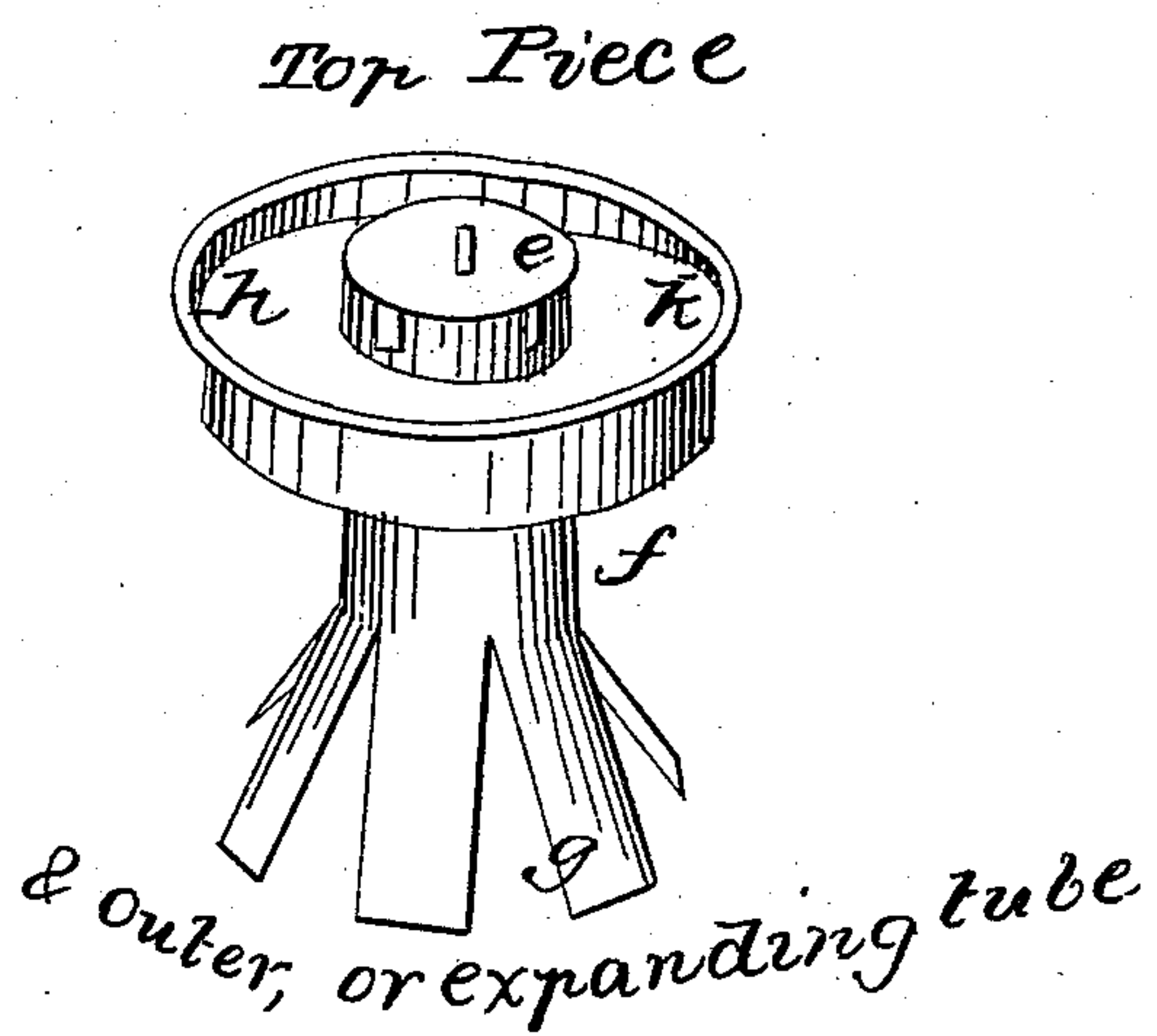
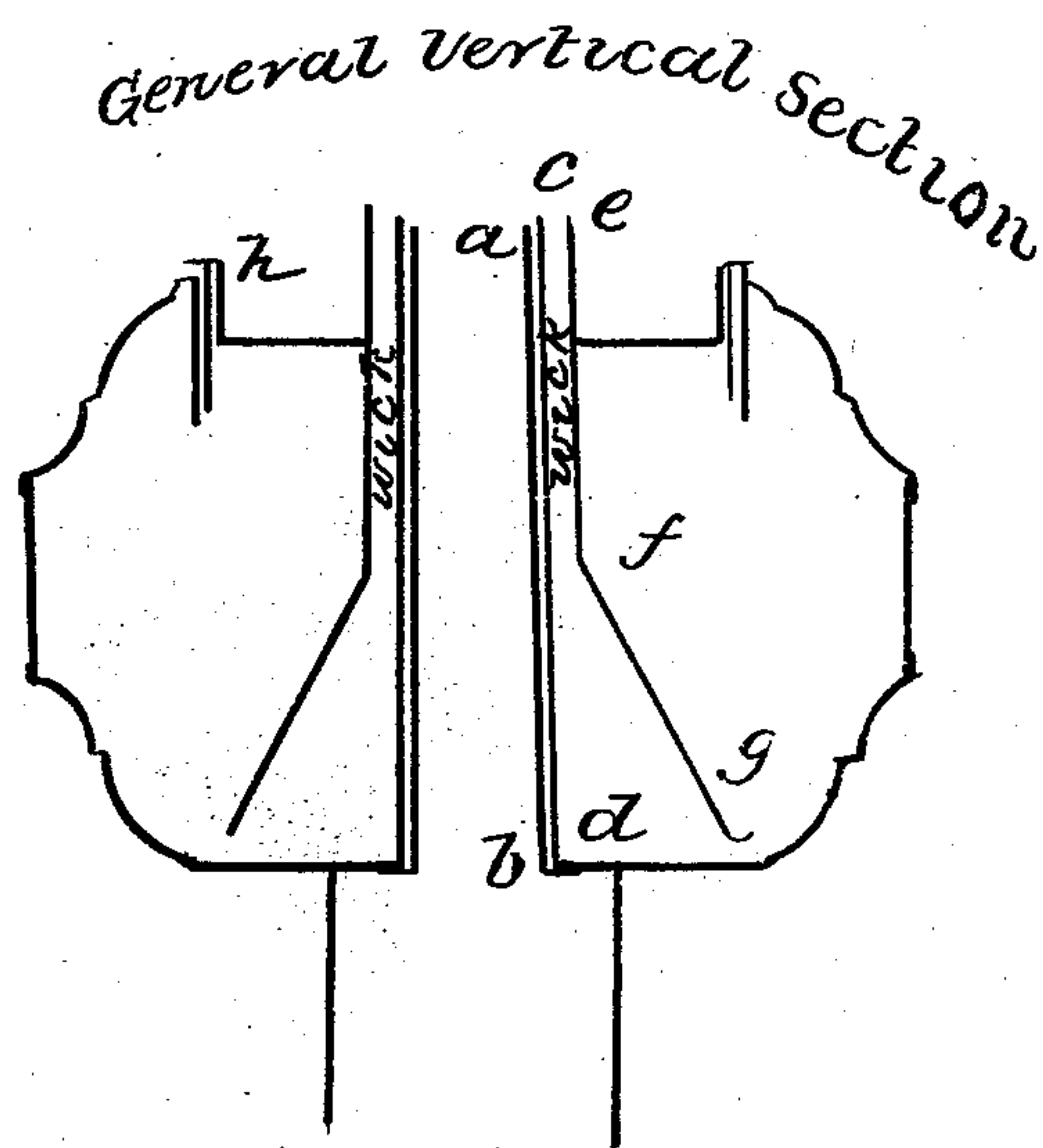


L. JONES.
Lard Lamp.

No. 3,101.

Patented May 26, 1843.



UNITED STATES PATENT OFFICE.

LUTHER JONES, OF UTICA, NEW YORK.

LARD-LAMP.

Specification of Letters Patent No. 3,101, dated May 26, 1843.

To all whom it may concern:

Be it known that I, LUTHER JONES, of the city of Utica, in the county of Oneida and State of New York, have invented a new and useful Improvement on Lamps for Burning Lard and other Oily Substances which Congeal at Common Temperatures, and that the following is a full and exact description thereof, reference being had to the drawings.

This lamp consists of a fountain or reservoir, which contains the lard or other substance, of any convenient size and form, furnished with a top piece which closes the opening of the fountain, and three concentric tubes, to hold the wick, and for other purposes hereinafter described. The innermost tube, (seen at *a, b,*) at its lower end, passes through, and is soldered fast to the bottom of the fountain; the upper end rising about a quarter of an inch above the top of the fountain. This tube being open, and communicating with the atmosphere at both ends, suffers a current of air to pass upward to the center of the flame, as in the common Argand burner. This tube may be half an inch in diameter, more or less, according to quantity of light required, and may be of tinned plate, or other suitable material.

The second tube from the center, shown at *c, d,* is of sheet copper, or other good conductor of heat, and fits on to the former, sliding on with sufficient friction to prevent its slipping up in raising the wick, and extends from the top of the tube *a, b,* to or near the bottom of the fountain. Around this tube the wick is placed, and may consist of two thicknesses of common cotton flannel, or any other suitable material. The tube *c, d,* may be dispensed with, and the wick placed immediately upon the tube *a, b.* But for the convenience of putting in the wick, and for the sake of conducting more heat to the lard, it is probably better it should be retained.

The third and outermost tube shown at *e, f, g,* embraces the wick, being attached to the top piece *h, k,* of the lamp, so as to be taken out therewith when the latter is removed. This tube is also of copper or other good conductor of heat, its upper end being even with that of the tube *c, d,* and its length about the same as that of the tube *c, d.* In the sides of this tube, above the top piece, are picker-holes for elevating the

wick. From the lower end upward for about half its length, the tube *e, f, g,* is slit lengthwise in six, or any other number of places or points of its circumference, and the sections thus formed, are bent outward, so as to give the lower portion a conical form, as shown at *f, g.* Or, the tube may be formed in any other manner, so as to be cylindrical, and just embrace the wick in its upper portion, and enlarged in the shape of a conic frustum, or any other form in its lower portion. Now, it will readily be seen that the two copper tubes *c, d,* and *e, f, g,* being heated at their upper extremities by the flame of the lamp, will conduct large quantities of heat downward into the lard or other substance contained in the fountain, thereby soon reducing it to, and maintaining it in a perfectly fluid state, so that it will ascend the wick as readily and burn as freely as the best winter-strained oil; particularly the outer tube *e, f, g,* being expanded at the lower end, conveys the heat, and diffuses it through the mass, so that the whole soon becomes fluid, and remains so as long as the lamp is burning, thus obviating a serious difficulty in other lard lamps, which in many cases, only melt a small portion of the lard immediately about the wick, while the mass at a little distance therefrom remains in a state of congealation, especially near the outside, where it is exposed to the action of the cold air, and requires to be forced into contact with the wick and tube by mechanical means.

This improvement is applicable to all kinds of lamps, whether portable or stationary and the heating power obtained is so great, that even tallow will burn freely in lamps constructed on this plan, in common temperatures.

Now, what I claim as my invention, and not before known, in the above described improvement, and desire to secure by Letters Patent, is—

The method of constructing and arranging the third, or outermost wick tube *e, f, g,* for conducting the heat of the flame into the lard below, by the expansion or enlargement of the lower part of the said outermost tube, as herein above described and set forth.

LUTHER JONES.

Witnesses:

JOHN B. PEASE,
WM. B. LYMAN.