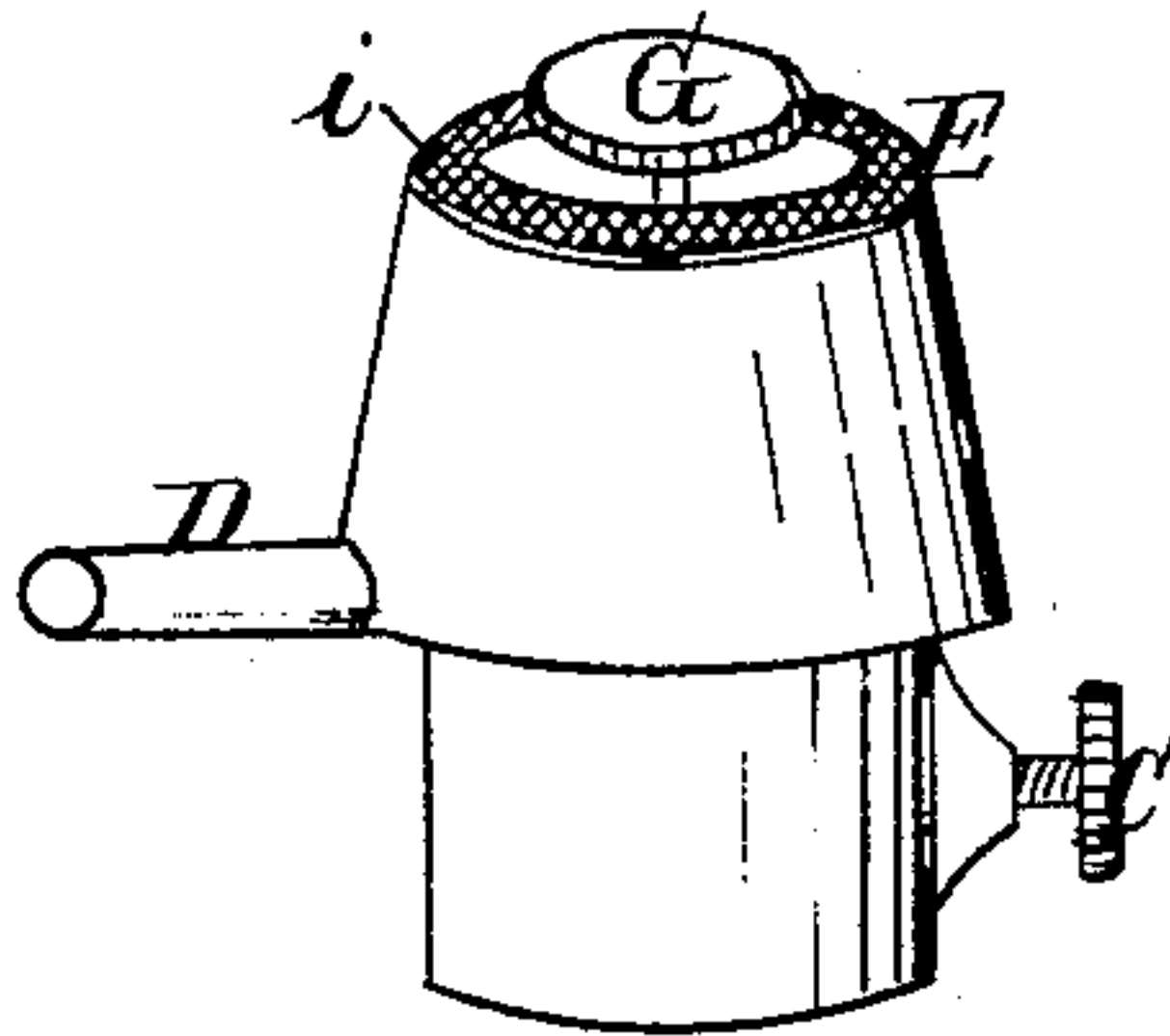
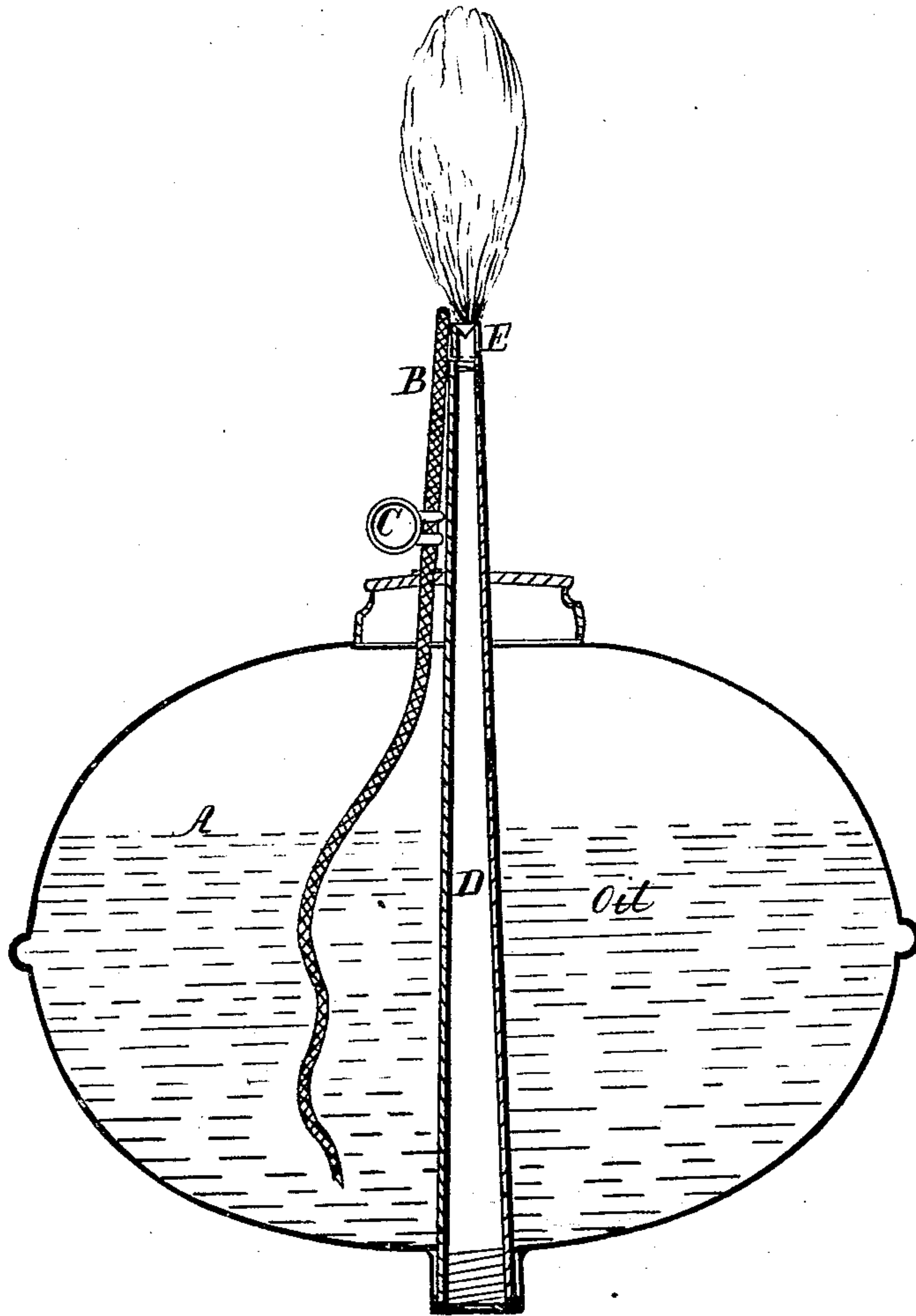


*J. Kidd.*

*Hydrocarbon Gas.*

*N<sup>o</sup> 94,219.*

*Patented Aug. 31, 1869.*



*Witnesses;*

*Geo. A. Cooke*  
*Paluck Comerford*

*Inventor;*

*Joshua Kidd*

# United States Patent Office.

JOSHUA KIDD, OF NEW YORK, N. Y.

*Letters Patent No. 94,219, dated August 31, 1869.*

## IMPROVED APPARATUS AND PROCESS FOR OBTAINING LIGHT FROM GAS AND OIL.

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

*To all to whom it may concern :*

Be it known that I, JOSHUA KIDD, gas-engineer, of 74 Maiden Lane, in the city and State of New York, have invented a new and improved Apparatus for Carburetting Gas; and I hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the drawings hereunto annexed, and making part of this specification.

This invention, for carburetting gas at the burner, I partially patented in England, on the 17th day of February, 1866, and the same is shown and described in Figures 8, in my specification, numbered 513, filed in the Great Seal Patent Office, England.

My improvements consist in drawing up the oil by capillary attraction to a gas-flame, and the joining the oil and gas-flames together. The rich carbon of the oil, by this commingling of the two flames, is raised to a higher state of incandescence in the burning gas, and a much cheaper light is produced than can be obtained by burning the gas and oil separately.

This arrangement may with advantage be used for carburetting air impregnated with the vapor of gasoline.

Figure 1 is a central vertical section of my invention.

Figure 2, an auxiliary burner, shown in elevation. Similar letters of reference indicate corresponding parts.

A shows the oil-reservoir for an ordinary kerosene-lamp.

B is the wick-tube.

C, the rack for regulating the wick.

D, the gas-pipe passing through the oil-vessel, and E, the gas-jet.

The gas-tube, if desired, may be attached to the wick-tube, without passing through the oil-vessel.

F is a screwed socket for connecting it to a gas-bracket.

Fig. 2 shows the application of my improvements to the well-known circular-wick burner with diffusing-button G.

The gas issues out of small holes round the wick I, and mixes with the oil-flame.

I claim uniting the flames from a kerosene or other oil or spirit-lamp, with a gas-flame, substantially as described and set forth.

JOSHUA KIDD.

Witnesses:

G. A. COOKE,

PATRICK COMERFORD.