No. 729,780. PATENTED JUNE 2, 1903.

T. A. MATTHEWS.

LAMP BURNER.

APPLICATION FILED JULY 23, 1902

NO MODEL.

Fig. 1.

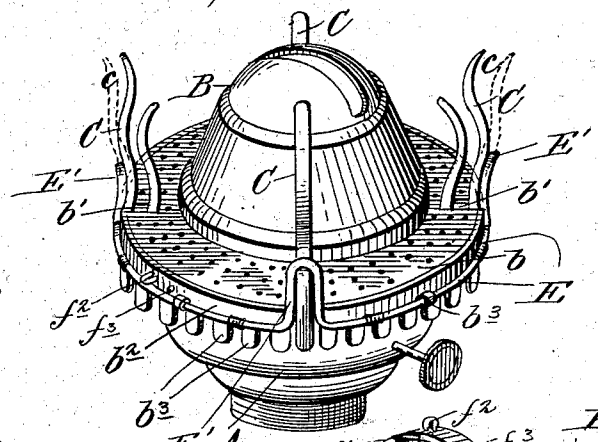


Fig. 4.

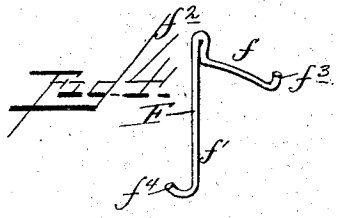
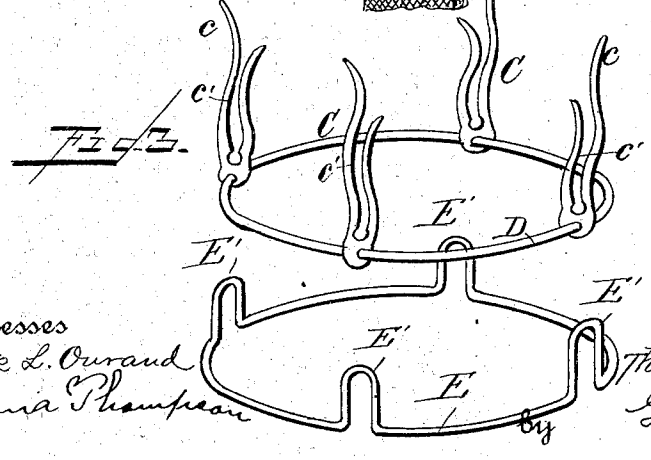


Fig. 2.

Fig. 3.



Witnesses

Frank L. Durand

Virginia Thompson

Inventor.

Thomas A. Matthews

Geo. H. Graves

Attorney.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 729,780. Patented June 2, 1903.

UNITED STATES PATENT OFFICE.

THOMAS A. MATTHEWS, OF NASHVILLE, TENNESSEE, ASSIGNOR OF ONE-HALF TO WILLIAM H. LIGON, OF NASHVILLE, TENNESSEE.

LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 729,780, dated June 2, 1903.

Application filed July 23, 1902. Serial No. 116,709. (No model.)

To all whom it may concern:

Be it known that I, THOMAS A. MATTHEWS, a citizen of the United States, residing at Nashville, Davidson county, Tennessee, have invented certain new and useful Improvements in Lamp-Burners, of which the following is a specification.

My invention relates to that class of burners with which chimneys are employed.

The objects of my invention are to provide an improved chimney-holding mechanism adapted to hold chimneys which vary in diameter, also to provide a chimney-holder hinged so as to swing out with the chimney beyond the burner proper and leave the wick-tube fully exposed for trimming the wick, cleaning, &c., also to provide a simple and effective means for locking the chimney-carrying section to the burner-carrying section. These objects I accomplish by the construction shown in the accompanying drawings, in which—

Figure 1 is a perspective of a burner with my improvements applied. Fig. 2 is a similar view with the chimney-holder swung out. Fig. 3 is a detail perspective of the chimney-holding fingers with their carrying and retaining rings. Fig. 4 is a detail view of the latch mechanism.

A is the burner proper, provided, as usual, with a wick-tube a and perforated air-supply plate a'.

B is the cone provided around its base beyond the periphery of the plate a' with a perforated horizontal flange b, having a series of radial slots b' opening through its outer edge, and from the flange b depends a second annular flange b^2, having its lower edge formed with a series of ears b^3.

C designates a plurality of forked chimney-grasping fingers pivoted in the slots b', and the upper ends of the spring members of these fingers are curved or inclined in opposite directions, as at c, to guide the chimney while being inserted. Just below the point c the two members of the fingers are curved, as at c', to form clamping-surfaces to yield and engage the chimney. The fingers C are preferably pivoted on a carrying-ring D, which passes through apertures in their lower ends. (See Fig. 3.) The fingers C are passed up through the slots b', with the ring D within the depending flange b^2, whereupon certain of the ears b^3 are bent inwardly and upwardly around the ring D (see Fig. 2) to secure it in place.

E is a retaining-ring secured to the outer side of flange b^2 by bending certain of the ears b^3 upwardly and inwardly around it. (See Fig. 1.) The ring E is provided with upwardly-projecting spring-fingers E′, which bear at their upper ends against the outer sides of the chimney-holding fingers C and press the same inwardly against the inner ends of the slots b^2. The fingers C, therefore, have a yielding pivotal movement, and so chimneys which vary somewhat at the base will readily fit in the said forked fingers.

These improvements are of course adapted to burners wherein the cone and chimney-holder have no swinging movement, but are fixed. I prefer a swinging chimney-holder, however, and, as shown in Fig. 2, I hinge the cone B by a hinge a^3 at the inner edge of the perforated flange b to the outer edge of the perforated plate a', and by this means the chimney-holder as a whole may be swung outwardly at right angles to the burner proper, and the then lower edge of the flange b b^2 will engage the side of the burner and hold the chimney-holder from swinging downwardly.

F designates the latch formed of a single length of spring-wire bent at right angles, as shown, to form the two members f f', at the junction of which the wire is bent upon itself to form the finger-piece f^2. The spring-retaining member f extends along the inner side of the flange b^2, to which it is secured by passing its bent outer end f^3 through an aperture in the said flange and upsetting or heading said end f^3. The finger-piece f^2 projects through an opening in the flange b^2, and the inner end of the member f' is provided with a depending hook or arm f^4, which engages an upturned lip a^4 on the edge of the perforated plate a' at a point opposite the hinge a^3. The sliding member f' is guided by a loop f^5 on the lower side of the horizontal flange b. By pressing the finger-piece f^2 inwardly against the action of the spring member f the latch will be released, and the

holder and chimney may be swung out at right angles, as in Fig. 2.

What I claim is—

1. The combination with a lamp-burner, of a plurality of forked chimney-holding fingers pivotally connected thereto and a yielding retaining means pressing said fingers inwardly.

2. The combination with a lamp-burner, of a plurality of pivoted forked chimney-holding fingers thereon and spring-fingers bearing against the outer sides of said forked fingers.

3. The combination with a lamp-burner having a series of slots, of a series of forked chimney-holding fingers extending up throughsaid slots, a ring secured to the burner and to which all of said fingers are pivoted and a series of spring-fingers bearing against the outer sides of the forked fingers.

4. The combination with a lamp-burner having a series of slots, of a series of forked chimney-holding fingers extending up through said slots, and apertured at their lower ends, a ring secured to the burner, passed through the said apertures and forming the axis of all of said fingers, and a second ring secured to the burner and having a series of yielding fingers bearing against the outer sides of the forked fingers.

5. In a lamp-burner, a chimney-holder comprising the cone having at its base an outwardly-projecting slotted flange, a second flange depending from the periphery of the first flange and having a series of depending ears, two rings around which certain of the ears are bent, forked chimney-holding fingers pivoted at their lower ends on one of said rings and extending up through said slots and yielding fingers extending up from the other ring and bearing against the outer sides of the forked fingers.

6. The combination with the burner proper, having a catch a^4, of the chimney-holder hinged to the burner opposite said catch and provided with a circular horizontal flange and an annular flange depending therefrom; the horizontal flange lying beyond the top of the burner, an angular latch F having a spring-attaching arm secured to the inner side of said annular flange, a latch-arm guided on the under side of the said horizontal flange and terminating at its inner end in a depending arm or hook to engage the catch a^4, and a finger-piece f^2 at the junction of the members f, f' and projecting through an aperture in said annular flange, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS A. MATTHEWS.

Witnesses:

R. M. HERRIGES,

JOHN EARLEY.