

C. F. A. HINRICHS & C. REISTLE.  
Lamp-Burner.

No. 198,981.

Patented Jan. 8, 1878.

Fig. 1.

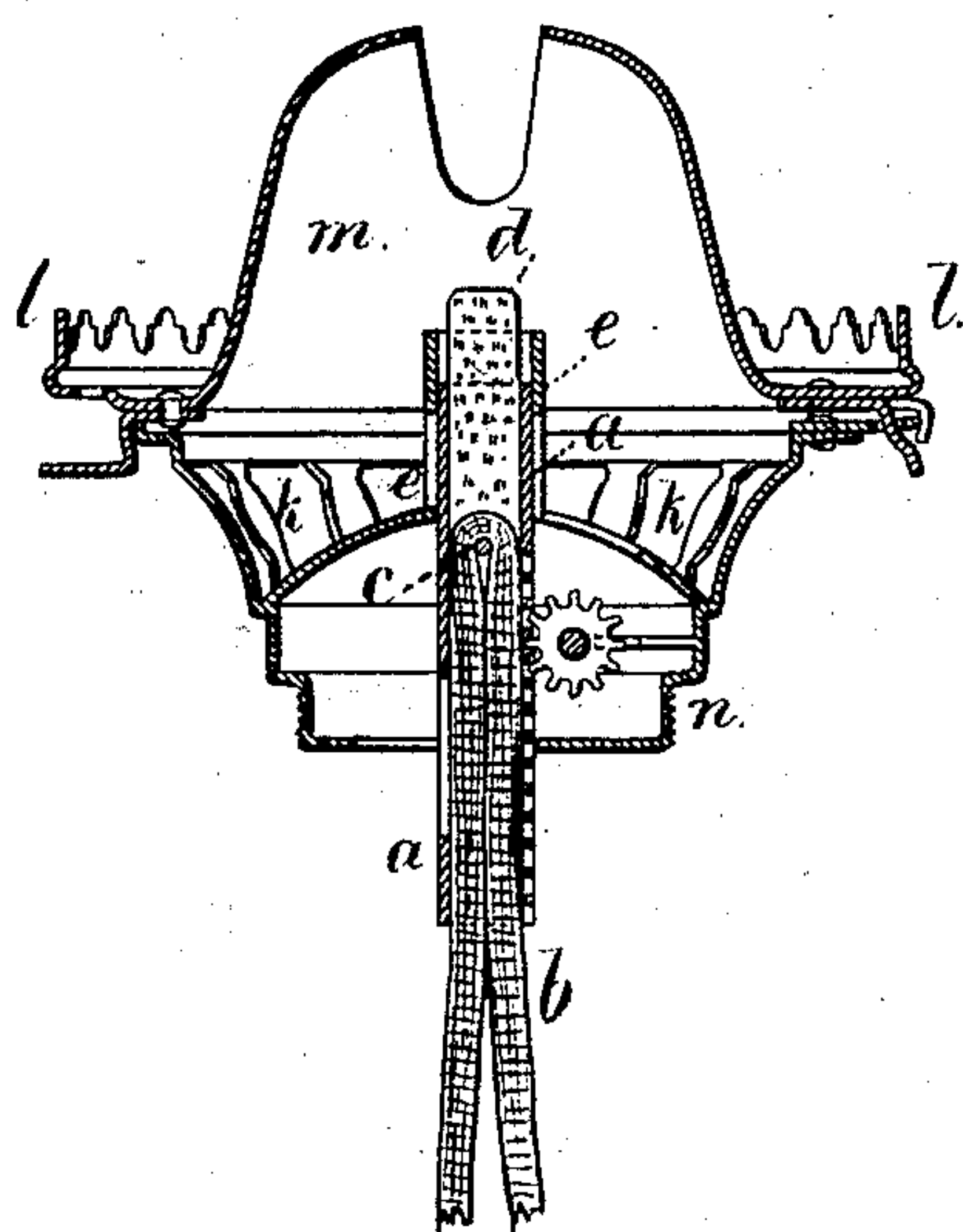


Fig. 3.

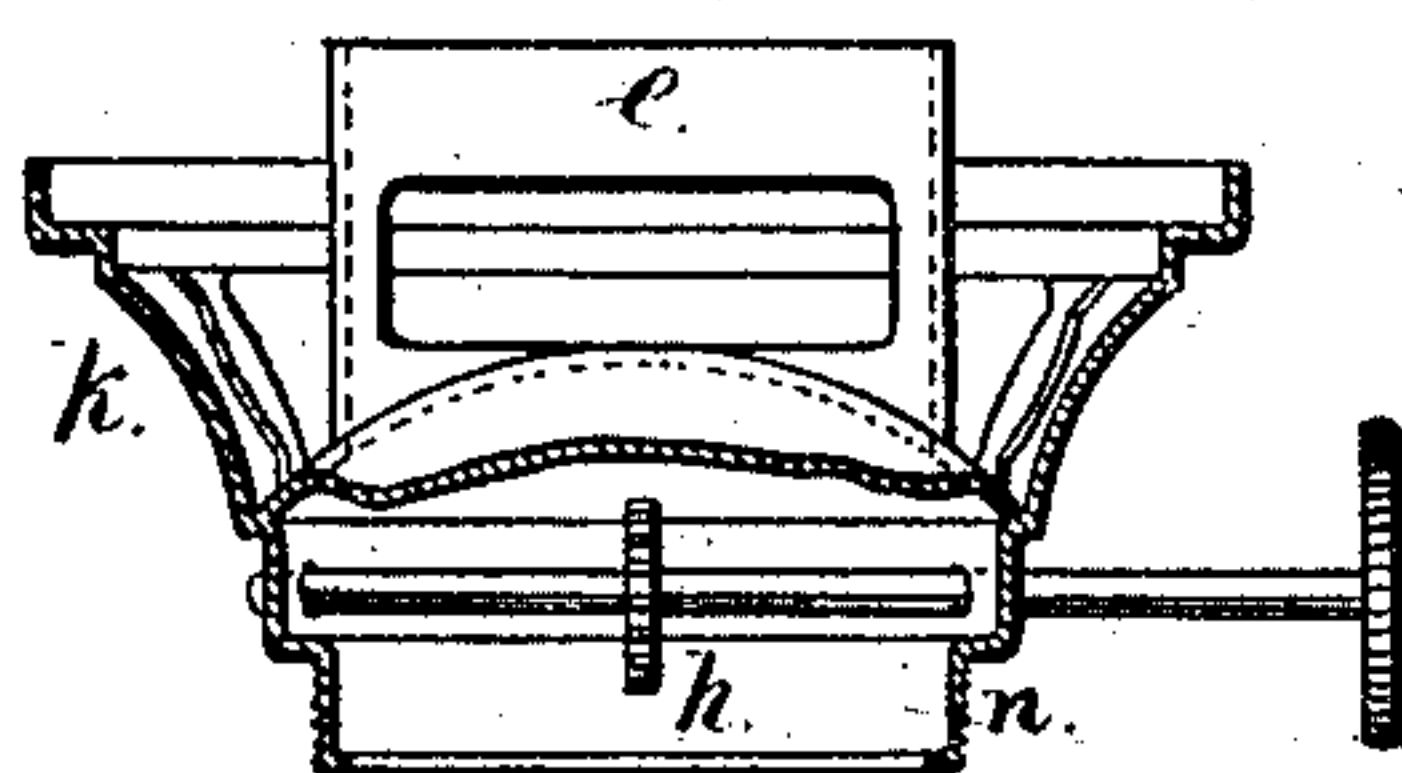
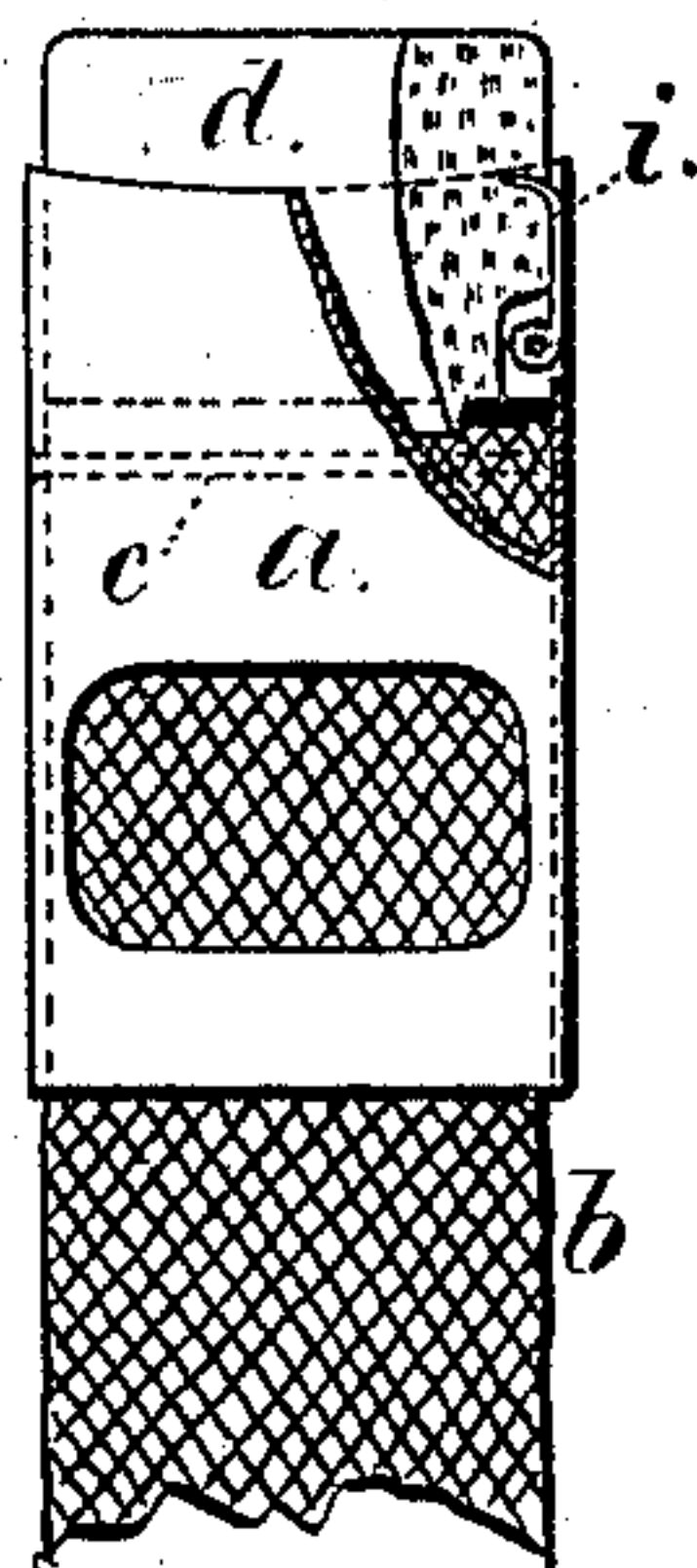


Fig. 2.



Witnesses

Charles H. Smith  
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Inventors

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per Lemuel W. Perrell atty

# UNITED STATES PATENT OFFICE.

CHARLES F. A. HINRICHS AND CHARLES REISTLE, OF BROOKLYN, NEW YORK, ASSIGNORS TO SAID HINRICHS.

## IMPROVEMENT IN LAMP-BURNERS.

Specification forming part of Letters Patent No. **198,981**, dated January 8, 1878; application filed October 29, 1877.

*To all whom it may concern:*

Be it known that we, CHARLES F. A. HINRICHS and CHARLES REISTLE, of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Lamps, of which the following is a specification:

Various mineral substances have been employed for lamp-wicks, and especially those of a cylindrical form, and in these cases the height of the flame has been regulated by raising or lowering the inner air-tube, as in Letters Patent No. 178,774, or the wick itself has been raised or lowered, as in Letters Patent Nos. 186,732 and 188,542.

Our present invention relates to an improvement in the parts connected with the wick, whereby a mineral wick is adapted to the flat wicks of lamp-burners.

In the drawing, Figure 1 is a vertical section of the lamp-burner and mineral wick. Fig. 2 is an elevation, partially in section, of the wick-tube and mineral wick; and Fig. 3 is an elevation of the wick-tube case.

The wick-tube *a* is adapted to receive the ordinary cotton wick *b* in a double or folded condition, the wick passing over the transverse wire *c*, so that it will not become misplaced by handling.

Into the upper part of the wick-tube *a* the piece of porous mineral wick *d* is inserted, and the same rests upon the wick *b*, or other fibrous material in the wick-tube, and is held in place by the small claw *i*, that is connected with the wick-tube, preferably, at one edge, and the point thereof is pressed into the mineral substance. This allows one piece of mineral wick to be removed by withdrawing the claw, and another to be substituted.

The wick-case *e* is of a size to receive the wick-tube *a*, and it is, by preference, made with open-worksides, that lessen the amount of heat conducted down to the burner and wick.

According to the height of the mineral wick above the top of the wick-case *e*, so the flame

will be larger or smaller, and by changing their relative height the flame will be varied. The wick-case *e* may be raised or lowered and the wick remain stationary. We, however, have shown the case *e* as stationary, and the wick-tube as raised or lowered by the pinion *h*, with pointed teeth, passing into holes in the wick-tube. In either instance the flame burns from the upper edge of the case *e*, the mineral wick rising above its wick-tube *a*, and the oil being supplied to the mineral wick by contact with the fibrous material in the flat wick-tube.

The other parts of the lamp, such as the air-distributor *k*, hinged chimney-holder *l*, cone or deflector *m*, and attaching-screw *n*, are of any desired or convenient character.

We claim as our invention—

1. The flat wick-tube *a*, having a transverse wire, *c*, and receiving the wick *b* in a folded condition, in combination with the mineral wick *d*, inserted into the top of the wick-tube and rising above the same, substantially as set forth.

2. The flat wick *d* of mineral material, in combination with the wick-tube *a* and holding-claw *i*, substantially as set forth.

3. The combination, in a lamp-burner, of a flat mineral wick, a wick-tube, above the upper end of which the mineral wick projects, a case surrounding the wick-tube closely, and having openings to lessen the heat conducted downwardly, and means for varying the height of the mineral wick relatively to the surrounding-case, substantially as set forth, whereby the base of the flame rises from the upper edge of the case, substantially as set forth.

Signed by us this 25th day of October, A. D. 1877.

C. F. A. HINRICHS.  
CHS. REISTLE.

Witnesses:

GEO. T. PINCKNEY,  
CHAS. H. SMITH.