J. B. FULLER.

Lamp Burner.

No. 97,069. Patented Nov. 23, 1869.

Fig. 1

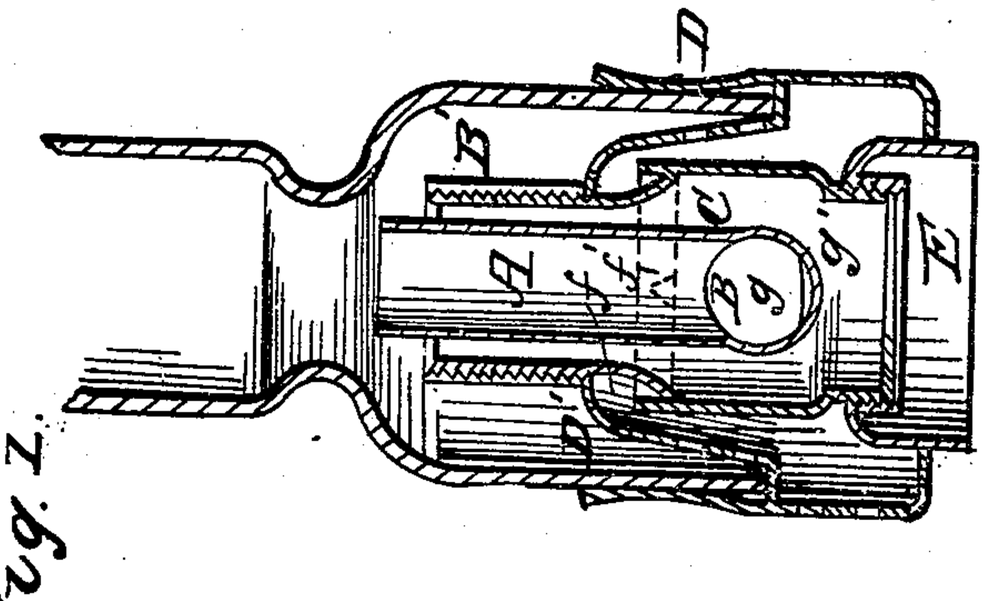


Fig. 2

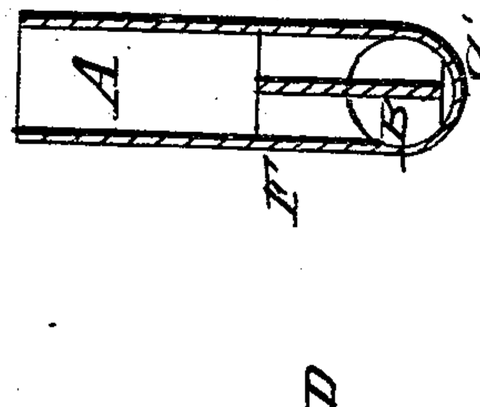


Fig. 3

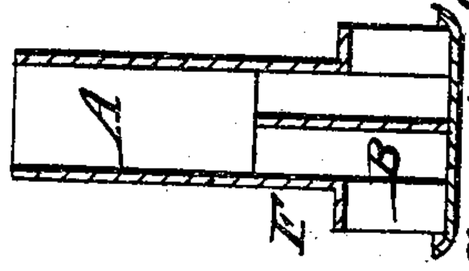


Fig. 4

Fig. 5

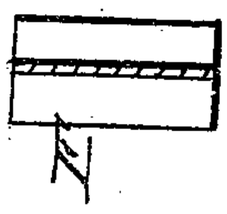
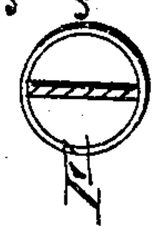


Fig. 6



Witnesses

Webster Park

J. V. Brandell

Inventor

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UNITED STATES PATENT OFFICE.

JIM B. FULLER, OF NORWICH, CONNECTICUT.

LAMP-BURNER.

Specification forming part of Letters Patent No. **97,069**, dated November 23, 1869.

To all whom it may concern:

Be it known that I, JIM B. FULLER, of Norwich, in the county of New London and State of Connecticut, have invented a new and useful Improvement in Lamp-Burners, the following being a full, clear, and exact description of the same, reference being had to the accompanying drawing, making part of this specification, in which—

Figure 1 is a vertical section of my improvement, and Figs. 2 and 3 are vertical sections of the interior parts. Figs 4 and 5 are sections showing the check-plate, and Fig. 6 is a top section of a single check-plate.

The same letters of reference indicate similar parts in each figure.

My invention relates to lamp-burners, having two flat wicks so arranged as to produce an Argand flame; and consists in the peculiar mechanism hereinafter fully described, by which the currents of air are so conducted to the flame as to produce a more intense, clear, and uniform light than has been done heretofore in this class of burners.

Heretofore in such burners the two wicks have been operated by means of toothed wheels, and in such a manner that there was great difficulty in raising or lowering both wicks evenly. Either one or the other, or both, would sometimes slip, the teeth becoming worn and not taking firm hold, thus resulting in an uneven flame.

In this class of burners, also, there has heretofore been no effectual means employed for regulating the current of air in the central tube. The air, passing in at the sides, formed within the central tube spiral currents, which, being changeable, produced an unsteady light.

In my improved burner I use two ordinary flat wicks; but, so far as relates to the central tube, the said wicks are stationary, and are trimmed and kept even with the top of the central tube.

As a means of regulating the flame, I raise or lower an outside tube, which exposes more or less of the outside of the wicks to the action of the flame, while the inside of the said wicks are protected by the central tube. Therefore, the wicks having been trimmed evenly, the means employed for regulating the light does not disturb them; but they remain as perfect as a continuous Argand wick.

I place within the wick-tube a vertical check-plate, in such a manner that the air passing in at the sides shall be deflected upward without the possibility of forming spiral or other uneven currents.

In the drawing, A represents the central or wick tube, extending down and opening into the tube B, forming a T; or both A and B may be made of one piece. C is a case, surrounding the tubes A and B, and is pierced on two sides, so that the ends of the tube B are open through the case for the passage of air up through the tube A. The tube A projects above the case a distance equal at least to the length of wick exposed to the action of the flame. D is the chimney-holder, which may be extended down around the collar E, as shown, and may be perforated at the base. D′ is a perforated cone, the base of which is attached to the chimney-holder, while the upper end forms the regulating-tube B′, being fitted with a screw-thread around the upper part of the case *c*. The whole space in the case above the tube B is of annular form, so that the wicks may be easily passed up through, forming a complete cylindrical wick in the upper part of the case. F is the check-plate, placed vertically in the bottom of the tube B, extending up into the tube A.

This check-plate may be made of various forms; but I prefer a single plate, as shown in Fig. 6, or the two cross-plates shown in Figs. 4 and 5. *f* is a cup, formed at the joints of the two parts of the case, and *f′* is an aperture in the cup, through which oil flowing over the top of the case will be returned into the lamp. This aperture is placed so as to return the oil at a point between the wicks. *g* is a lip at each end of the tube B, and *g′* is an aperture through the bottom of said tube, by which means any oil flowing over the wick-tube will be returned into the lamp.

The chimney is of ordinary construction, having a neck near the base, forming a deflector; or a chimney of other construction may be used with a metallic or other separate deflector.

The burner is secured to the lamps in common use in the ordinary manner, and the

light is governed by turning the chimney-holder around to the right or left, without moving or otherwise disturbing the wick, but exposing more or less of its outside surface to the action of the flame.

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

1. Arranging two stationary flat wicks around a central tube, having side passages for supplying air to the interior of the central tube, so as to produce an Argand flame, and having an outside tube for regulating the exposure of one side of the wicks to the action of the flame, said wicks being kept even with the upper end of the central or wick tube, the whole being constructed and arranged substantially as and for the purpose set forth.

2. The tubes A and B, the case C, the cone D′, and tube B′, or their equivalents, when used in connection with two stationary wicks, in the manner substantially as herein described, and for the purpose specified.

3. The check-plate F, or its equivalent, substantially as shown and described.

4. The lips *g* and aperture *g′*, as and for the purpose specified.

5. The cup *f* and aperture *f′*, when arranged substantially as shown and described, so that the oil returning through the aperture into the case shall pass between the wicks.

October 18, 1869.

JIM B. FULLER.

Witnesses:
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HENRY ORTH.