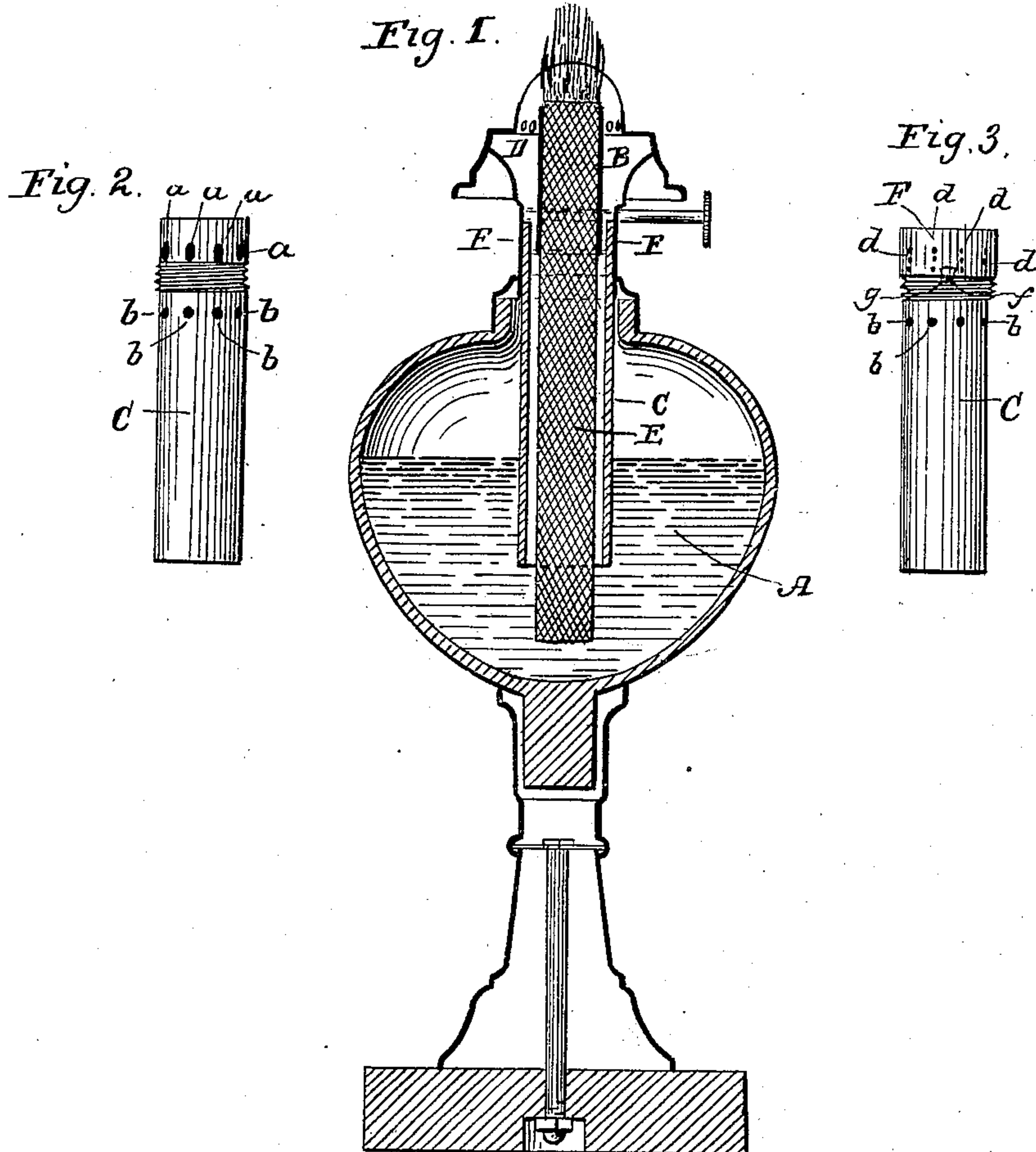


G. P. FULLER.  
Lamp Burner.

No. 110,846.

Patented Jan. 10, 1871.



Witnesses:

Thomas J. Dewley  
Lawrence Phelps Maito.

Inventor:

George P. Fuller  
By his attorney  
Stephen Vaticke

# United States Patent Office.

GEORGE P. FULLER, OF HUMPHREY, NEW YORK.

Letters Patent No. 110,846, dated January 10, 1871; antedated December 30, 1870.

## IMPROVEMENT IN LAMP-BURNERS.

The Schedule referred to in these Letters Patent and making part of the same.

I, GEORGE P. FULLER, of Humphrey, in the county of Cattaraugus and State of New York, have invented certain Improvements in Lamp-Burners, of which the following is a specification.

It consists in the combination of a tubular slide with the said perforated part of the tube, the slide being pierced with small holes to admit the air through the openings of the tube, they being small enough to prevent any flame which may be brought there by any cause passing into the tube. When the lamp is to be extinguished the slide is turned to cover the openings, to prevent the escape of gas.

To enable others skilled in the art to which my improvement appertains to make and use my invention, I will now give a detailed description thereof.

In the accompanying drawing which makes a part of this specification—

Figure 1 is a vertical section of a lamp provided with the improved burner.

Figure 2 is a side elevation of the safety-tube C.

Figure 3 is a like view of the said tube C and slide F, in connection therewith.

Like letters in all the figures indicate the same parts.

A is the oil-chamber.

B is the wick-tube, to which is connected the detachable safety-tube C and the burner D, or any ordinary burner.

The safety-tube C has in its upper end a series of openings, *a*, through which air flows and commingles with the gas as it passes up through the wick E to the burner, and also has a free passage through the openings *b* to the gas-chamber, to keep up an equilibrium between the air in the gas-chamber and the external air outside of the lamp.

The possibility of explosion is prevented by any excess of gas in the gas-chamber having a free outward passage through the openings *b* and *a*.

The free circulation of air through the tubes, as described, prevents a communication of heat from the burner to the body of the lamp.

F is a tubular slide which surrounds the tube.

It is pierced with small holes *d*, which, when the lamp is burning, are brought into communication with the perforations of the safety-tube C, the holes of the slide being small enough to prevent any flame being carried into the tube and communicating with the gas.

When the lamp is to be extinguished the slide is turned partly around to close the openings *d* of the safety-tube so as to prevent any outflow of gas.

The movements of the slide are regulated by the slot *f* in the lower edge and the pin *g*, which projects from the side of the tube, as seen in fig. 3.

If deemed necessary, the slide may be provided with a thimble surrounding it, constructed of thin wire gauze.

The object of the extension of the tube C to near the bottom of the oil-chamber A is to prevent the direct upward pressure of gas, as without this provision danger might occur if through neglect the slide F should be left closed. Yet, if desired, the tube may be made only long enough for the combination therewith of the slide F.

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

The combination of the slide F with the safety-tube C, the slide being provided with holes *d*, and the tube with perforations *a*, substantially in the manner and for the purpose set forth.

In testimony that the above is my invention I have hereunto set my hand and affixed my seal this 22d day of March, 1870.

GEORGE P. FULLER. [L. S.]

Witnesses:

STEPHEN USTICK,

THOMAS J. BEWLEY.