

No. 662,583.

Patented Nov. 27, 1900.

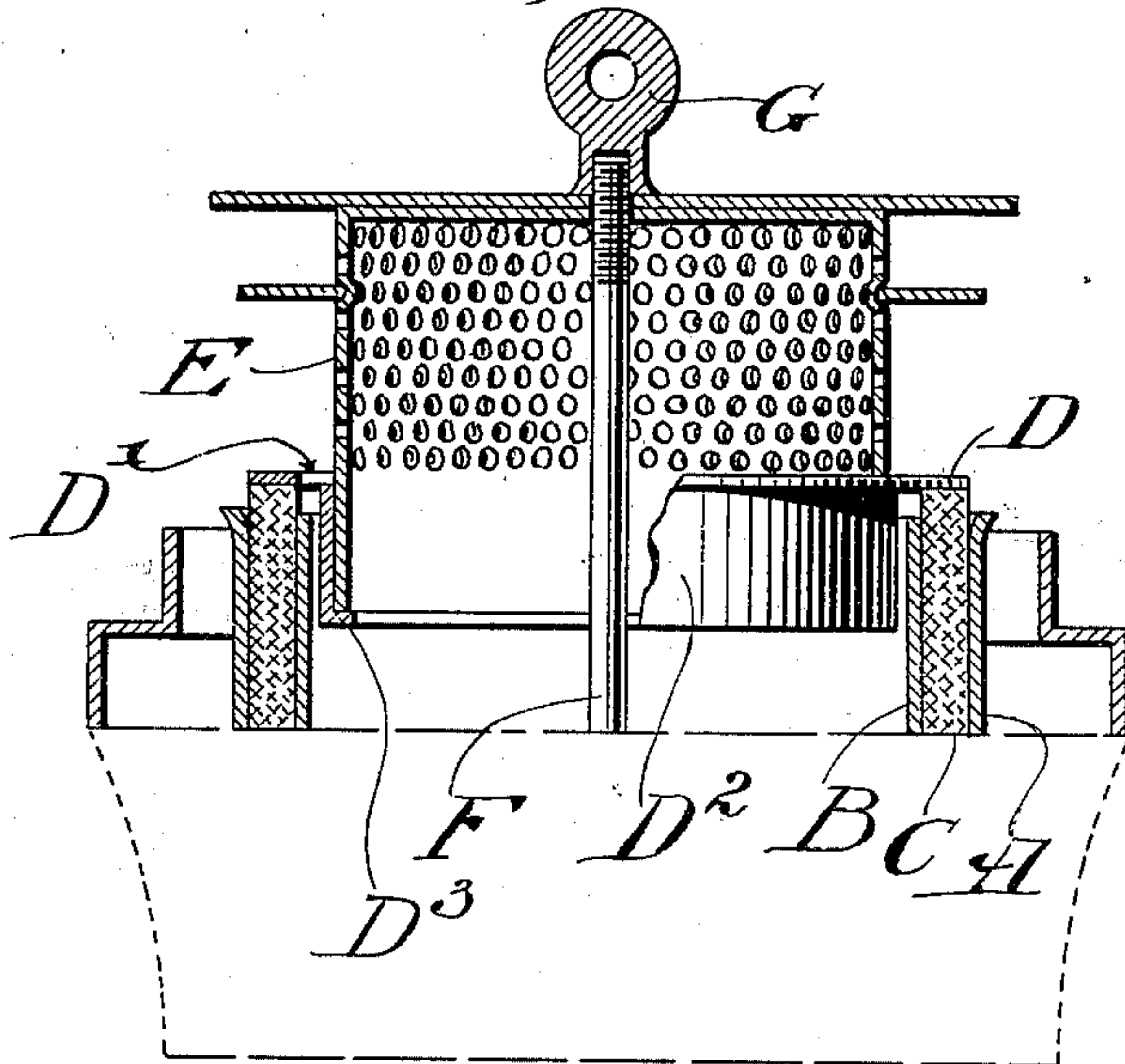
F. T. WILLIAMS.

LAMP BURNER.

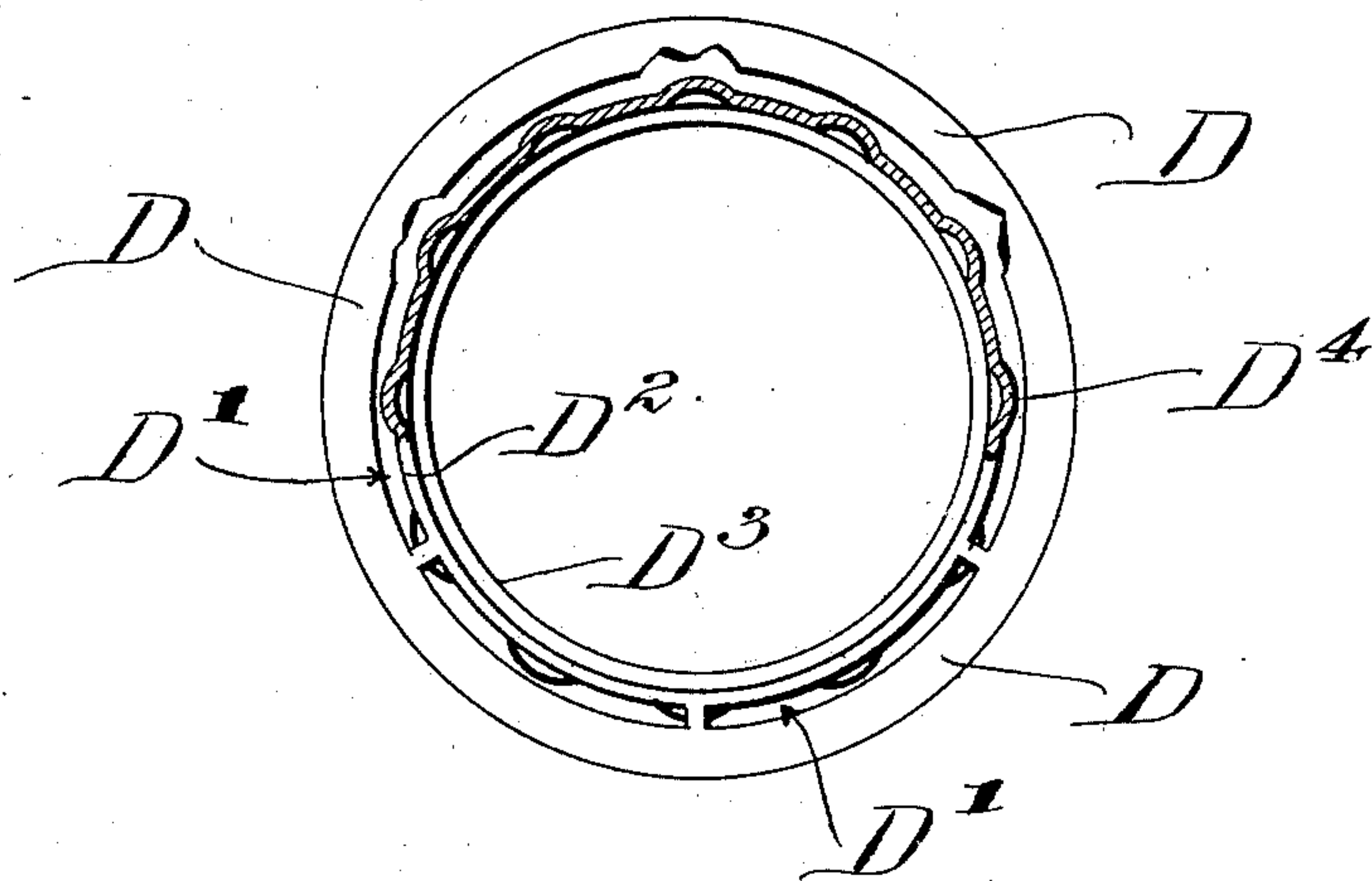
(Application filed Sept. 24, 1900.)

(No Model.)

*Fig. 1.*



*Fig. 2.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

FRANK THEODORE WILLIAMS, OF MERIDEN, CONNECTICUT, ASSIGNOR TO  
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## LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 662,583, dated November 27, 1900.

Application filed September 24, 1900. Serial No. 30,896. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK THEODORE WILLIAMS, a citizen of the United States, residing at Meriden, New Haven county, Connecticut,  
5 have invented certain new and useful Improvements in Lamp-Burners, of which the following is a full, clear, and exact description.

My invention relates to oil-lamps of the  
10 central-draft type, and particularly to the burner construction thereof.

The chief object of my invention is to prevent unsteadiness or flickering of the flame. This I accomplish by means which cause the  
15 gas and the air to be mixed uniformly and in the most effective proportions, which when lighted produces a flame of a steady character and of practically uniform height entirely around the burner. Incidentally the construction is such that the wick cannot be raised  
20 to an unnecessary or dangerous height. In addition to the foregoing features the construction is such that the user can quickly extinguish the flame.

25 In the drawings, Figure 1 is a vertical section and elevation of a lamp-burner of my improved construction. Fig. 2 is a plan view of one of the details of construction, one side of the same being partly broken away and  
30 shown in section.

A is an outer wick-tube. B is an inner wick-tube. C is a wick movable between said tubes, which wick may be raised or lowered by means of any well-known wick-lift device.  
35 (Not shown.)

D is a flange or guard resting upon the top or upper edge of the wick C, which flange or guard is perforated or slotted, as at D', for the purpose of affording a gas opening or  
40 space adjacent the inner side of the wick C. D<sup>2</sup> is a cylindrical wall projecting downwardly from said flange D and having at its lower edge an inturned flange or supporting-ledge D<sup>3</sup>. The cylindrical wall D<sup>2</sup> is of such a size  
45 as to leave a space between its exterior surface and the interior surface of the inner wick-tube B, so that air flowing up through the tube B will pass up through the space thus formed and supply air to the inner side of the  
50 wick when the same is elevated, as shown in

Fig. 1. To center the part D<sup>2</sup> within the inner tube B, nibs or bosses D<sup>4</sup> may be provided, whereby the air-opening between the wall D<sup>2</sup> and the tube B is of a uniform size all around. Obviously the nibs D<sup>4</sup> might be formed upon  
55 the inner wick-tube B instead of on the part D<sup>2</sup>. The shape of these centering-nibs is also entirely immaterial.

E is a perforated spreader, the lower edge of which rests upon the supporting-shelf D<sup>3</sup>,  
60 so that when the wick is raised and lowered the flange D, cylindrical wall D<sup>2</sup>, and the spreader E will move together.

F is a stationary rod which projects upwardly through the top of the spreader and  
65 which carries a stop or cap G, which is preferably adjustable, so that by its position the upward excursion of the wick is limited. In this way by adjusting the parts before using  
70 a person cannot elevate the wick to such a height as to cause the flame to smoke. When the wick is lowered, the flange D practically covers the space between the wick-tubes A and B, and consequently the flame will be extinguished.  
75

What I claim is—

1. In a device of the character described in combination, an inner and an outer wick-tube forming between them a wick-passage, a wick-guard resting upon and supported by the  
80 wick, perforations in said guard adjacent the inner side of said wick, a wall depending from said wick-guard said wall projecting into the inner tube but of considerably less diameter thereby affording an air opening or passage  
85 to the inner side of the wick, a spreader carried by said wick-guard, and means to limit the upward excursion of said wick-guard and spreader.

2. In a device of the character described in  
90 combination, an inner and an outer wick-tube forming between them a wick-passage, a wick-guard resting upon and supported by the wick, perforations in said guard adjacent the inner side of said wick, a wall depending from  
95 said wick-guard said wall projecting into the inner tube but of considerably less diameter thereby affording an air opening or passage to the inner side of the wick, means to center  
100 said wall with respect to said inner tube, a



spreader carried by said wick-guard, and means to limit the upward excursion of said wick-guard and spreader.

3. In a device of the character described in  
5 combination, an inner and an outer wick-tube forming between them a wick-passage, a wick-guard resting upon and supported by the wick, perforations in said guard adjacent the inner side of said wick, a wall depending from  
10 said wick-guard said wall projecting into the inner tube but of considerably less diameter thereby affording an air opening or passage

to the inner side of the wick, means carried by said wall for centering the same with respect to said inner tube, a spreader carried 15 by said wick-guard, and means to limit the upward excursion of said wick-guard and spreader.

Signed at Meriden, Connecticut, this 17th day of September, 1900.

FRANK THEODORE WILLIAMS.

Witnesses:

WM. F. NEALE,

GEO. R. HICKS.