

No. 662,584.

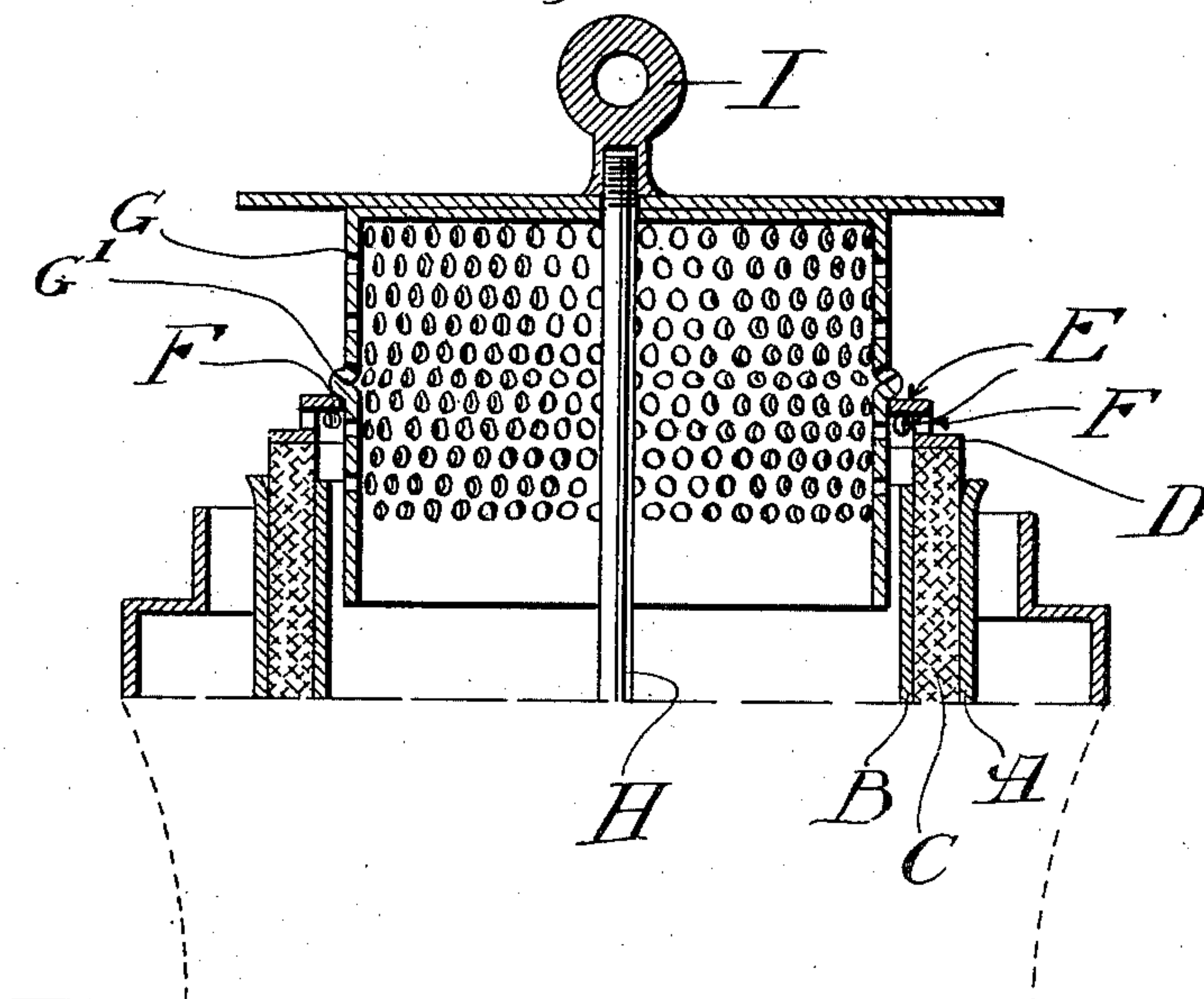
Patented Nov. 27, 1900.

F. T. WILLIAMS.  
LAMP BURNER.

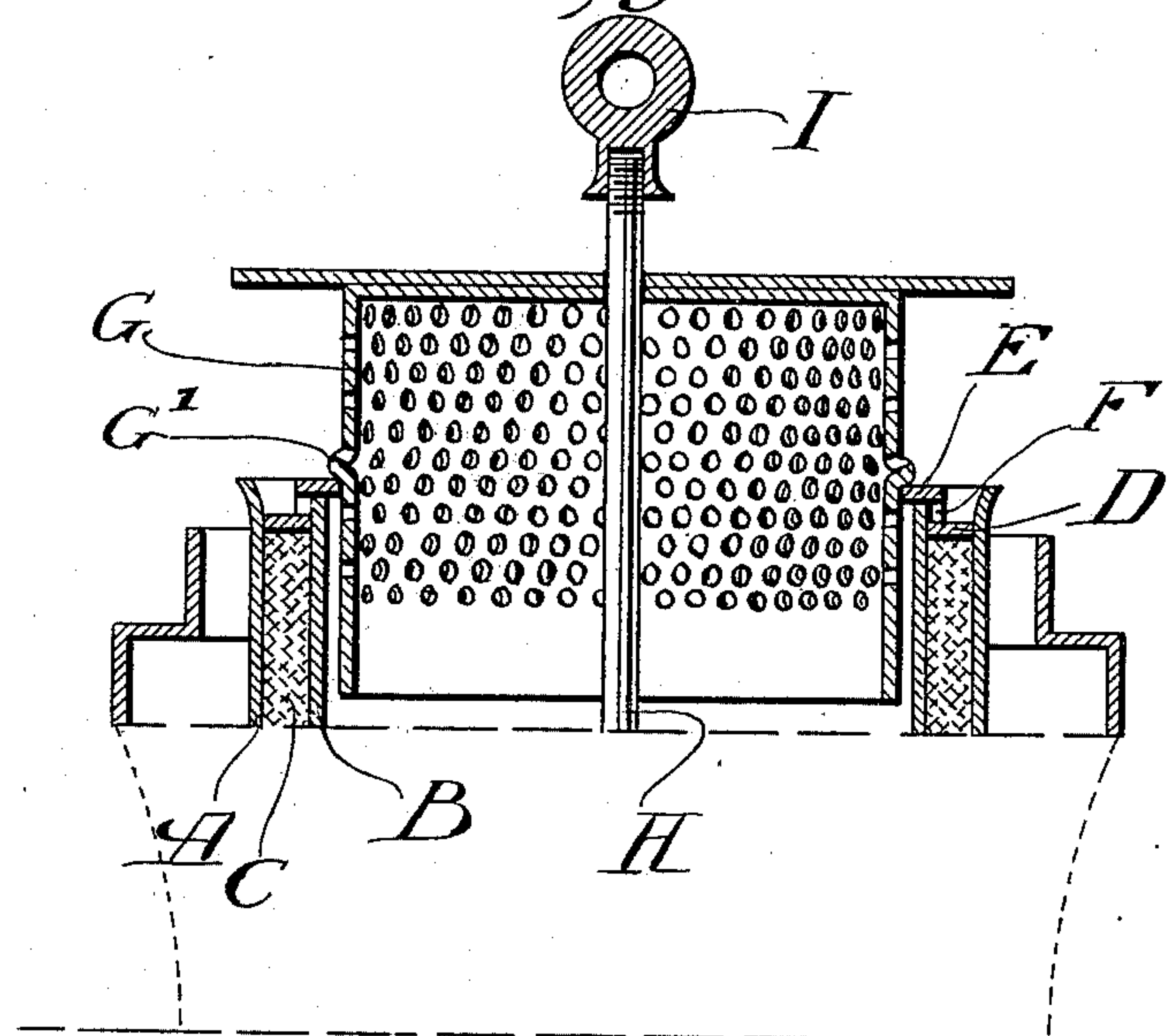
(Application filed Sept. 24, 1900.)

(No Model.)

*Fig. 1.*



*Fig. 2.*



WITNESSES:

*George T. Hackley*  
*L. Ireland*

INVENTOR

*Frank T. Williams.*

BY

*R. C. M. C. C.*  
ATTORNEY



# UNITED STATES PATENT OFFICE.

FRANK THEODORE WILLIAMS, OF MERIDEN, CONNECTICUT, ASSIGNOR TO  
THE EDWARD MILLER & COMPANY, OF SAME PLACE.

## LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 662,584, dated November 27, 1900.

Application filed September 24, 1900. Serial No. 30,897. (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 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 and 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  
20 raised 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 of my improved burner, showing the parts in one position. Fig. 2 is a similar view showing the parts in another position.

A is an outer wick-tube.

30 B is an inner wick-tube.

C is a wick.

The wick C is movable between the wick-tubes A and B and may be raised or lowered by means of any well-known wick-lift. (Not  
35 shown.)

D is a guard supported upon the top of the wick C and movable therewith. Projecting upwardly and inwardly from said guard D is an annular flange E.

40 F shows perforations which are formed around the upper side of the flange E and just above the guard D for the purpose hereinafter described. The flange E overstands the inner wick-tube, and the guard D is of such a size  
45 as to approximately fill the space between the wick-tubes A and B, but yet is sufficiently free to prevent cramping or binding.

G is a perforated spreader which performs the usual function. This spreader may be  
50 provided with a rib G', which may rest upon

the flange E, so that when the wick C is raised or lowered the guard D, flange E, and spreader G will move simultaneously.

H is a stationary rod projecting upwardly through the top of the spreader G and carrying at its upper end a stop I, which by preference is adjustable by means of a screw-threaded connection. In Fig. 1 of the drawings the wick is shown as elevated and in the position ready to light. In this position it  
55 will be observed that the stop I by engaging with the spreader checks any further upward movement. When the lamp is lighted, the products of combustion rise from the outer and inner side of the wick, the products from  
60 the inner side passing out through the perforations F, whereupon they mingle the products of combustion which rise from the outer side of the wick. The spreader or that portion thereof which projects down into the  
65 wick-tube is by preference considerably smaller than the inner wick-tube, so as to afford a space through which air may flow to the gas-chamber or parts adjacent to the inner side of the wick C. This air-supply may  
70 be augmented by increasing the perforations in the spreader down to a point below the exposed portion of the wick.

In Fig. 2 the several parts of the burner are shown in the position in which the flame  
80 is extinguished, the wick being lowered so that the guard D will drop down into the spaces between the wick-tube, effectively cutting off the supply of air, and consequently preventing combustion. Heretofore the  
85 extinguishing-guards have not projected into the wick-tube, but have merely rested upon the upper edge of the same. In this case, however, the guard is permitted to drop down into the spaces between the wick-tubes, there-  
90 by effectively extinguishing the flame.

What I claim is—

1. In a device of the character described, an inner and an outer wick-tube, a wick-space between said tubes, an annular movable wick-  
95 guard adapted to rest upon said wick the inner edge of said guard being turned upwardly to form a supporting-shoulder for a spreader, a spreader supported upon said upturned  
100 portion of the guard, perforations in the up-

turned portions of said guard, and an air-passage between said spreader and the said wick-tube.

2. In a device of the character described,  
5 an inner and an outer wick-tube, a wick-space between said tubes, an annular movable wick-guard adapted to rest upon said wick the inner edge of said guard being turned upwardly and inwardly to form a supporting-shoulder  
10 for a spreader, a spreader supported upon said upturned portion of the guard, perforations in the upturned portions of said guard, and an air-passage between said spreader and the said wick-tube.

3. In a device of the character described, 15 an inner and an outer wick-tube, a wick-space between said tubes, an annular movable wick-guard adapted to project into the space between said wick-tubes, the edge of said guard being turned upwardly, and a perforated 20 spreader concentric with said wick-tubes and guard.

Signed at Meriden, Connecticut, this 18th day of September, 1900.

FRANK THEODORE WILLIAMS.

Witnesses:

WM. F. NEALE,  
GEO. R. HICKS.