

CATE & PUTNAM.

Lamp.

No. 2,358.

Patented Nov. 16, 1841.

Fig: 1.

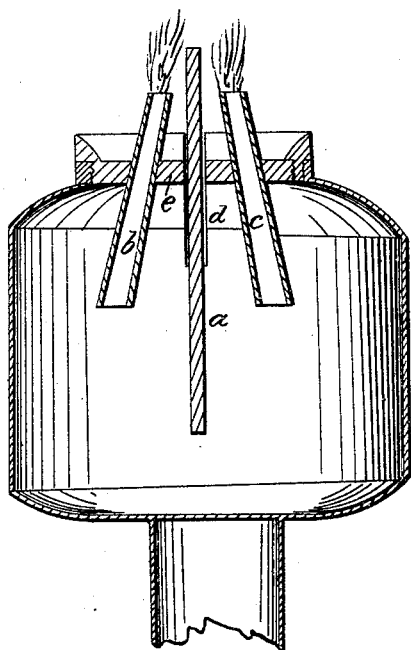


Fig: 3.

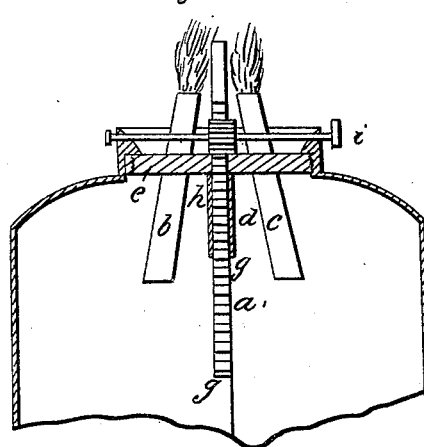


Fig: 2.

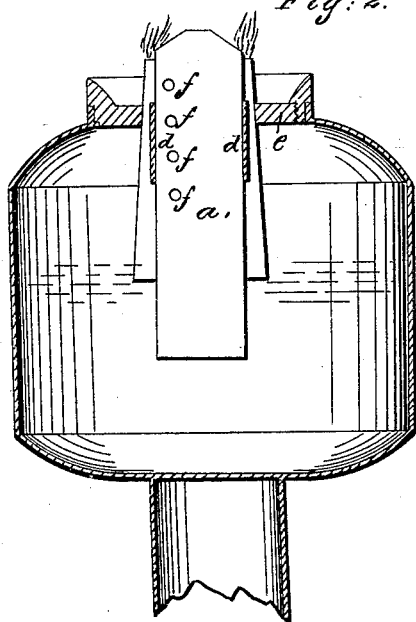
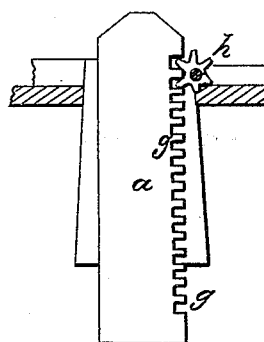


Fig: 4.



# UNITED STATES PATENT OFFICE.

N. S. CATE, OF CHARLESTOWN, AND J. H. PUTNAM, OF MALDEN, MASSACHUSETTS.

## CONSTRUCTION OF LAMPS FOR BURNING LARD, TALLOW, &c.

Specification of Letters Patent No. 2,358, dated November 16, 1841.

*To all whom it may concern:*

Be it known that we, NORMAN S. CATE, of Charlestown, and JAMES H. PUTNAM, of Malden, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Lamps for Burning Lard, Tallow, or other Concrete Fatty Matters, of which the following is a full and exact description, reference being had to the accompanying drawings, which, combined with the same, form our specification.

In the same we have set forth the nature of our inventions, by which they may be distinguished from others of a like character, together with such parts or combinations therein as we claim and for which we solicit an exclusive property for fourteen years to be secured to us by Letters Patent.

Our inventions are represented in Figures 1, 2, 3, 4 and consist in so arranging the piece of copper which conducts the heat of the flame to the material to be burned, to melt the same, that it may be raised or depressed at pleasure. In lamps of this description, the copper conductor has generally consisted of a copper wire inserted in the wick tube and extending through and below the same into the body of the lamp. This latter disposition of the conductor often and most always causes the destruction of the wick in contact with it, for the conductor becoming red hot soon, not only burns up the wicking, but so heats the cap of the lamp as to unsolder the wick tubes.

In our lamp the conductor *a* (see Figs. 1 and 2, the former of which is a vertical cross section of the lamp, taken through the center of the wick tubes, and the latter is another vertical cross section taken at right angles to the former through the central

part of the conductor), is placed immediately between the wick tubes *b*, *c*, and slides up and down in a spring collar *d* surrounding the same and soldered to the screw cap, *e*. The conductor may have a series *f*, *f*, *f* of small holes bored through it as seen in Fig. 2, into which a pointed instrument may be inserted to raise or depress the same, or it may have a toothed rack *g*, *g*, Figs. 3, 4, formed on its edge into which the teeth of a small pinion *h*, (applied to the screw cap on a short thumb shaft *i*) may operate, and thus when the lamp is first lighted the conductor may be elevated into the body of the flame, where in one or more seconds it becomes sufficiently heated to be depressed into the lard in the lamp, so as to liquidize the same. As soon as the lamp becomes hot enough to keep the lard in a fluid state, the conductor may be lowered below the flame, or into such position as to convey a suitable degree of heat to the lard.

Having thus explained our inventions we shall claim—

The movable metallic conductor, situated between the wick tubes, and arranged in the spring collar as above described, so as to be elevated or depressed or adjusted to any desirable position with respect to the flame, the same being constructed and operated substantially in the manner above set forth.

In testimony that the foregoing is a true description of our said inventions and improvements we have hereto set our signatures this fifth day of October in the year eighteen hundred and forty one.

NORMAN S. CATE.  
JAMES H. PUTNAM.

Witnesses:

R. H. EDDY,  
EZRA LINCOLN, JR.