.)

E represents the cone or deflector of the

burner, which is of the usual form, and is secured to the annular plate D by means of two lips, *d d*, and a spring-fastening, F. These parts also secure the chimney G to the cone. The lips *d d* are formed, one near the outer end of each arm *b*, and the fastening F is at the outer edge of the projecting plate *c*, which extends beyond the side of the burner. This fastening F is composed of a single piece of metal, but in the form of a circle, one end, *e*, being riveted to the outer part of *c*, as shown at F, and the other end, *g*, extending up through a slot, *h*, in *c*, and the end *f* of the spring, and bent or curved to form a catch, *i*, as shown clearly in Fig. 1. The catch *i* of the spring projects over the flange *j* at the bottom of the draft-chimney G, and firmly secures the chimney to the cone, and the latter to the annular plate D.

The spring-fastening F, in consequence of being constructed as described, causes the catch *i* to pass downward on the flange *j* in the direction indicated by the arrow 1, and the catch *i* is at the same time allowed to yield or move horizontally backward, as indicated by the arrow 2. (See Fig. 1.)

The downward pressure of the catch *i* secures the chimney to the cone and the cone to the annular plate D, while the horizontal yielding movement of the catch admits of the chimney expanding freely under the heat of the flame. This double action of the spring is an important feature of the invention, as it accomplishes the two objects above specified in a perfect manner, and effectually prevents the breaking or fracturing of the chimney under expansion by heat. The spring also is durable, not liable to get out of repair, or rendered inoperative by undue straining, a contingency of frequent occurrence with all of the spring-fastenings for the same purpose which have passed under my observation.

In order to light or trim the wick or replenish the lamp with oil, all that is required is simply to grasp the fastening F and raise the plate D, as shown in red outline in Fig. 1, the slide C serving as a guide for the plate D.

The plate D may be retained in an elevated position by the friction of the slide in the burner, or any suitable means may be employed for that purpose.

I am aware that it is not new to have the

chimney and cone so arranged that they may be turned or lifted so as to expose the wick, and this I do not claim; but,

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

Having the upper part of the slide C made in the form of an annular plate, D, with arms

b, and carrying a spring, F, the whole constructed and operating in the manner herein shown and described.

JAMES R. BAKER.

Witnesses:

JAMES COLEGROVE,
ZERA C. THOMAS.