

(No Model.)

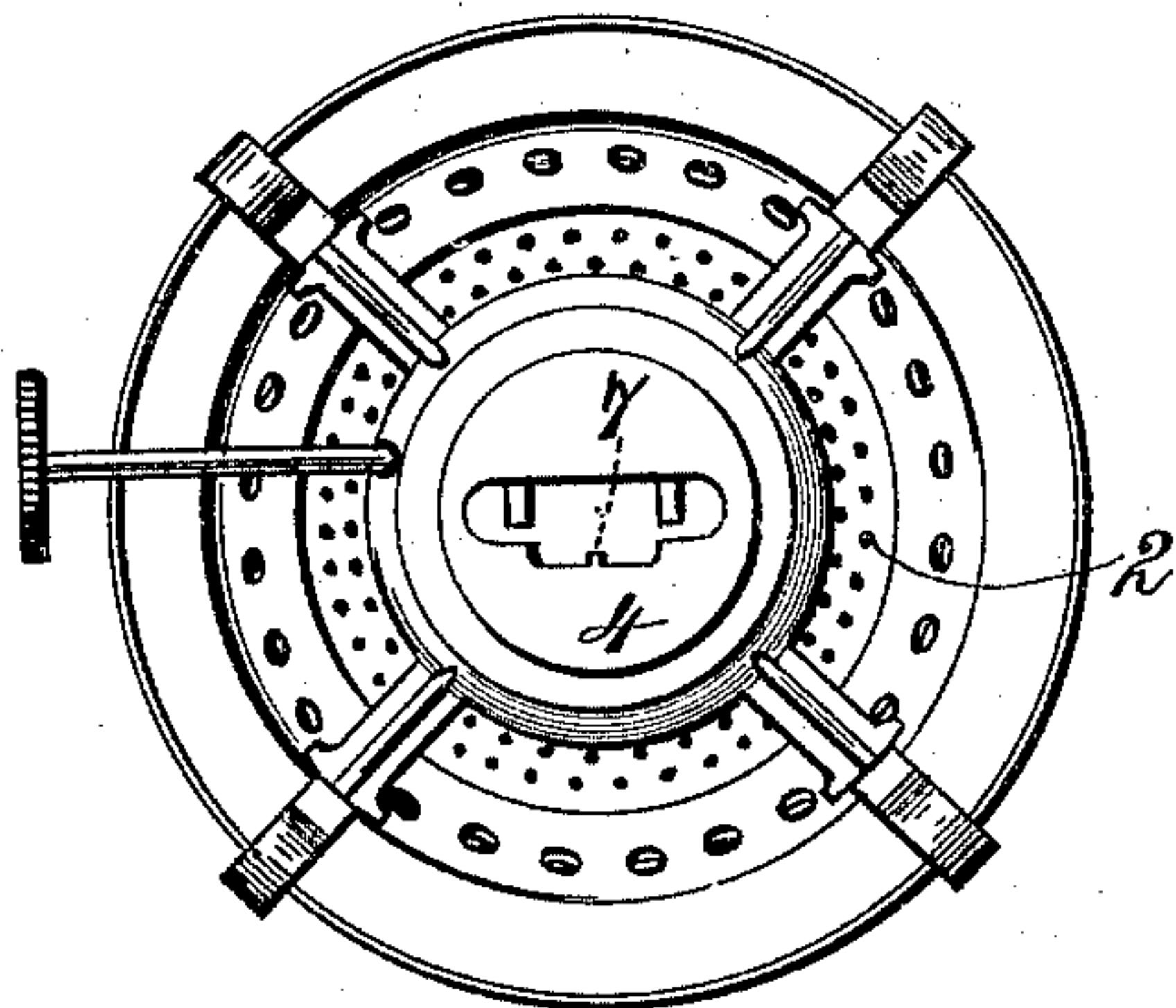
D. L. DURAND.

LAMP BURNER.

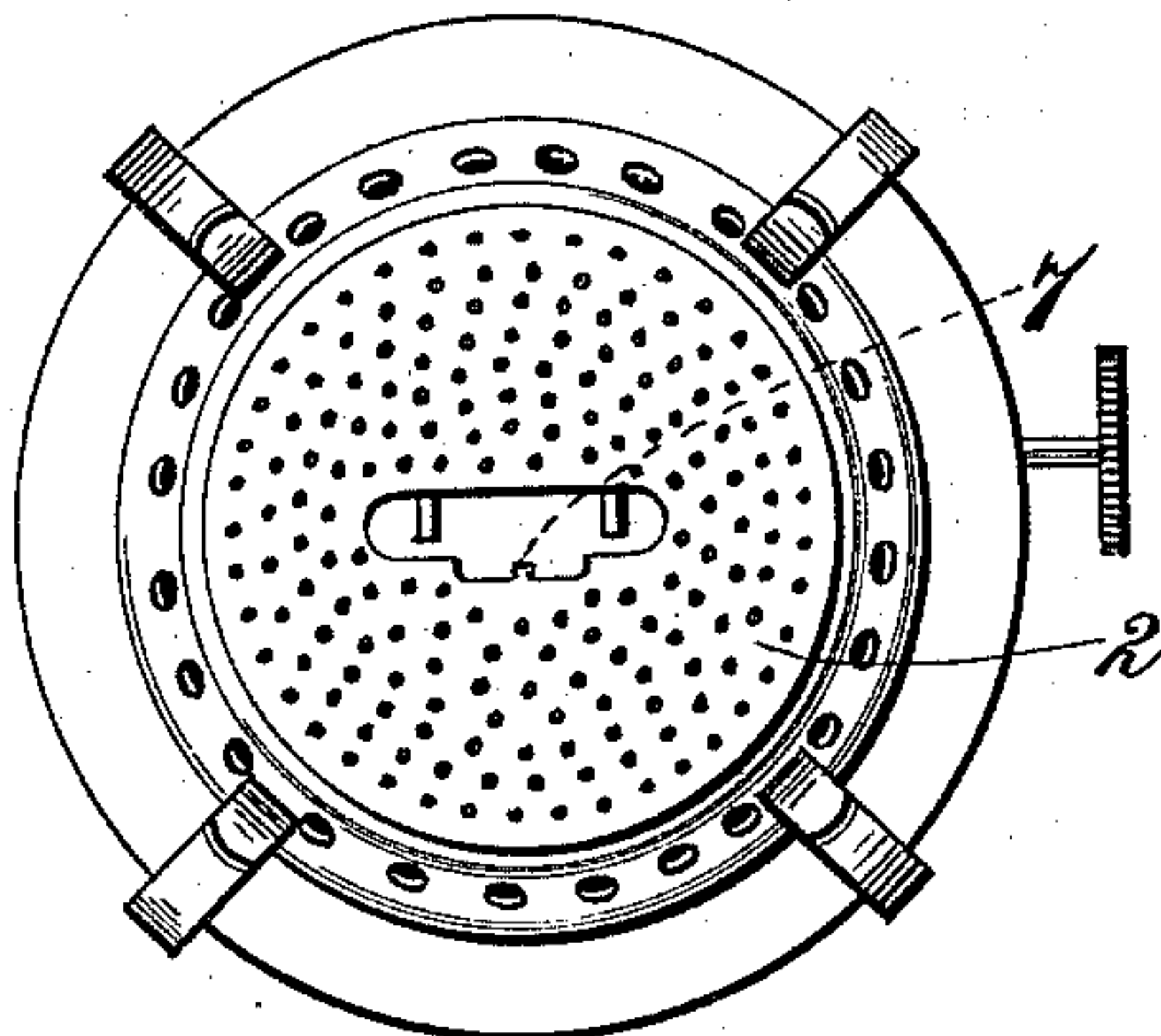
No. 313,713.

Patented Mar. 10, 1885.

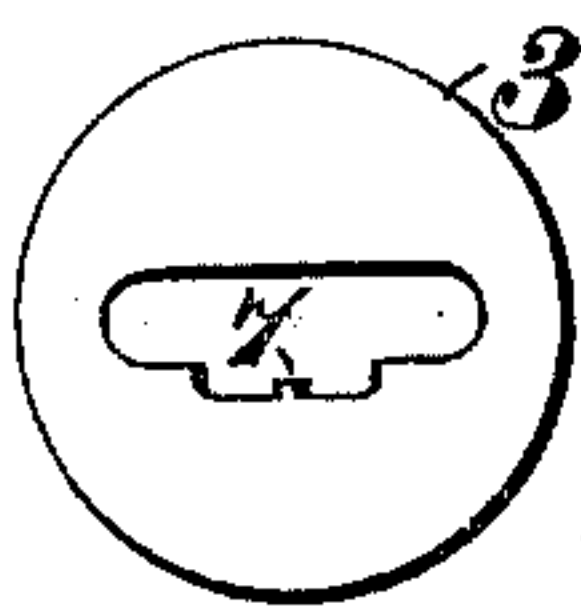
*Fig. 1.*



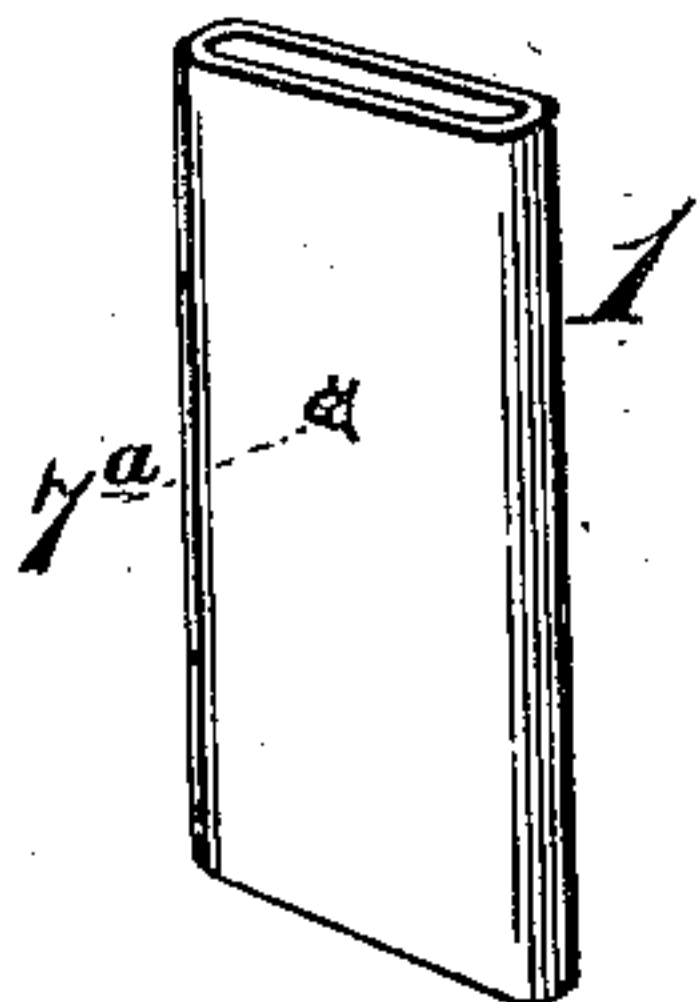
*Fig. 2.*



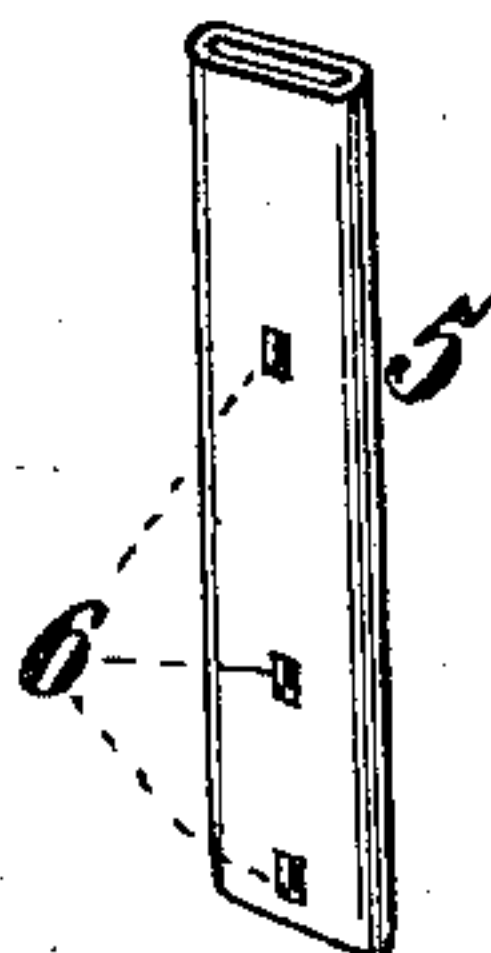
*Fig. 3.*



*Fig. 4.*



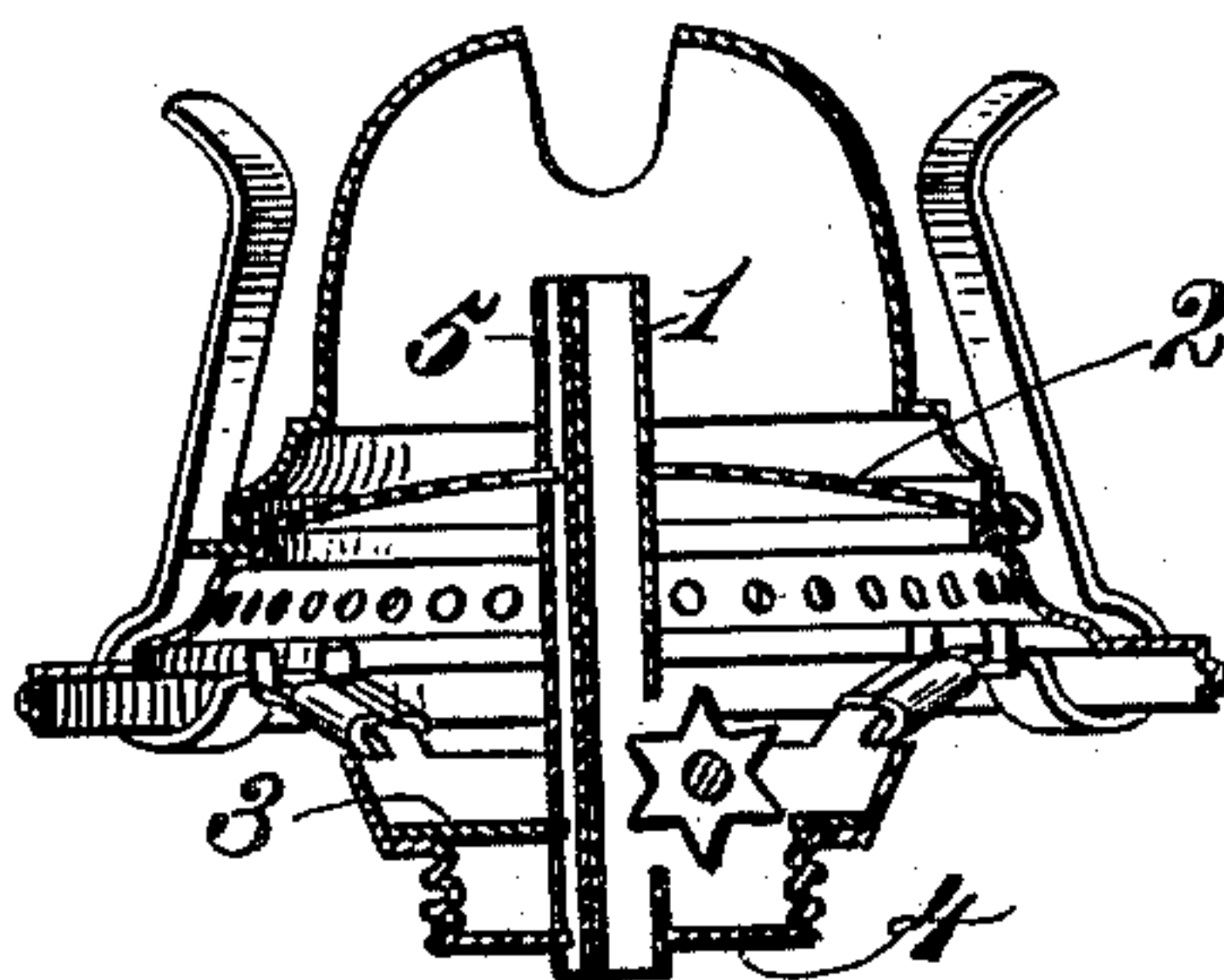
*Fig. 5.*



*Fig. 5<sup>a</sup>.*



*Fig. 6.*



Witnesses.

*Robert Everett.*

*J. A. Rutherford.*

*Inventor.*

*David L. Durand.*

*By James L. Norris.*  
*Atty.*



# UNITED STATES PATENT OFFICE.

DAVID L. DURAND, OF DERBY, CONNECTICUT.

## LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 313,713, dated March 10, 1885.

Application filed October 11, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID L. DURAND, a citizen of the United States, residing at Derby, New Haven county, Connecticut, have invented  
5 new and useful Improvements in Lamp-Burners, of which the following is a specification.

My invention relates to lamp-burners, and the purpose thereof is to provide novel, cheap, and simple construction, whereby the gas-tube  
10 may be fastened in place without soldering.

The invention consists in the several parts and combinations of parts, hereinafter fully set forth and definitely pointed out in the claims.

15 Referring to the drawings, forming part of this application, Figure 1 is a plan view of the burner inverted, showing the screw part. Fig. 2 is a plan view of the deflector or chimney-base. Fig. 3 is a plan view of the ratchet-  
20 cap. Fig. 4 is a perspective view of the wick-tube. Fig. 5 is a perspective view of the gas-tube. Fig. 5<sup>a</sup> is a sectional view showing a modified construction of the gas-tube. Fig. 6 is a central vertical section taken through  
25 the burner transversely to the greater diameter of the wick-tube.

Heretofore and prior to my invention it has been common to fasten the wick-tube in place by swaging, and to secure the gas-tube by  
30 means of projections or nipples formed in and extending slightly from the wall, a space being left between to receive the edge of the disk upon the screw part of the bottom of the burner. These nipples have also been formed  
35 at such distance apart as to engage with the opposite faces of any two of the disks in the burner.

I propose to secure the gas-tube by forming therein one, two, or more minute openings or  
40 perforations which shall engage with small teats or projections formed upon the edge of one or more of the disks of the burner, in such position as to engage with the openings in the gas-tube when the latter is in place and prevent its displacement longitudinally, said tube  
45 being supported laterally by the wick-tube and the disk through which it passes.

In the drawings, numeral 1 denotes the wick-tube of a burner of the usual construction  
50 passing downward through the chimney-base

or deflector 2, through the ratchet-cap 3 and the screw part 4 of the burner.

Against one of the flattened sides of the wick-tube lies the gas-tube 5, which may be of the ordinary form. In the wall of said tube is  
55 formed an opening or openings, 6, and upon the edge of one or more of the disks 2, 3, and 4 is formed a teat or projection, 7, extending from the edge of the aperture which receives the gas-tube, and adapted to engage with one  
60 or more of the openings 6 formed in the latter. The wick-tube having been adjusted and swaged in the usual manner to hold it firmly in place, the gas-tube is inserted and pushed  
65 downward to its proper position, the points 6; or teats 7 springing into engagement with the openings 6 in the gas-tube and securing it in place.

The gas-tube may be made a complete oval, as shown in Fig. 5, or it may be formed in the  
70 manner shown in Fig. 5<sup>a</sup>, a greater or less portion of one of its flat vertical walls being omitted. It will of course be understood that when a gas-tube is made somewhat open at one side such open side may be arranged against the  
75 side of the wick-tube. Where the tube has a complete oval form, the teat or projection may be formed in the wall of the wick-tube, as shown at 7<sup>a</sup>, Fig. 4, said projection engaging with an opening cut in the gas-tube in that  
80 wall which lies adjacent to the wick-tube. By this construction I provide a cheap, simple, and very convenient means of securing the gas-tube in position.

I do not claim a gas-tube having attached  
85 projections arranged to engage the edge of one of the disk-like parts of a burner. In such construction it is difficult to properly form the projections on the gas-tube, and this I avoid by my invention.

Having thus described my invention, what I claim is—

1. In a lamp-burner, the combination, with the wick-tube, of a gas-tube having one or more openings engaging with a teat or pro-  
95 jection formed upon the disk or disks through which said tube passes, substantially as described.

2. In a lamp-burner, the combination, with a gas-tube having one or more openings cut  
100

in its wall, of a teat or teats formed upon one or more of the parts against which said tube has lateral support, substantially as described.

- 5 3. In a lamp-burner, the combination, with the gas-tube 5, having openings 6, of a teat, 7, formed upon one, two, or more of the disks 2, 3, and 4, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

DAVID L. DURAND.

Witnesses:

JOHN E. LEWIS,  
E. T. HARDING.