

W. H. BURNETT.  
LAMP BURNER.  
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975,929.

Patented Nov. 15, 1910.

Fig. 1

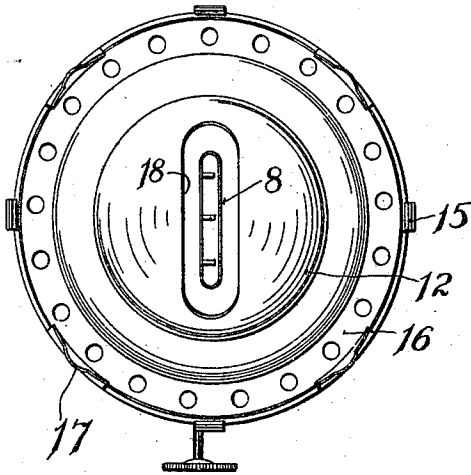


Fig. 3.

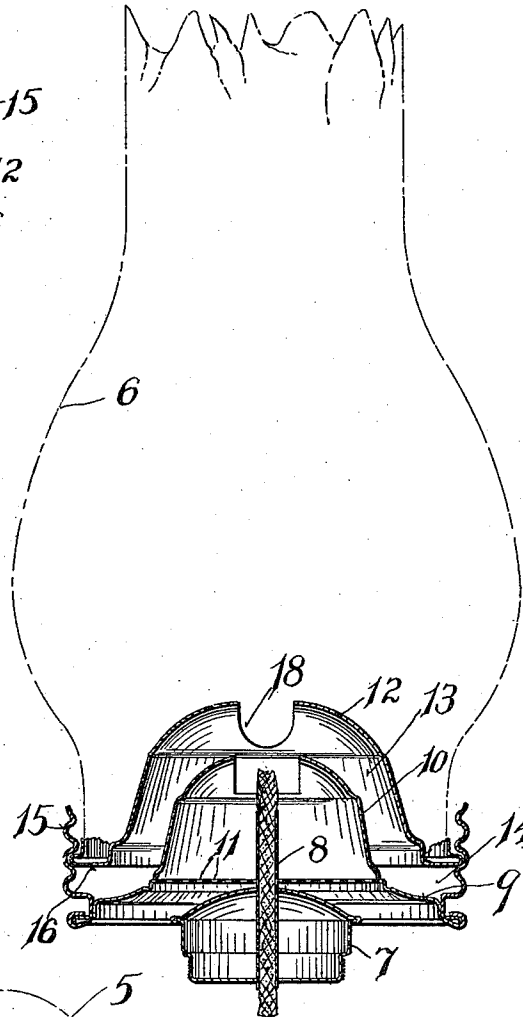
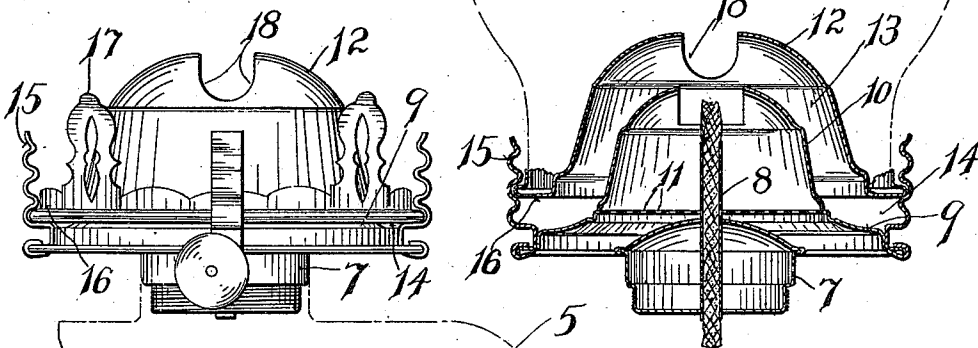


Fig. 2.



Witnesses:

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# UNITED STATES PATENT OFFICE.

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## LAMP-BURNER.

975,929.

Specification of Letters Patent.

Patented Nov. 15, 1910.

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*To all whom it may concern:*

Be it known that I, WILLIAM H. BURNETT, a citizen of the United States, and a resident of Hartford, in the county of Hartford and State of Connecticut, have invented a new and Improved Lamp-Burner, of which the following is a specification.

My invention relates to the class of devices used for illuminating purposes employing oil as an illuminant, and the object of the invention is to provide a device of this class having novel features of advantage and utility.

One form of device embodying the invention and in the use of which the objects sought may be attained is illustrated in the accompanying drawings, in which—

Figure 1 is a top view of my improved lamp burner. Fig. 2 is a view in side elevation of the same. Fig. 3 is a view in central longitudinal section.

My improved burner contemplates a device in which the amount of air supplied for combustion purposes may be regulated according to the amount of wick that is exposed to the flame, thus producing a device in which all the products of combustion are consumed, and thus increasing the size of the flame, the brilliancy of the light and avoiding any discoloration of chimneys or the like by reason of matter passing off unconsumed.

In the accompanying drawings the numeral 5 denotes a lamp (shown in dotted outline) to which my improved burner is attached and which may be supplied with a chimney 6 (shown in dotted outline in Fig. 3).

My improved burner is of usual form and construction as to the neck 7 which is adapted to be secured to the lamp body, the wick tube 8 secured to the neck, the flange 9 depending from the wick tube, and the dome 10 inclosing the end of the wick tube. The usual openings 11 are employed for supplying air within the dome and to the wick to aid combustion.

It will be noted from an examination of Fig. 3 that when the end of the wick is flush with the end of the wick tube 8 a certain amount of air can pass between the dome and the end of the tube, but as the wick is raised it partially closes the passage and thus reduces the amount of air which may be supplied at the burning point.

In carrying out my invention I supply an auxiliary dome 12 surrounding and inclosing the dome 10, providing an air space 13 between the two. The opening 14 into this space is free entirely around the burner except for the supports 15 which are located at proper intervals to sustain the auxiliary dome 13.

In the construction herein shown the chimney gallery 16 is formed on the base or rim of the auxiliary dome and is supplied with a proper and suitable number of prongs 17 for holding the chimney in place. It will be understood, however, that the chimney gallery need not necessarily be formed on the adjustable dome but may be otherwise supported upon the burner and effect the desired results.

The auxiliary dome 12 may be adjusted with respect to the dome 10 in any suitable manner, so that the space 13 may be increased or decreased, according to the amount of wick which is exposed to the flame, that is, the more wick exposed to the flame the greater will be the space. This construction provides a combustion chamber 18 located within the mouth of the auxiliary dome and between the two domes whereby the gases generated by the heat of the flame are thoroughly mixed with the air flowing up within the dome 10 and also within the auxiliary dome 12, thus producing an extremely combustible mixture which results in consuming all of the vapors and gases coming from the oil, with the result as hereinabove explained, that the illuminating power is greatly increased.

I do not limit my invention and the scope of the following claims to the foregoing illustration and description of the preferred form in which it has been embodied.

I claim—

1. A lamp burner including a wick tube with means for operating the wick, a dome overlying the tube, an auxiliary dome surrounding the first mentioned dome, means for supplying air between said domes, and means for controlling the amount of air passing between said domes.

2. A burner including a wick tube with means for operating a wick, a dome inclosing said tube, means for supplying air within said dome, an auxiliary dome overlying the first-mentioned dome, and means for adjusting the position of one of said domes

with respect to the other to control the amount of air passing between said domes.

3. A burner including a wick tube with means for operating the wick, a dome surrounding the tube, an auxiliary dome over-  
5 lying the first-mentioned dome, means for supplying air between said domes, and means for adjusting the position of said domes one with respect to the other.

10 4. A lamp burner including a wick tube with means for operating the wick, a dome

inclosing said tube, means for supplying air within said dome, an auxiliary dome over-lying the first-mentioned dome, means for supplying air between the two domes, and  
15 means for adjusting the position of the auxiliary dome.

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Witnesses:

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