

(No Model.)

R. L. COBURN.  
LAMP BURNER.

No. 596,482.

Patented Jan. 4, 1898.

Fig. 1.

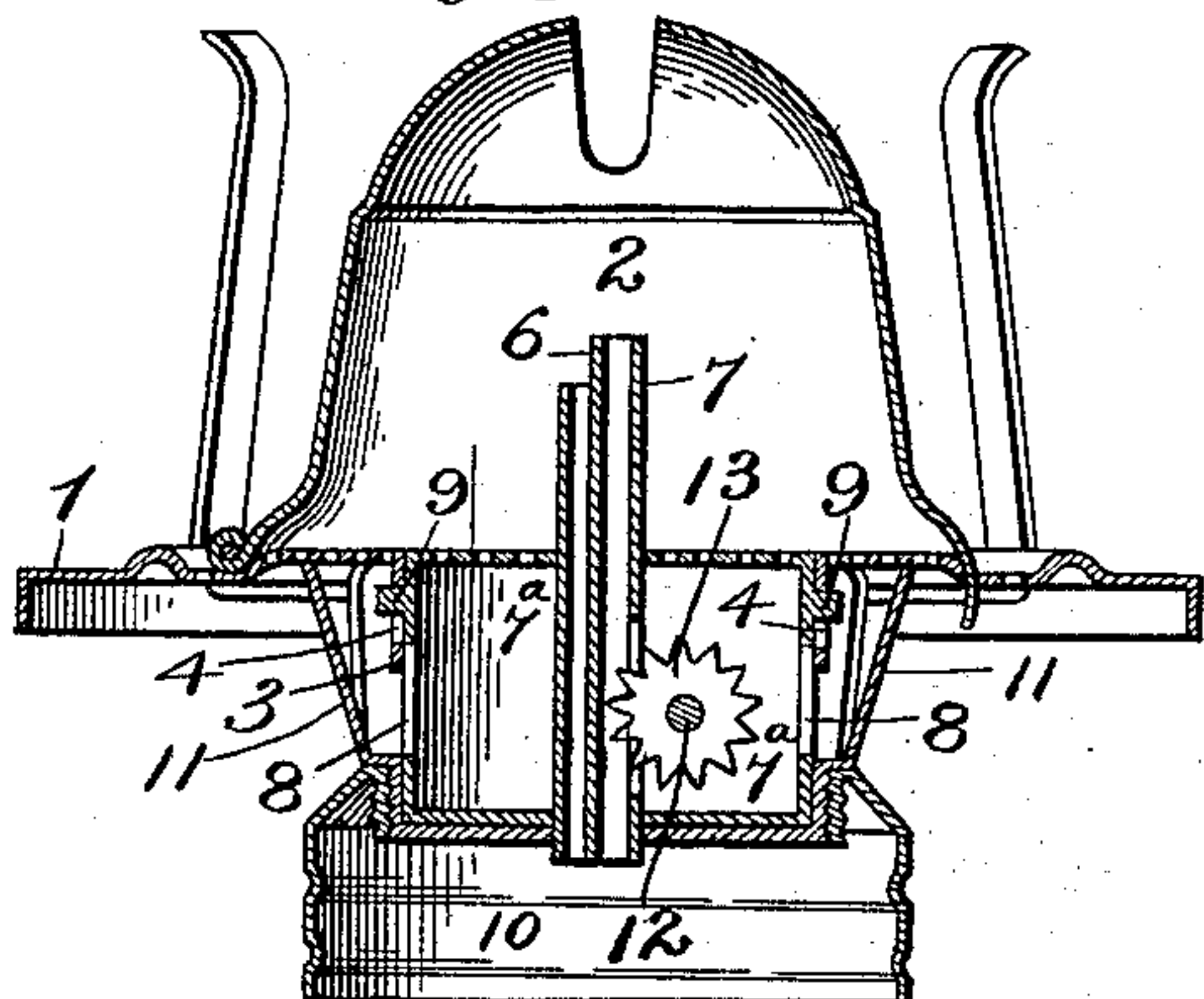


Fig. 2.

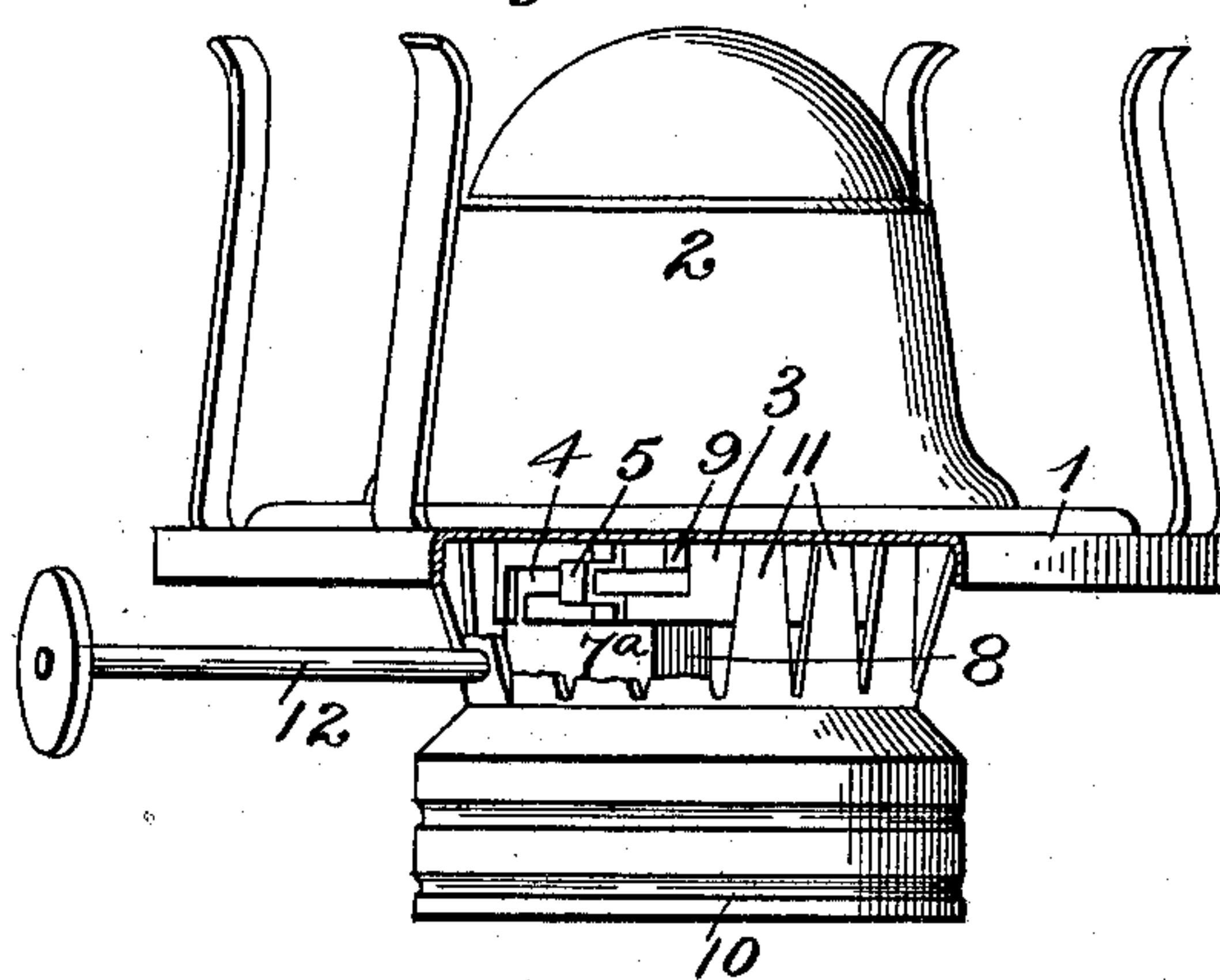


Fig. 3.

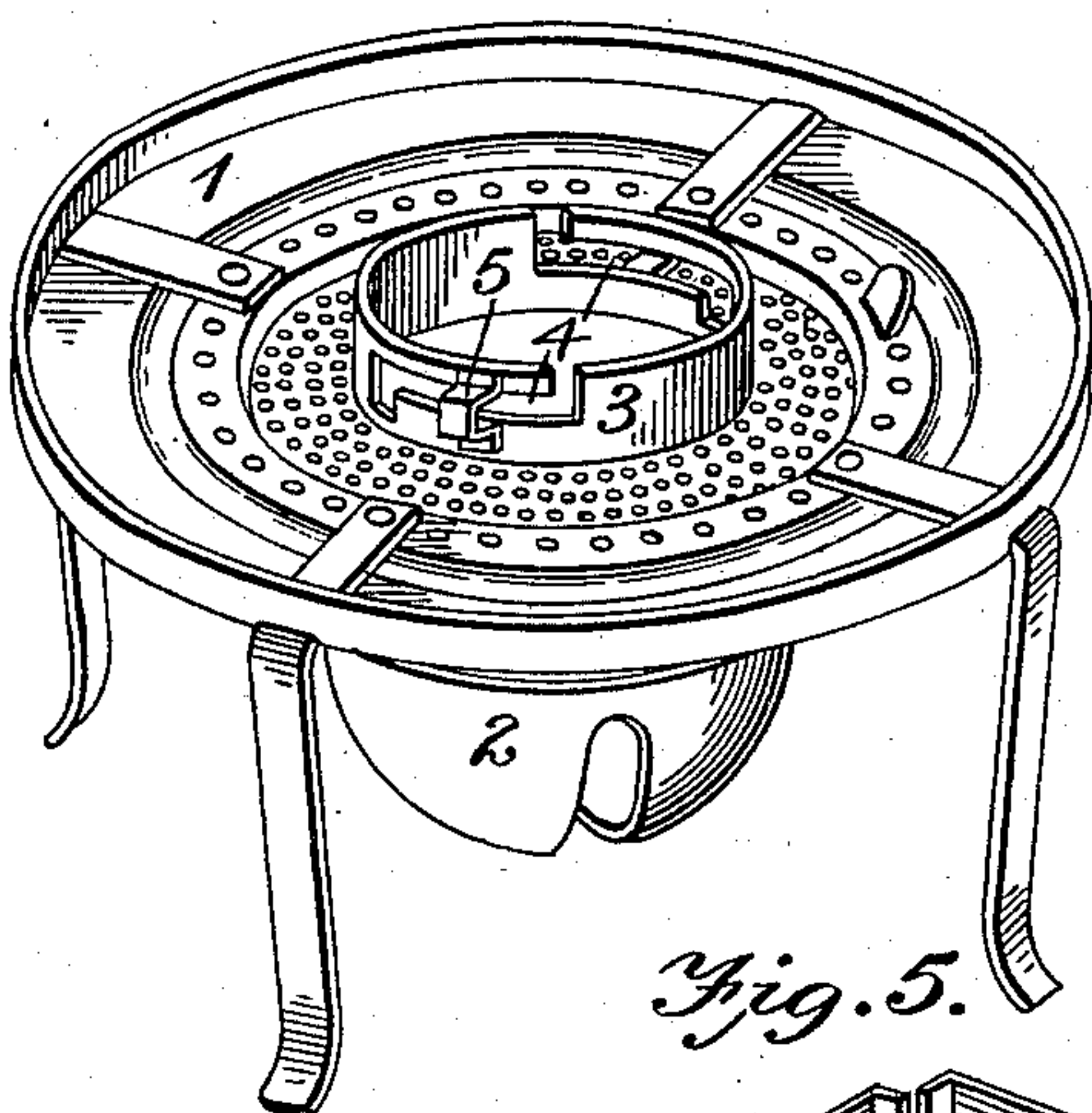


Fig. 4.

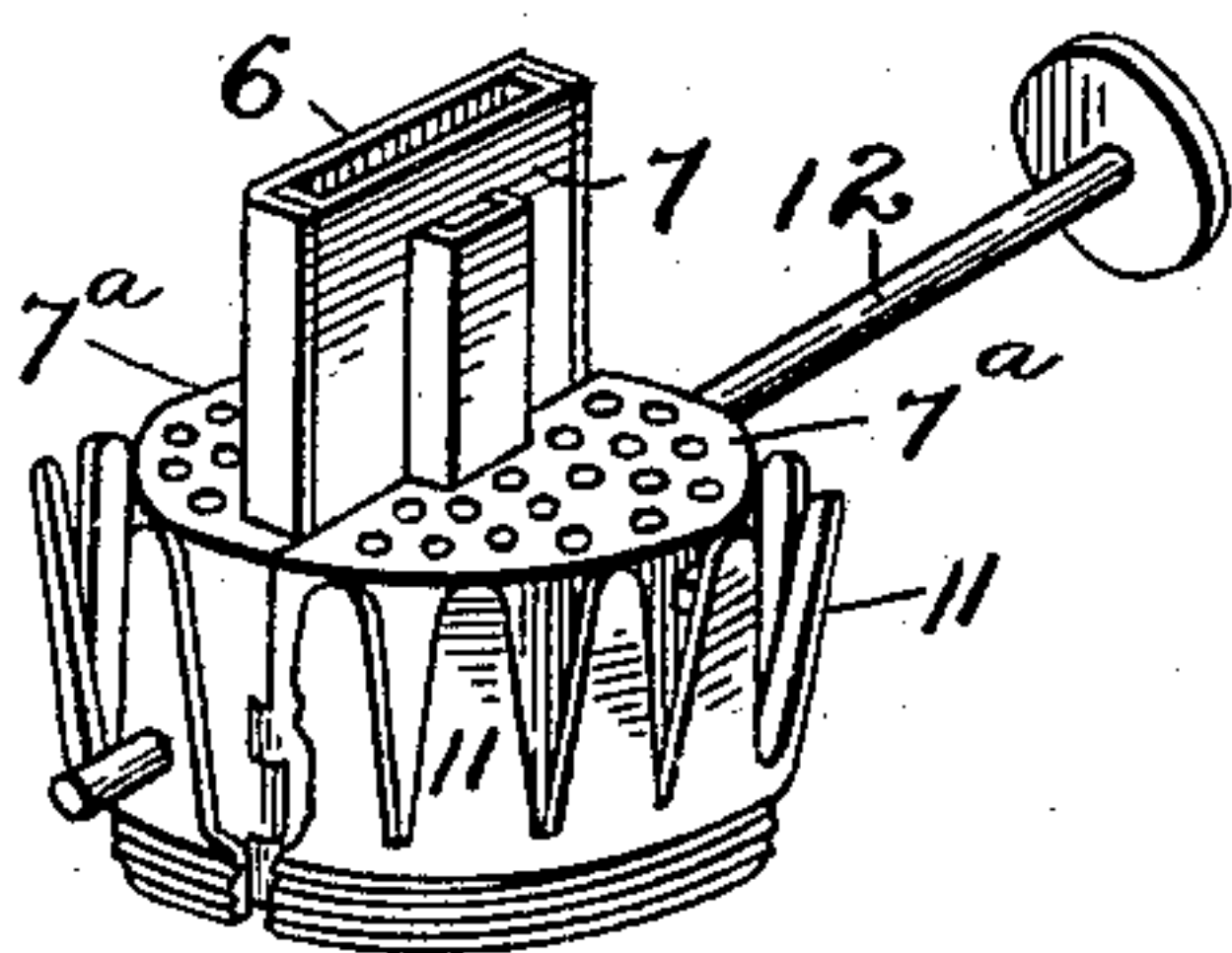
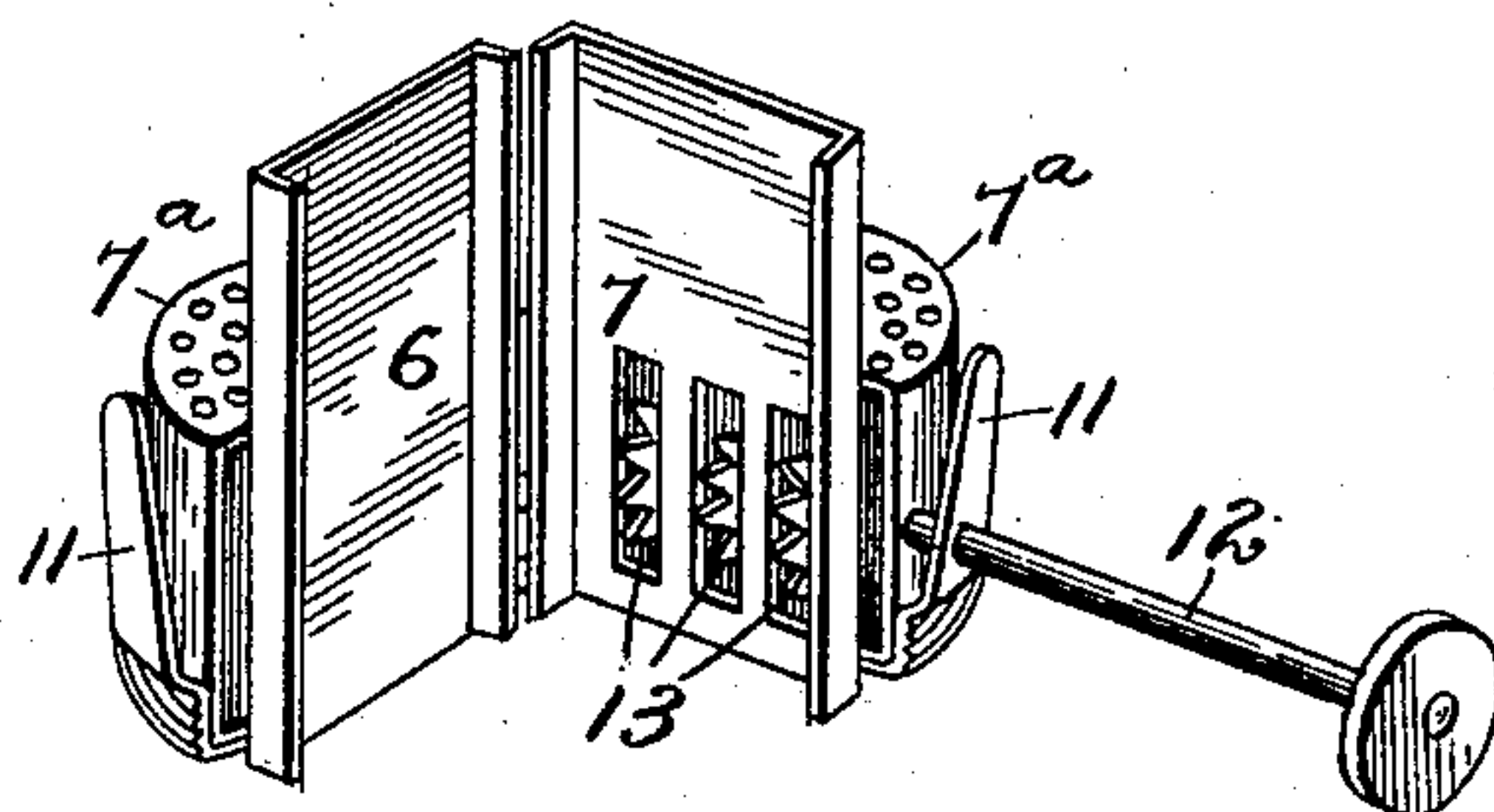


Fig. 5.



Inventor

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Witnesses

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# UNITED STATES PATENT OFFICE.

RICHARD L. COBURN, OF ROANOKE, VIRGINIA.

## LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 596,482, dated January 4, 1898.

Application filed March 10, 1897. Serial No. 626,813. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD L. COBURN, a citizen of the United States, residing at Roanoke, in the county of Roanoke and State of Virginia, have invented a new and useful Lamp-Burner, of which the following is a specification.

The purpose of the present invention is to enable lamp-burners to be readily cleaned in the event of fouling from any cause, to prevent the overheating and the consequent burning of the wick, and to increase the quality of the light.

With the foregoing ends in view the invention consists, primarily, of a burner having a detachable and separable wick-tube, the latter for convenience being composed of sections which are hinged together, so as to prevent their accidental misplacement and insure their registering when placed together.

The invention also consists in combining with the separable wick-tube a drum through which the air is caused to circulate, thereby cooling the wick and increasing the illuminating qualities of the light by attaining a more perfect combustion of the oil when the wick is lighted.

The improvement also consists of the novel features and details of construction, which hereinafter will be more particularly set forth, illustrated, and finally embodied in the subjoined claims.

For a full understanding of the merits and advantages of the invention reference is to be had to the accompanying drawings and the following description.

The improvement is susceptible of various changes in the form, proportion, and the minor details of construction without departing from the principle or sacrificing any of the advantages thereof, and to a full disclosure of the invention an adaptation thereof is shown in the accompanying drawings, in which—

Figure 1 is a vertical central section of a lamp-burner embodying the essential features of this invention. Fig. 2 is a side elevation, parts being broken away. Fig. 3 is a detail perspective view of the gallery inverted, the wick-tube and parts connected directly therewith being omitted. Fig. 4 is a detail perspective view of the wick-tube and the parts

having direct connection therewith. Fig. 5 is a detail perspective view of the parts shown in Fig. 4, showing the sections of the wick-tube open and the parts of the drum separated.

Corresponding and like parts are referred to in the following description and indicated in the several views of the drawings by the same reference-characters.

The invention is especially designed for use in connection with lamp-burners employing a flat wick, although with slight modifications, which will suggest themselves to the skilled artisan, it may be adapted to central-draft and other burners of the various types whether for illuminating or heating purposes.

The lamp-burner shown is of ordinary form and comprises the gallery 1 and cone 2, the gallery having a depending collar 3 formed in its sides at diametrically opposite points with bayonet-slots 4, the lower portions of the collar separated by the said bayonet-slots being strengthened and braced by looped stays 5, spanning the slots and secured at their ends to the portions of the collar bordering thereon.

The wick-tube is composed of complementary sections 6 and 7, which are separable and hinged together at one edge, whereby the sections are caused to register when closed and are prevented from being lost or misplaced when separated or open. Each of the sections is flanged at its longitudinal edges or sides to retain the wick in place and prevent relative lateral movement of the sections when assembled, and these flanged edges fit closely, so as to prevent any leaking or wasting of the oil.

A drum or chamber surrounds the wick-tube and consists of similarly-formed parts 7<sup>a</sup> of semicircular outline and closed on all sides, the top closures or plates being perforate to provide for the escape of the heated air, and the outer sides having openings for the entrance of air to keep the wick cool when the burner is lighted, said air circulating through the respective parts of the drum or chamber and passing out through the upper perforate plates thereof. Lugs 9 are provided at the sides of the drum or chamber at diametrically opposite points, and are adapted to cooperate with the bayonet-slots 4 to secure the wick-tube and drum to the gallery



when the parts are properly assembled, the gallery and wick-tube being prevented from relative turning after the lugs 9 have entered the vertical notches at the inner ends of the bayonet-slots, as will be readily understood. The drum is formed at its lower end with a threaded portion which is adapted to make screw-thread connection with the lamp-collar 10, thereby supplementing the action of the depending collar 3 in holding the separable parts together when the burner is in service.

In order to relieve the depending collar 3 of as much strain as possible, the drum is provided with a series of supports 11 concentric therewith and adapted to engage at their upper ends with the bottom side of the gallery, thereby bracing the gallery and enabling it to resist the strain to which it is subjected when forcing the lamp-chimney thereon between the holders.

The wick-raising mechanism is applied to a section or part of the drum and consists of the usual shaft 12 and spur-wheels 13, secured thereto and projecting across the wick-space of the wick-tube, so as to engage with the wick and move the latter up or down, according to the direction of turning the shaft. The drum affords a convenient means for housing the spur-wheels and the inner end portion of the shaft, and the section 7 of the wick-tube is slotted, as shown, to admit of the free operation of the spur-wheels, as will be readily understood. In the event of the burner fouling the wick-tube and drum can be readily detached and parted to admit of the wick being removed or placed in position or the obstructing matter removed, after which the wick-tube can be placed in position and the burner restored to an operative condition.

Having thus described the invention, what is claimed as new is—

1. In a lamp-burner, the combination of a one-piece gallery or like support, and a wick-tube having detachable connection with the gallery or support and composed of separable sections which are held closed by the said gallery when the parts are assembled, substantially as and for the purpose set forth.

2. In a lamp-burner, the combination of a one-piece gallery or like support, and a wick-tube having detachable connection therewith and composed of complementary sections hinged together at one edge and having their longitudinal edges flanged and held closed by the gallery when the parts are fitted together, substantially as and for the purpose set forth.

3. In a lamp-burner, the combination of a one-piece gallery or like support, a wick-tube having detachable connection therewith and composed of separable sections which are held together by the gallery, and a drum composed of corresponding parts each applied to a corresponding section of the wick-tube and provided with openings for the circulation thereof through of air, substantially as set forth.

4. In a lamp-burner, the combination of a gallery or like support, a wick-tube detachably connected therewith and provided with a drum, and a series of supports concentric with the drum and connected therewith at their lower ends, and having their upper extremities spreading so as to engage with the gallery at points distant from the sides of the drum, substantially as set forth for the purpose described.

5. A lamp-burner comprising a gallery having a depending collar formed at diametrically opposite points with bayonet-shaped slots, a wick-tube composed of complementary sections hinged together, a sectional drum secured to the respective sections of the wick-tube and provided with openings for the circulation of air therethrough, lugs at the outer sides of the parts of the drum and adapted to cooperate with the aforesaid bayonet-slots, supports having connection with the drum and adapted to engage with the gallery, and a wick-raising mechanism applied to one of the parts of the drum, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

RICHARD L. COBURN.

Witnesses:

JOHN H. SIGGERS,  
H. H. SIMMS.