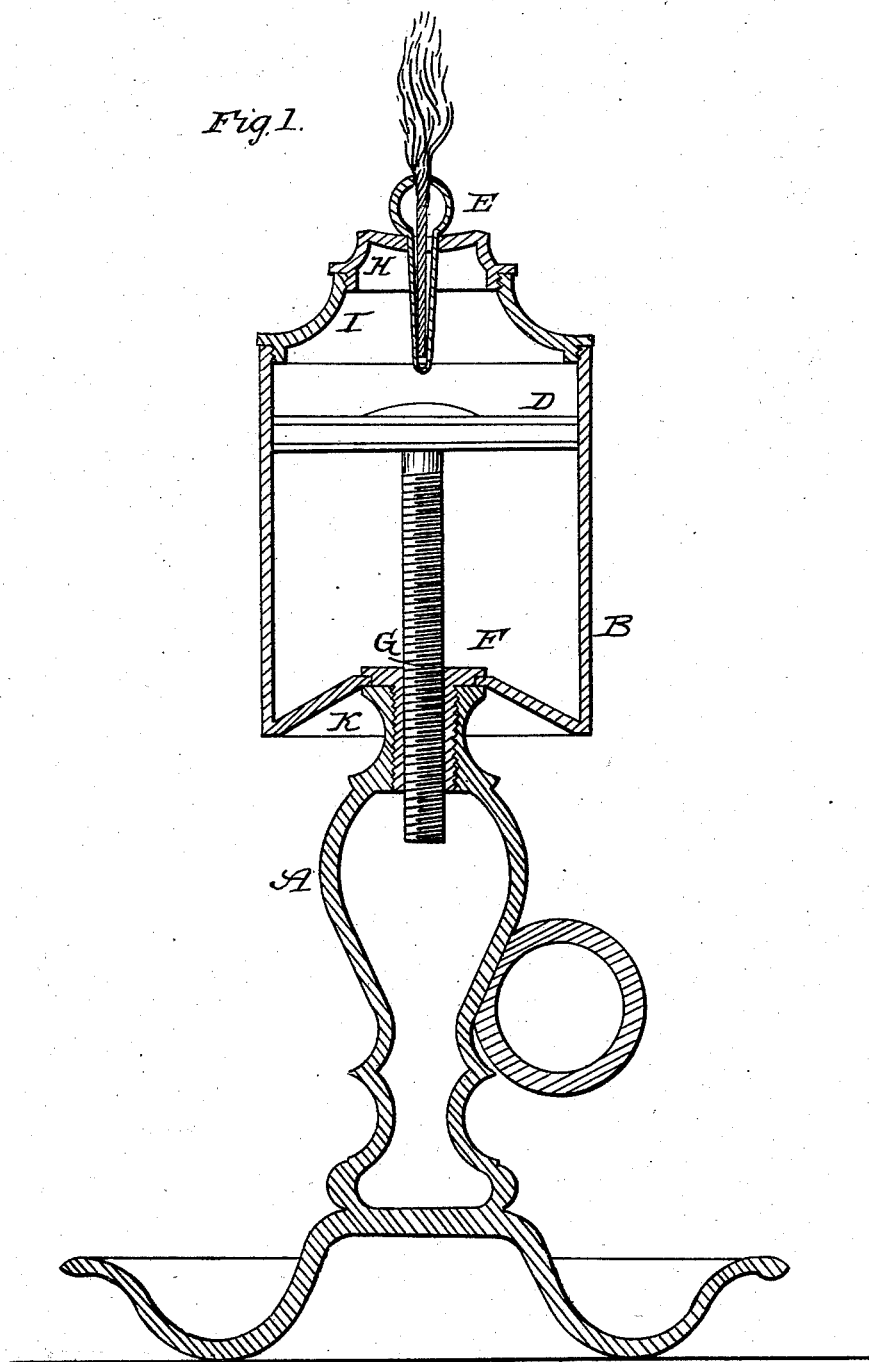


HOUGHTON & WALLACE,

Lamp.

No. 3,333.

Patented Nov. 15, 1843.



# UNITED STATES PATENT OFFICE.

THOS. HOUGHTON AND JOHN F. WALLACE, OF PHILADELPHIA, PENNSYLVANIA.

## LARD-LAMP.

Specification of Letters Patent No. 3,333, dated November 15, 1843.

*To all whom it may concern:*

Be it known that we, THOMAS HOUGHTON and JOHN F. WALLACE, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in the Lamp for Burning Lard, which I have described as follows, reference being had to the annexed drawings of the same making part of this specification.

Figure 1 is a vertical section of the center of the lamp.

A is the stand of the lamp containing a socket of the requisite diameter and depth to admit a screw piston rod to turn therein closed at the upper end by a nut F containing a female screw in which the screw piston rod G turns and a groove K on the outside in which the body of the lamp turns.

B is the body of the lamp that contains the lard, having a concave bottom perforated in the center with a round aperture of the diameter of the neck of the nut F aforesaid at the top or head of the stand on which it turns. The inside of the upper end of the cylindrical reservoir containing the lard, or body of the lamp, contains a female screw in which is screwed a cylindrical cap or cover I perforated in the center with a round aperture containing a female screw in which is screwed the nut H through which the wick holder passes perforated in the center by an oblong slot into which the wick holder E hereafter described is inserted.

D is the piston for raising the lard to the flame and keeping it in contact therewith as it is consumed. This piston is of the same diameter as the inside of the lard reservoir and is packed around its circumference so as to fit the interior of the reservoir tight and to turn horizontally with the reservoir as it is turned on the neck of the nut and at the same time to rise vertically in the reservoir with the lard above it which is lifted toward the flame bringing the surface in contact therewith which is essential to the complete success of the lard lamp. The descent of the piston is caused by reversing the motion of the reservoir and piston, the screw rod G of the latter turning in the nut F at the head of the socket stand which remains in the same position.

E represents the wick holder and heat

conductor; this is made of a metallic flat plate having a semicircular cavity or depression near each end and bent in the form of a pair of tongs so as to bring the aforesaid cavities opposite each other thus forming a semicircular air chamber on each side of the wick contained between the legs of the said wick holder and at the upper end of the wick for supplying the flame with two strong currents of air for keeping up a rapid combustion of the lard which is kept in a state of fluidity by the aforesaid metallic conductor.

The convex sides of the aforesaid bent portions of the wick holder forming the air chambers also form shoulders which rest upon the upper surface of the screw cap H and thus hold the wick in a suspended state in the lard the wick being grasped between the upper or open ends of it in the manner of tongs or pincers easily separated for raising the wick the plate being made flexible for that purpose and preventing the lard holding or drawing the wick down by surrounding and protecting it from such effect and being easily and quickly withdrawn from the lamp for trimming or other purpose and costing but a mere trifle on account of its extreme simplicity. This I consider a very valuable part of the construction of the lamp.

The manner of raising the lard to the flame is also very simple and efficacious as will be evident on examining the annexed drawings of the lamp.

We do not mean to claim that we are the original inventors of metallic wick holders and heat conductors for lard lamps; or of raising the lard to the flame by a screw and piston, as this has already been done, but

What we do claim as our invention and for which we ask Letters Patent is—

The peculiar construction of the wick holder and conductor, having the two semicircular chambers near the top and forming shoulders for suspending it to the screw cap, in the manner and for the purpose set forth.

THOS. HOUGHTON. [L. S.]

JOHN F. WALLACE. [L. S.]

Witnesses at signing:

I. BRAZER,

JOHN CLAPP, Jr.