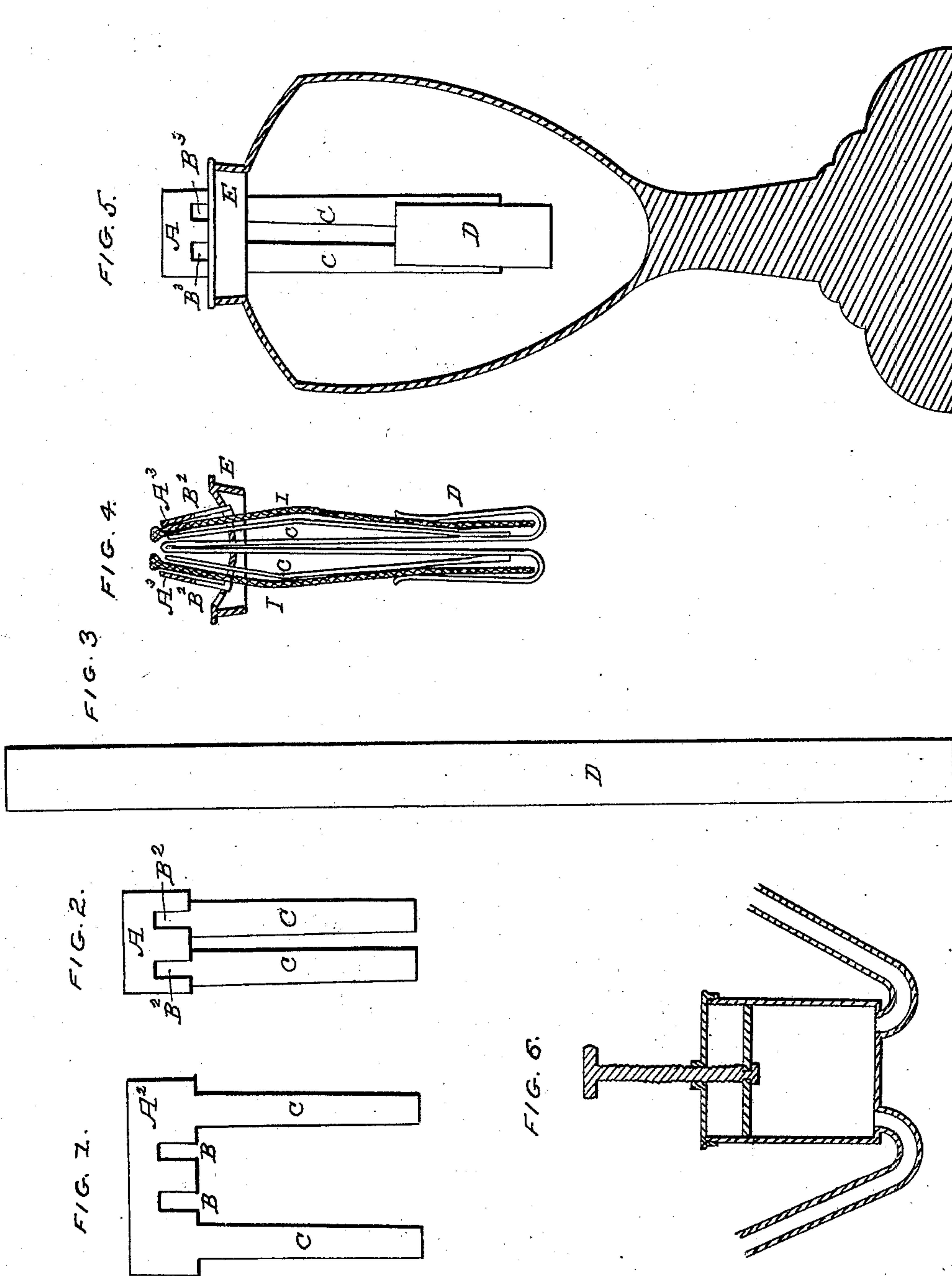


F. H. SOUTHWORTH.

Lard Lamp.

No. 2,703.

Patented July 2, 1842.



# UNITED STATES PATENT OFFICE.

F. H. SOUTHWORTH, OF WASHINGTON, DISTRICT OF COLUMBIA.

## IMPROVEMENT IN LARD-LAMPS.

Specification forming part of Letters Patent No. 2,703, dated July 2, 1842.

*To all whom it may concern:*

Be it known that I, FREDERICK H. SOUTHWORTH, of Washington, in the county of Washington and District of Columbia, have invented a new and useful Improvement in the Lamp for Burning Lard, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 shows the piece of copper which forms the wick-holder and conductor before it is bent to the form represented in Fig. 2. Fig. 2 represents the wick holder and conductor. Fig. 3 is a long flat piece of copper, to form a central conductor before it is bent around and in contact with the ends of the wick-holders. Fig. 4 represents a vertical section of the wick-holder and central conductor combined with a concave or basined cap. Fig. 5 is an elevation of same.

Similar letters refer to corresponding parts.

The nature of my invention and improvement consists in constructing a holder for the wick of copper in a peculiar manner, which also acts as a conductor of the heat, and combining it with a central copper conductor, which also serves to hold or anchor the wick, and combining these with a basined cap for holding a quantity of lard in contact with the lighted part of the wick, to cause the wick to light speedily before the main body of the lard or concrete substance can be converted into oil. The lamp in other respects is made in the usual manner.

The wick-holder A is made in the following manner: Take a flat piece of copper, A<sup>2</sup>, of suitable length and breadth, and cut it to the form represented in Fig. 1, having two notches, B B, which will form the air-holes B<sup>2</sup> B<sup>3</sup> when bent, and two tails, C C, which will form the conductors. Then bend this plate and lap the ends over each other in the manner represented in Fig. 4, which will form the upper end into a short tube, A<sup>3</sup>, into which the wick is inserted, having two air-holes, B<sup>2</sup> B<sup>3</sup>, through which the flame is supplied with air, and through which a needle or wire is inserted for raising the wick.

The central conductor, D, is made in the following manner: Bend the flat strip of copper D, Fig. 3, at the middle and lap the two halves. Then bend the ends D back in contrary direc-

tions, so as to lap over the tails C C of the wick-holder when inserted. Prepare the cap E to receive the wick holders and conductors by making two parallel oblong slots for the wick-holders and a parallel slot between them for the central conductor. Then basin or render concave the cap, the circular rim or screw of the cap being made in the usual manner. Then insert the central conductor and wick-holders, and secure them by brazing or other means, the tails of the wick-holders, which also act as conductors, being soldered or otherwise fastened to the main stems of the central conductor, while its short branches lap over them and the wicks which are held against the said branches acting in the manner of flat springs. The wicks are then prepared and saturated in melted lard and inserted in the wick-holders in the position represented at I in Fig. 4. A small quantity of unmelted lard is put into the basined cup around the lighted ends of the wick, to cause them to light quickly and effectually by the almost instantaneous melting of this lard. The wick-holders and conductors become heated in a few minutes and conduct the heat to the concrete lard or other substance, and convert it into an oil which supplies the wick and keeps up a vivid combustion, and produces a brilliant light until the lard is consumed below the ends of the wicks.

One wick-holder may be used with the conductor.

A central cylindrical lard-receiver with a piston and radiating wick-tubes and stop-cocks, such as represented in Fig. 6, may also be used.

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

The peculiar form of the wick-holders, in combination with the central conductor, constructed and arranged in the manner herein set forth, or in any other manner substantially the same, combined with a glass or other lamp for burning lard or other concrete substance, to be previously converted into oil by the conductors of heat in contact with the flame of the lamp.

FREDERICK H. SOUTHWORTH.

Witnesses:

WM. P. ELLIOT,  
EDMOND MAHER.