(No Model.)

E. C. FOWLER & G. A. DOWNS.

CLAMP FOR LAMP BURNERS.

No. 520,042. Patented May 22, 1894.

Fig. 1.

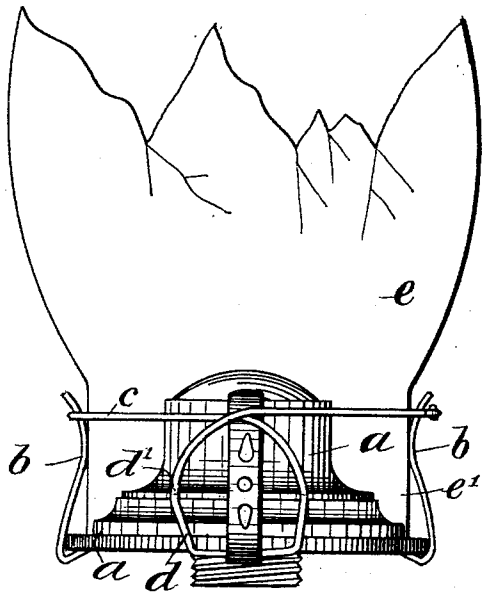


Fig. 2.

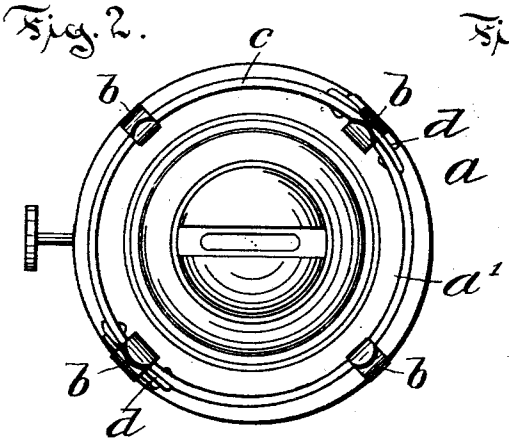
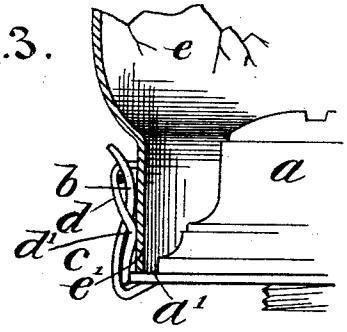


Fig. 3.



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EDWARD C. FOWLER AND GEORGE A. DOWNS, OF FORESTVILLE, CONNECTICUT.

CLAMP FOR LAMP-BURNERS.

SPECIFICATION forming part of Letters Patent No. 520,042, dated May 22, 1894.

Application filed November 29, 1892. Serial No. 453,464. (No model.)

To all whom it may concern:

Be it known that we, EDWARD C. FOWLER and GEORGE A. DOWNS, of Forestville, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Clamps for Lamp-Burners, of which the following is a full, clear, and exact description, whereby any one skilled in the art can make and use the same.

The object of our invention is to provide an improved clamp for more securely supporting and holding a lamp chimney on the burner having spring arms of ordinary construction, and to this end our invention consists in the details of the several parts making up the clamp as a whole, and in the combination of those parts with each other and with the lamp burner, as more particularly hereinafter described and pointed out in the claims.

Referring to the drawings: Figure 1 is a view in elevation of a lamp burner and chimney showing the clamp in place. Fig. 2 is a detail plan view of the clamp. Fig. 3 is a detail view in cross section on enlarged scale through the base of the chimney showing the holding arm and clamp.

The lamp burner of ordinary construction is provided with a number of upturned spring arms between which the base of the chimney is inserted and held in place on the burner. These arms are curved at the base at the points where they are attached to the gallery of the burner and also near the upper end of the arms, the latter being the only points of contact between the chimney and the holding arms. After a short use these arms become weakened and from the first do not operate to hold a chimney against a tilting motion difficulty being experienced in holding the chimney in place. This is particularly the case when the lamp is moved quickly or is in a position where it is subject to jars.

In the accompanying drawings the letter *a* denotes a lamp burner of ordinary construction, *b* the holding arms that project upward from the outer edge of the gallery of the burner. These are usually four in number disposed at regular intervals about the burner and made of spring metal, usually brass. In order to get the proper spring action these arms are secured to the base of the burner at one end of the arm that is bent around the edge of the burner and then turned upward, the upper end being curved outward to enable the chimney to be readily thrust between the holding arms with the lower edge resting on the gallery *a'*.

In order to give the proper holding power to the arms *b* a supplemental clamp *c* is provided. This is preferably composed of a piece of spring wire bent so as to encircle the chimney base and provided with downturned clamping loops *d*. These loops are formed so as to rest on the holding arm just at the edge of the gallery or chimney outside of the base *e'* of the chimney *e*. The branches of the main wire from which the loop is formed cross each other and are located opposite the upper part of the arm *b* as shown in the drawings. In the clamping loop *d* there are formed inturned bends that when the clamp is in place thrust inward against the chimney and form supports near the bottom edge of the chimney. It is not essential that these clamping loops should be in loop form as they may be any other shape nor is it necessary that they should be integral with the main clamp although for convenience and cheapness of construction the form of clamp described is preferred for the reason that it can be cheaply and readily bent to shape from wire.

The main advantage of this clamp is its adaptability to different forms of existing lamp burners without requiring any change whatever in the burner or the arm. No particular attaching point is required but the clamp is easily and readily attached by placing the bottom of the loop or arm inside of the holding arm of the burner as described and springing the main body of the clamp outside of the holding arms. When the clamp is made in the form described its binding power, due to the spring action of the material of which the clamp is made, tends to hold the spring arms inward and to support the chimney at that part while the pressing of the angular part *d'* of the clamp loop or arm against the chimney near its base prevents any shaking or rocking movement of the chimney on its support on the burner.

It is to be noticed that by means of our improvement not only is the usual spring action

and holding power of the arms of a lamp burner increased in efficiency but an additional advantage is gained in the application of a distinct holding device nearer the bottom of the chimney than is usual in burners in which the upturned arms are used.

We claim as our invention—

1. In combination with a lamp burner having chimney holding arms, a removable and contractile clamp adapted to surround and embrace the arms, and having a downturned loop resting at its lower end at the bottom of and within one of the holding arms, all substantially as described.

2. In combination with a lamp burner having holding arms, a clamp made of wire bent to shape and adapted to embrace the holding arms, the downturned loops formed integral with the clamp the parts of which cross outside of a holding arm and extend within it having an inturned portion operating to hold the chimney at a point below the point of contact with the holding arms, all substantially as described.

3. In combination with a lamp burner having chimney holding arms, a clamp made of spring wire with integral loops bent downward and crossing a spring arm, the clamp being supported by the loop which is provided with inturned presser arms that hold the chimney with a yielding pressure, and a lamp chimney, all substantially as described.

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