

G. PUGH.
Lamp Burner.

No. 91,263.

Patented June 15, 1869.

Fig. 1.

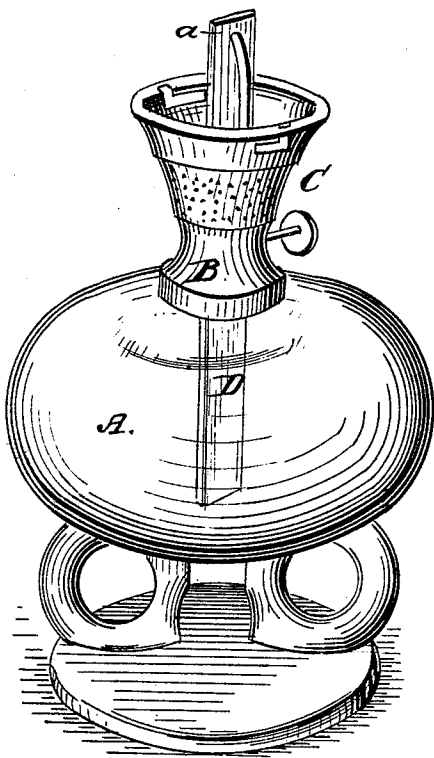
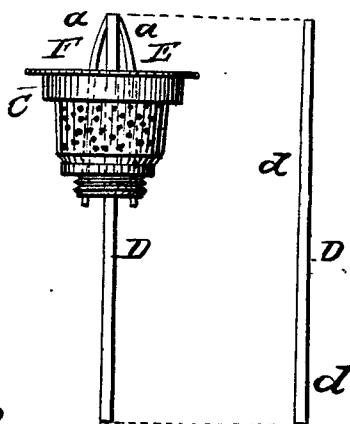


Fig. 2.



Witnesses
J. H. Burrill
E. E. Wale

Inventor
G. Pugh

United States Patent Office.

GEORGE PUGH, OF CLEVELAND, OHIO.

Letters Patent No. 91,263, dated June 15, 1869.

IMPROVEMENT IN LAMPS.

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, GEORGE PUGH, of Cleveland, in the county of Cuyahoga, and State of Ohio, have invented certain new and useful Improvements in Lamps; and I do hereby declare that the following is a full and complete description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the lamp.

Figure 2, a detached section.

Like letters of reference refer to like parts in the several views presented.

The nature of this invention relates to the removal and consumption of the gas or vapor generated in an ordinary kerosene or fluid-lamp, whereby the lamp is secured from explosion, and its illuminating-power increased.

In the drawing, A, fig. 1, represents the globe, or fount of the lamp, B, the collar, in which the cap C is fitted, all of which is or may be constructed in the ordinary way.

The wick-tube D extends nearly to the bottom of the fount, so as to reach the lower stratum of oil, where it is of a lower temperature than near the top.

It will be observed that the wick-tube is larger below the cap than it is above it, thereby allowing the wick to be raised or lowered easily. This enlargement is indicated at *d d*, fig. 2.

E E are gas-tubes, the lower ends of which penetrate the bottom of the cap, and open within the fount immediately below the under side of the cap, and above the oil; whereas each of the upper ends penetrates the sides of the wick-tube directly below the upper end, and into which they open, and have a free communication to the blaze.

It is well known to those using lamps of this class, that on account of the volatile and gaseous nature of the oil or fluid, gas or vapor accumulates immediately above the fluid, and, in consequence of its near proximity to the flame, it is very liable to take fire and explode the lamp. This is more liable to occur when the lamp is nearly empty, allowing the wick to become

dry, and the blaze to ignite the gas through the wick-tube.

In order to avoid this danger, I provide a means of escape for the gas through the tubes E E, above referred to.

As fast as the gas is generated, it is carried up and discharged into the wick-tube a little below the flame, where it is allowed to escape and is consumed, adding thereby greatly to the illuminating-capacity of the lamp, making it completely safe and reliable.

In consequence of the smallness of the gas-tubes, the flame cannot descend therein and communicate with the gas in the lamp.

The wick-tube being carried as near as practicable to the bottom of the globe, cool oil is supplied to the burner, instead of the more heated oil near the top, with which the ordinary lamp is supplied.

The capillary action of the wick and tube supplies a free flow of oil even when the lamp is nearly empty, and prevents the wick from becoming dry, charred, or heated, so long as there is any oil in the globe. The lower end of the tube being constantly immersed in the oil, the blaze cannot communicate through the wick-tube with the gas in the fount.

Also, the length of the tube prevents the irregular supply of oil, and consequent flashing of the blaze, experienced when carrying or moving a lamp with the ordinary burner.

The enlarged and extended wick-tube and gas-tubes can be applied to any burner now in use at a small expense.

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

The combination of the single wick-tube D, enlarged at its lower end, with the gas-tubes E E, when constructed in the manner and arranged with relation to the cap C, and to operate substantially as set forth.

GEORGE PUGH.

Witnesses:

J. H. BURRIDGE,
E. E. WAITE.