

R. S. MERRILL.

Lamp Burner.

No. 79,488.

Patented June 30, 1868.

Fig. 1.

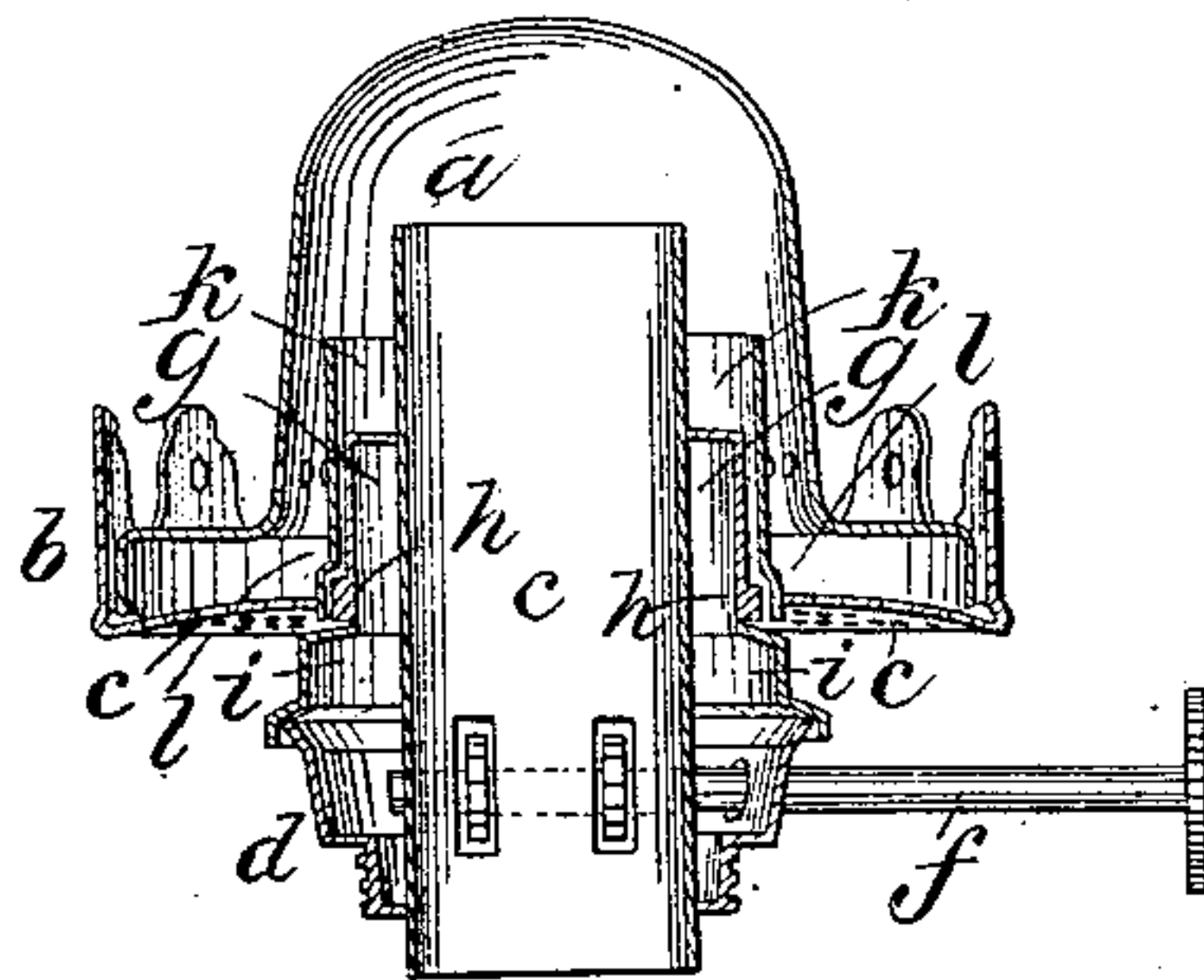


Fig. 2.

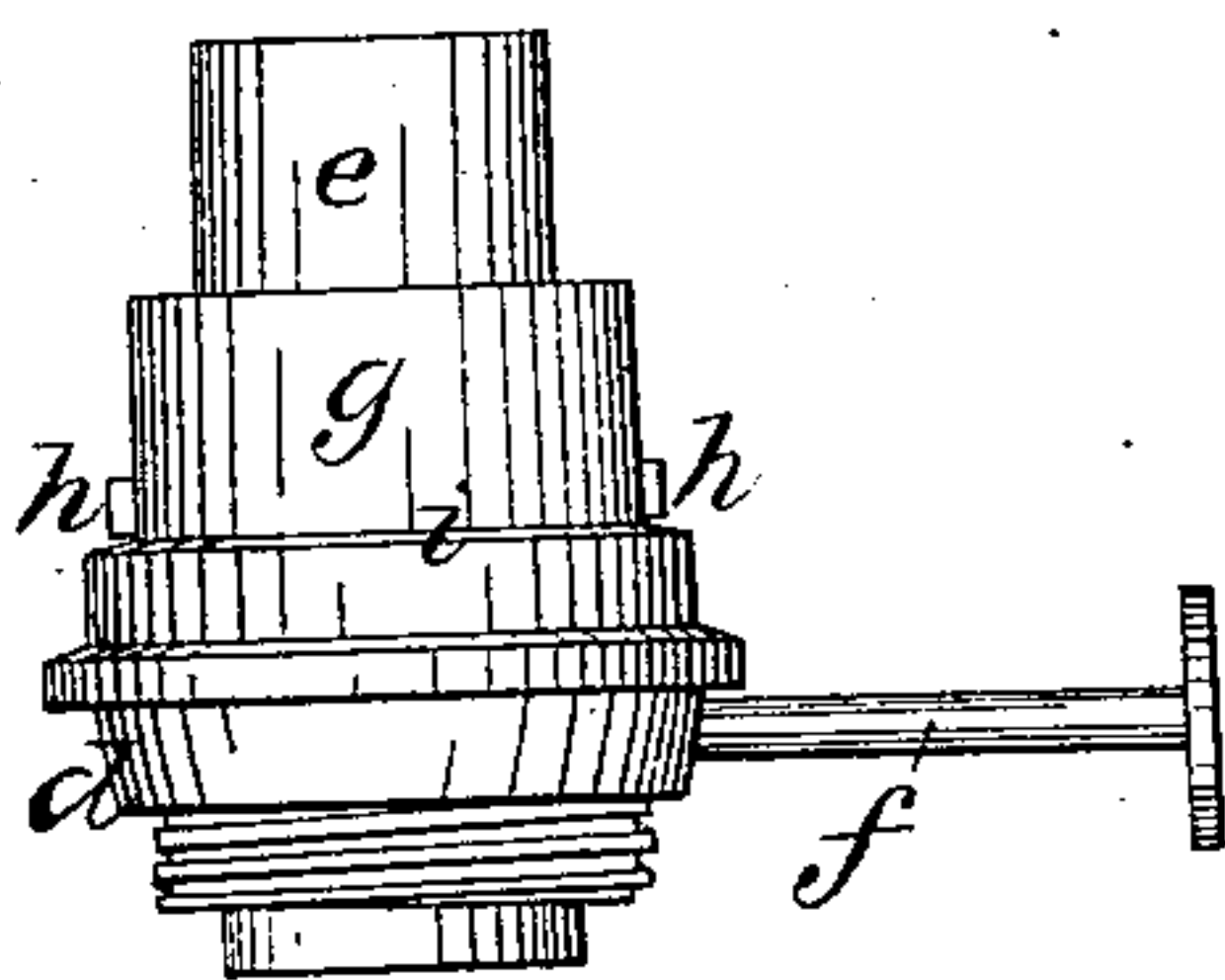
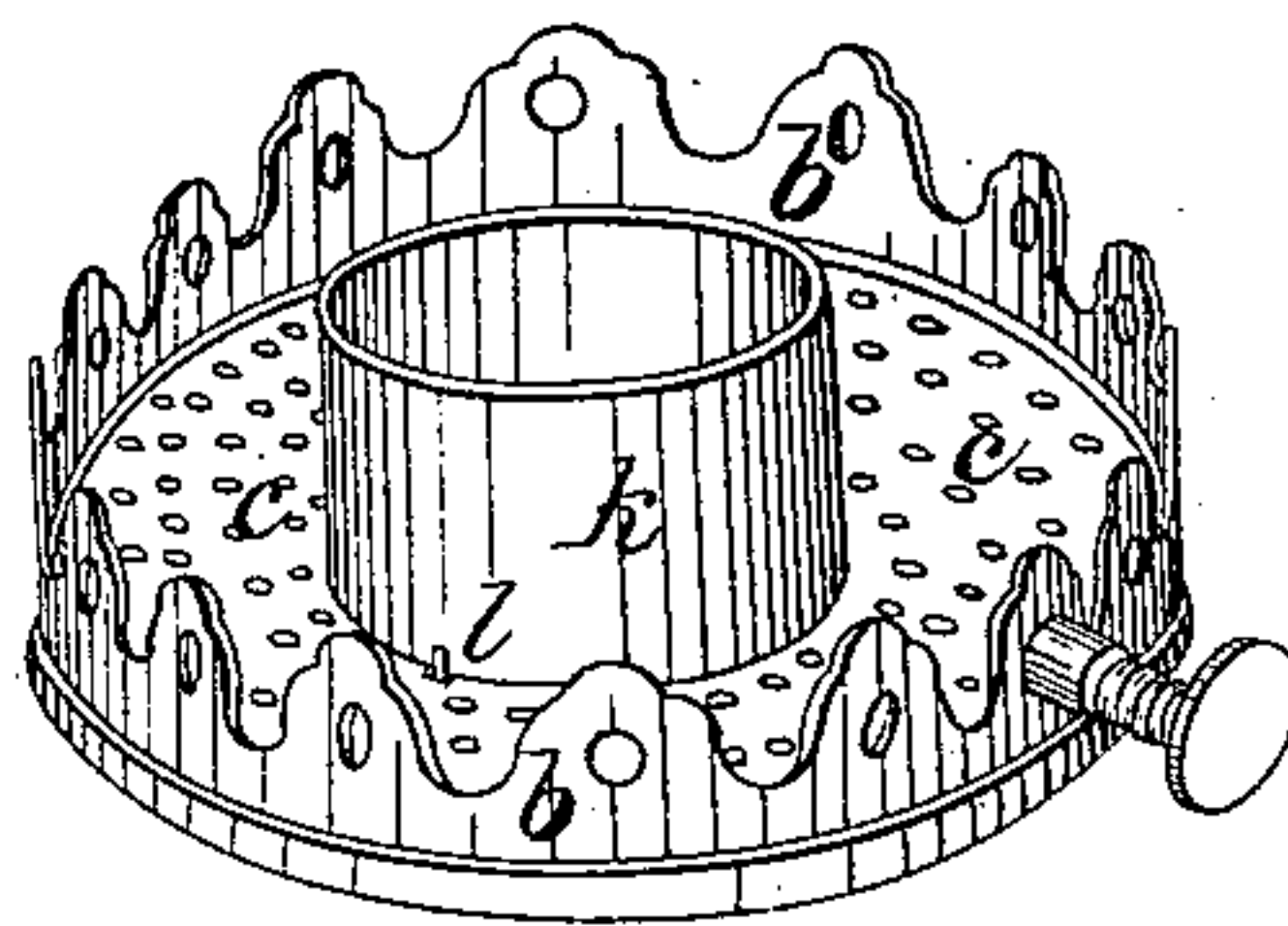


Fig. 3.



Witnesses:

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Inventor:

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RUFUS S. MERRILL, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF
AND WILLIAM CARLETON, OF SAME PLACE.

Letters Patent No. 79,488, dated June 30, 1868.

IMPROVEMENT IN LAMP-BURNERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO WHOM IT MAY CONCERN:

Be it known that I, RUFUS S. MERRILL, of Boston, in the county of Suffolk, and State of Massachusetts, have invented certain new and useful Improvements in Lamp-Burners; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings.

My invention has reference to that class of lamp-burners in which the lower section—composed of the base and wick-tube—is combined with an upper and removable section, consisting of the deflector, chimney-holder, with its chimney and air-distributor or diaphragm, united with the lower section by a friction-joint, and it relates more particularly to the means by which the two parts of the burner are united and held in their proper relations to one another.

To enable those skilled in the art to understand and use my invention, I will now proceed to describe the manner in which the same is or may be carried into effect, by reference to the accompanying drawings, in which—

Figure 1 represents a vertical central section of a lamp-burner made in accordance with my invention.

Figure 2 is an elevation of the burner with the upper or movable section removed.

Figure 3 is a perspective view of the upper and movable section of the burner.

The burner is composed of two sections, the upper or movable section consisting of the deflector *a*, the chimney-rest *b*, and the air-distributor or perforated plate *c*, and the lower section consisting of the base, *d*, the wick-tube *e*, and the wick-adjusting device *f*.

The ordinary method of uniting the two sections is by means of a sleeve attached to the upper section, which fits closely around the wick-tube, the latter thus constituting the guide by which the slotted dome *a* is assured in its proper position above the wick-tube.

My object, as above stated, is to accomplish this result without employing the wick-tube as a guide. To this end, I combine with the lower section a cap, *g*, which surrounds the wick-tube, and has a diameter considerably greater than the breadth of the tube. The cap, after being struck up into the desired shape, is soldered or otherwise suitably secured to the base, *d*. Upon its sides may be formed guides, *h*, for the purposes hereinafter mentioned. A shoulder, *i*, is also made upon the lower part of the cap, which supports the upper section, when the parts are in the position seen in fig. 1.

To the air-distributing plate *c* of the upper section is secured a sleeve, *k*, of such shape and form as to fit loosely around the bearing *g*, and upon this sleeve are formed guides, *l*, in position corresponding to that occupied by the guides or lugs *h* on the bearing, so that when the sleeve is pressed down over the cap, the sections will be readily adjusted and held in their proper relations to each other.

Instead of making the cap and sleeve cylindrical, they may be made slightly conical, but this is not essential.

In a burner thus constructed, the upper section is not dependent upon the wick-tube, either as a guide or as a support, nor has it any contact with the tube, which is a point of some importance, and at the same time the burner is much simplified, especially when the bearing forms, as above stated, the cap for the base, and the cost of its construction is considerably reduced. The upper section can also be adjusted to and removed from the burner with greater facility than when the sleeve is drawn in so as to fit the wick-tube.

In addition to these advantages, it will be seen that as the sleeve is much wider and larger in every direction than the wick-tube, there is not that danger of extinguishing the flame, in adjusting the upper section in position over the lighted wick, which exists when the sleeve, as is now the case, is drawn in so as to fit closely around the tube.

Having now described my invention, and the manner in which the same is or may be carried into effect, what I claim, and desire to secure by Letters Patent, is as follows:

1. In a burner, in which the upper section, consisting of the deflector, air-distributing plate, and chimney-

holder, with its chimney, is removable from the lower section, composed of the base and wick-tube, I claim a sleeve united with the air-distributing plate, and shaped in the manner herein described, so that, while entirely removed from contact with the wick-tube, it shall fit the cap of the lower section, and maintain the upper or removable section in position, substantially as and for the purposes specified.

2. In combination with the parts arranged as claimed in the preceding clause, I claim guides, or their mechanical equivalents, formed upon the cap and the sleeve, as described, so that the upper section of the burner may be readily adjusted upon the lower section, as set forth.

In testimony whereof, I have signed my name to this specification before two subscribing witnesses.

RUFUS S. MERRILL.

Witnesses:

MARCELLUS BAILEY,
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