(No Model.)

H. E. SHAFFER.

LAMP BURNER.

No. 503,007. Patented Aug. 8, 1893.

Fig. 1.

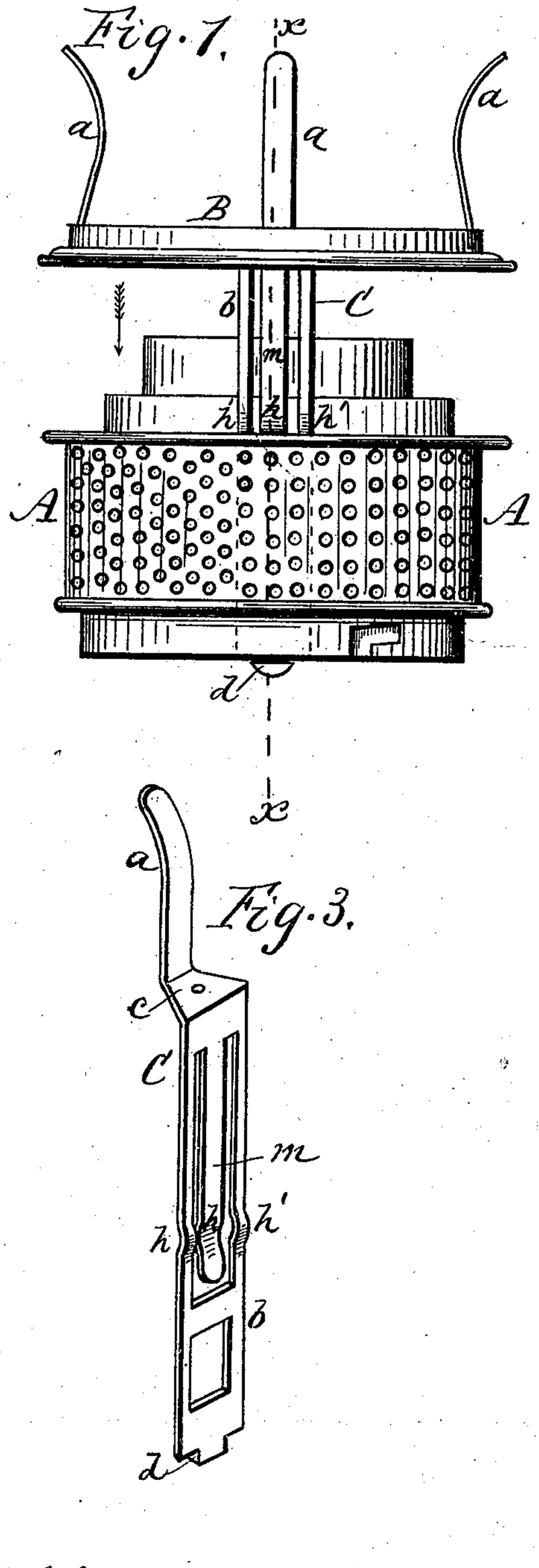

Fig. 2.

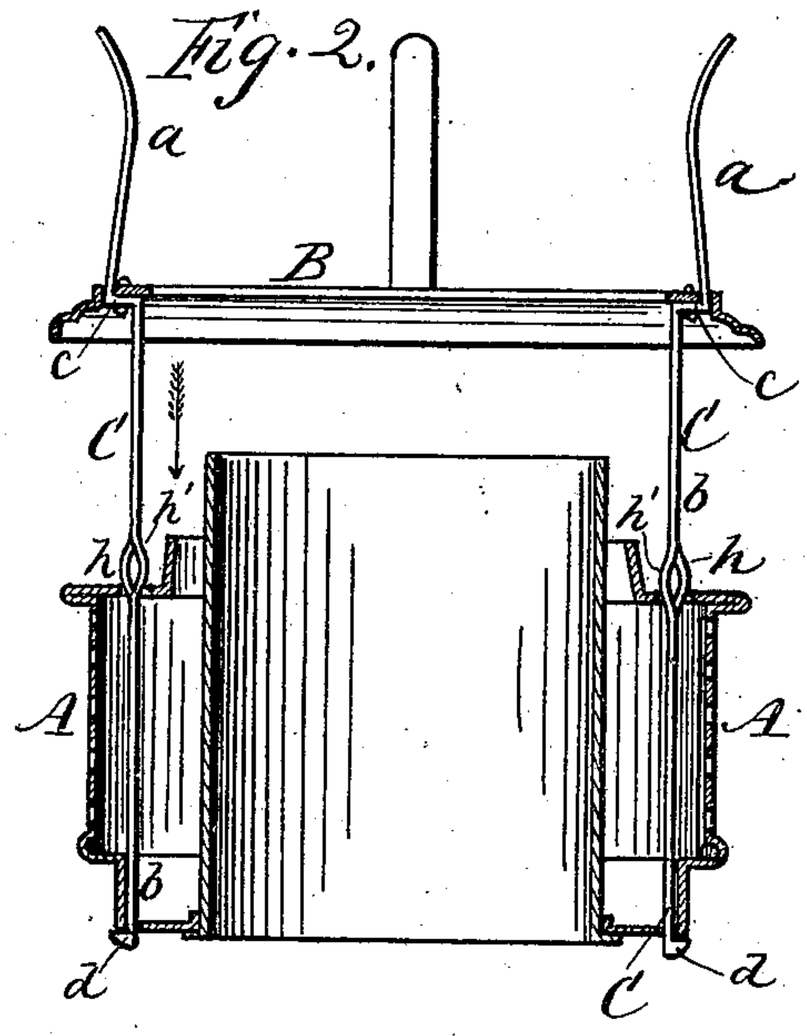

Fig. 3.

Witnesses.
C. R. Osgood.
F. B. Hutchinson

Inventor:
Henry E. Shaffer,
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Atty

UNITED STATES PATENT OFFICE.

HENRY E. SHAFFER, OF ROCHESTER, NEW YORK.

LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 503,007, dated August 8, 1893.

Application filed August 5, 1892. Serial No. 442,271. (No model.)

To all whom it may concern:

Be it known that I, HENRY E. SHAFFER, of Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Lamp-Burners; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the drawings accompanying this specification.

My improvement relates to burners for center-draft lamps, and is of that kind where the chimney holder is attached to standards or arms which slide up and down in the burner cap, thereby raising the chimney so that the lamp may be lighted.

The invention consists in the construction and arrangement of the standards as hereinafter described and claimed.

In the drawings—Figure 1 is an elevation of a burner-cap with my improvement, the chimney holder being raised. Fig. 2 is a central, vertical section of the same in line *x x* of Fig. 1. Fig. 3 is a perspective view of one of the sliding standards.

A indicates the burner cap and B the chimney holder.

C C are the sliding standards by which the chimney holder is sustained. Two of these are used, one on each side and diametrically opposite each other. Each consists of a strip or bar of metal, and is formed with a straight lower portion *b*, which slides up and down in the burner cap, a horizontal offset or seat *c* which rests under, is riveted to, and supports the chimney holder B, and a tongue *a* which forms one of the springs that holds the chimney in place. The offset *c* rests under the ring of the holder B, while the tongue *a* projects up through a hole cut in said ring, as shown in Figs. 1 and 3.

In the form shown in Figs. 1, 2 and 3 the central portion of the standard below the seat *c*, is cut out or slitted so as to form a tongue *m* which is attached at its upper end but free at its lower end. This tongue is provided with a small outward bend *h*, and the two side pieces are each provided with a similar inward bend *h'*. These bends are all in such position that when the standard is raised to its full extent said bends come just through the top of the cap and spring outward in opposite directions over the hole through which they have passed and hold the chimney elevated. When sufficient force is applied they spring back and pass through the hole again. By this means a simple and effective spring is produced sufficient to make the chimney self sustaining when elevated, and occupying so little space as not to be perceived under ordinary circumstances.

I am aware that it is common to make the standard and the chimney-holding springs in one integral piece; also to form on the bottom of the standard a set of springs by slitting the end of the standard; but in such case the end of standard, when drawn up to raise the chimney-cap, engages with the bottom of the burner and is unsupported beneath. In such case there is danger of drawing the standard through the opening and leaving it unsupported. My device differs from this in forming the springs in the central portion of the standard, while the lower end of the standard is solid and extends down below the burner and is never drawn up through its bottom when the chimney cap is raised. By this means a stiff and substantial support is obtained which always holds the cap in position. Furthermore, the springs being formed in the body instead of the end of the standard, are more effective in operation.

Another feature of my invention is the seat *c* of the standard resting under the top flange of the chimney cap B, with the spring *a* passing through a slot of the cap, said seat supporting the flange and giving it stability without other fastenings.

Having described my invention I do not claim broadly a standard with the chimney springs made integral therewith. Neither do I claim a standard with a split lower end bent to form holding springs. Neither do I claim broadly a right-angled seat in the standard resting under the chimney cap.

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

1. The combination, with the burner and chimney-cap, of the standard C constructed with the spring tongue *m* and reverse spring bends *h h' h'* in its body portion engaging with an opening in the top of the burner, and the projecting guide end *b* below said spring.

tongue, resting in bearings in the bottom of the burner, as shown and described and for the purpose specified.

2. The combination, with the burner and chimney cap, of the standard C, constructed with the spring tongue *m* and reverse spring bends *h h' h'* in its body portion, engaging with an opening in the top of the burner, a projecting guide end *b* below said spring tongue resting in bearings in the bottom of the burner, a right-angled seat *c* above said spring tongue supporting the chimney cap, and a tongue *a* extending through a slot of the chimney cap and forming a chimney holder, as herein shown and described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

HENRY E. SHAFFER.

Witnesses:
R. F. OSGOOD,
P. A. COSTICH.