

J. W. EMERSON.

Wick Raiser.

No. 108,694.

Patented Oct. 25, 1870.

fig. 1

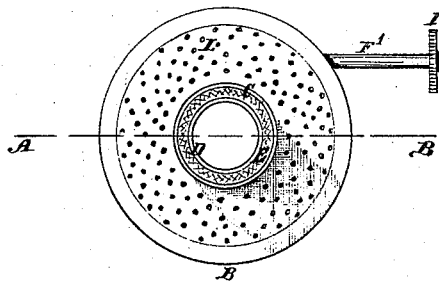


fig. 2

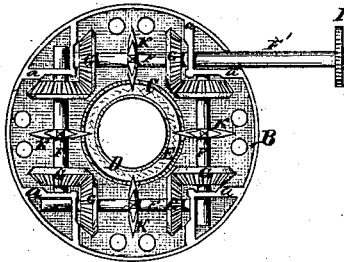
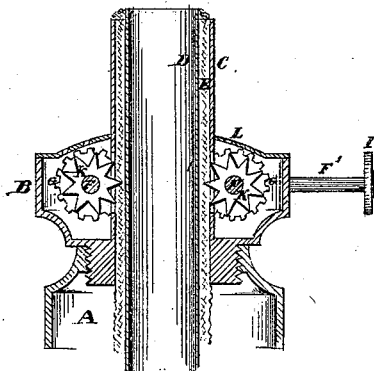


fig. 3



Witnesses

Thos H. Dodge
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JOHN W. EMERSON, OF MILBURY, MASSACHUSETTS.

Letters Patent No. 108,694, dated October 25, 1870.

IMPROVEMENT IN HOLLOW-WICK LAMP-BURNERS.

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

To all whom it may concern:

Be it known that I, JOHN W. EMERSON, of Milbury, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Hollow-wick Lamp-Burners; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing which forms a part of this specification, in which—

Figure 1 represents a plan view of my improved hollow-wick lamp-burner;

Figure 2 represents a plan view of the same, with the perforated cap removed to show the feeding device; and

Figure 3 represents a central vertical section of the same at line A B, fig. 1.

To enable those skilled in the art to which my invention belongs to make and use the same, I will proceed to describe it more in detail.

The nature of my invention consists in a round wick lamp-burner, the parts of which are constructed and combined, as hereinafter described.

In the drawing the parts marked A represent the top part of the lamp, into which is screwed the tube-holding case B.

C indicates the outer tube, which is secured in an upright position in the center of the case B.

D indicates the inner tube, which extends to the bottom of the lamp, to which its lower end is secured, while its upper end projects up through the center of the wick E, the latter being arranged between the outer and inner tubes, as shown in the drawing.

Within the case B is a series of small spindles, F, supported so as to turn in the bearing pieces a, and joined to each other for operation by sets of miter or bevel-gears G, in the manner shown in fig. 2 of the drawing.

One of the spindles F is prolonged, as shown at F', and its outer end furnished with a thumb-wheel, I, by means of which the spindles can easily be revolved in unison.

At the central part of the spindles F are arranged spur-wheels K, the points of which extend through

openings formed in the outer tube C, and enter the wick E, so that, when the spindles are turned, all of the spurs, acting together, raise or lower the wick in a very steady and perfect manner.

The top of the case B is covered with a perforated cap, L, which fits closely around the tube C, and upon which the chimney rests when a chimney is used.

The chimney may be held in place by any of the well-known devices for such purposes.

The air to supply the interior of the flame passes up through the center of the tube D, the lower end of which is left open; while air to supply the outside of the flame passes through holes in the lower part of the case B and up through the perforated cap L.

One pair of the gears G can be omitted if desired, as three pair are sufficient to drive the spindles.

By the use of my improvement the tubes C and D are held firmly in position, so that neither of them are liable to become displaced, even though the lamp should be overturned; and as there is no space for the escape of oil, except through the wick, it is not liable to overflow and besmear the exterior of the lamp.

Again, the labor of re-wicking the lamp is much less than with burners of the ordinary construction. The operation being simply to unscrew and remove the top, then insert one end of the wick in the lower end of the tube C, and the tube D in the other end of the wick, and slide down the tube C, thus carrying the end of the wick up against the spur, when, by turning the thumb-wheel I, the wick will be drawn up to the desired position.

Having described my improvements in hollow-wick lamp-burners,

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

The case or cap B, inclosing the wick-raising devices, and carrying the outer wick-tube C, in combination with the stationary tube D and lamp-top or collar A, as shown and set forth.

Witnesses:

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THOS. H. DODGE,

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