

(No Model.)

2 Sheets—Sheet 1.

F. T. WILLIAMS.
LAMP BURNER.

No. 477,035.

Patented June 14, 1892.

Fig. 1

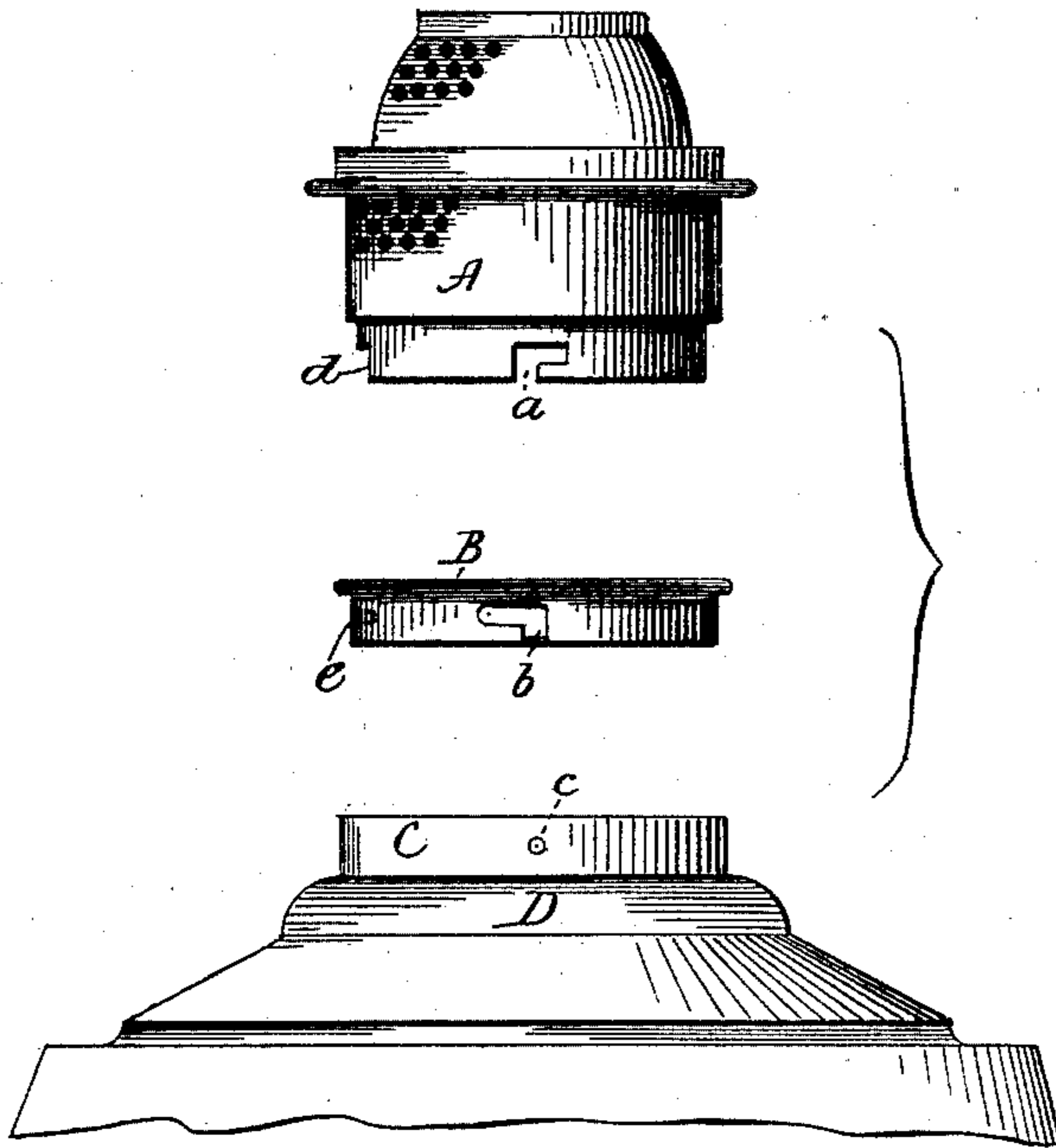
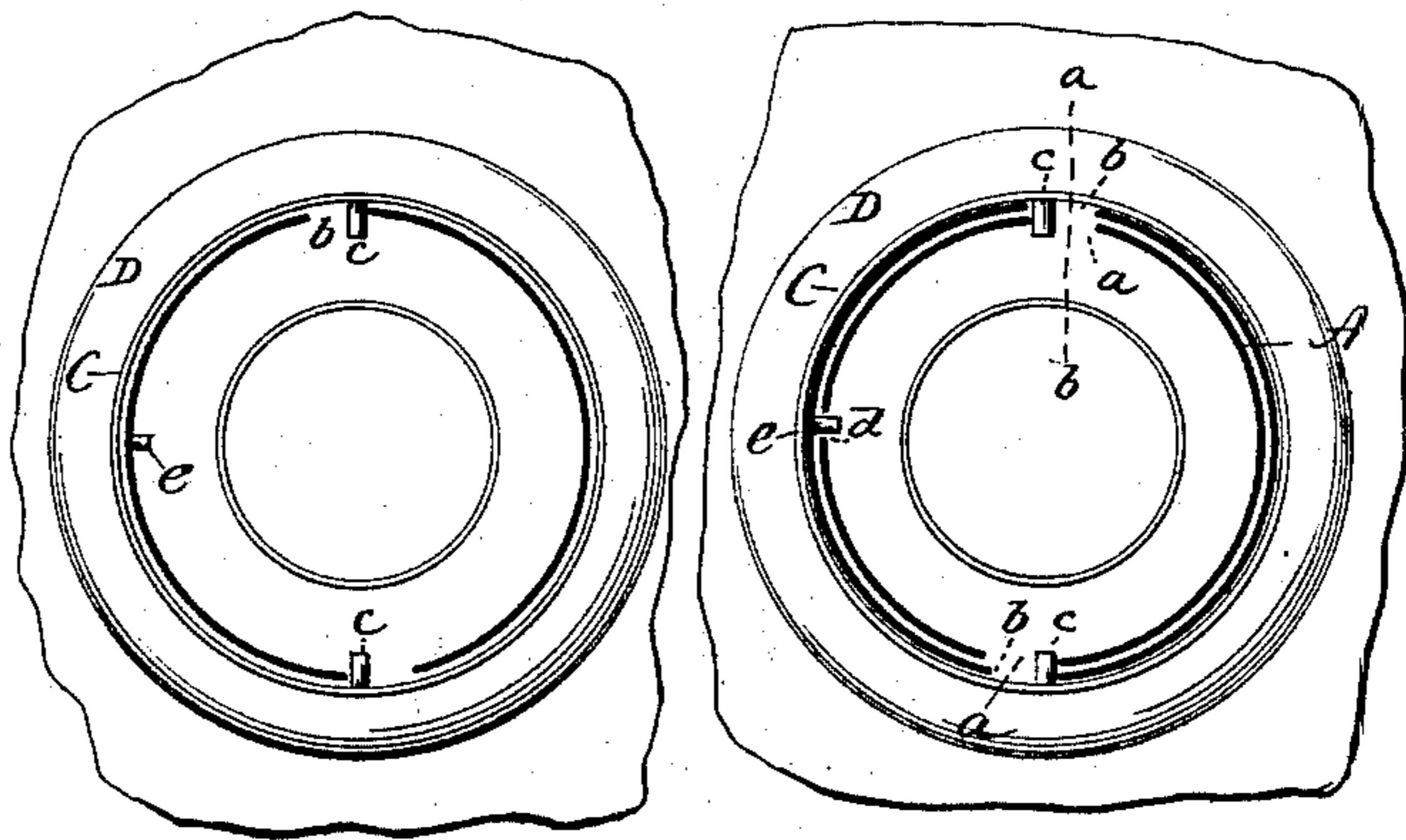
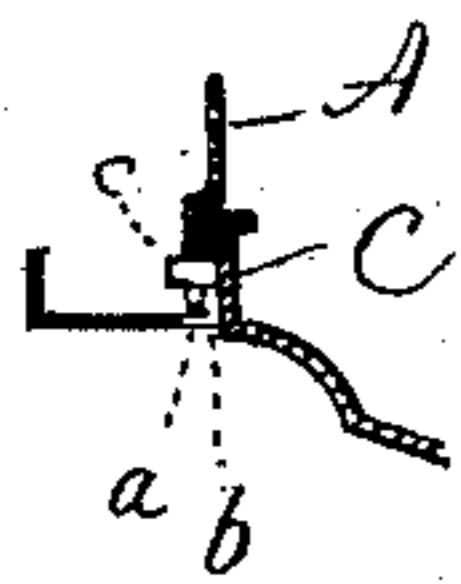


Fig. 2

Fig. 3

Fig. 4



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2 Sheets—Sheet 2.

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Fig. 5.

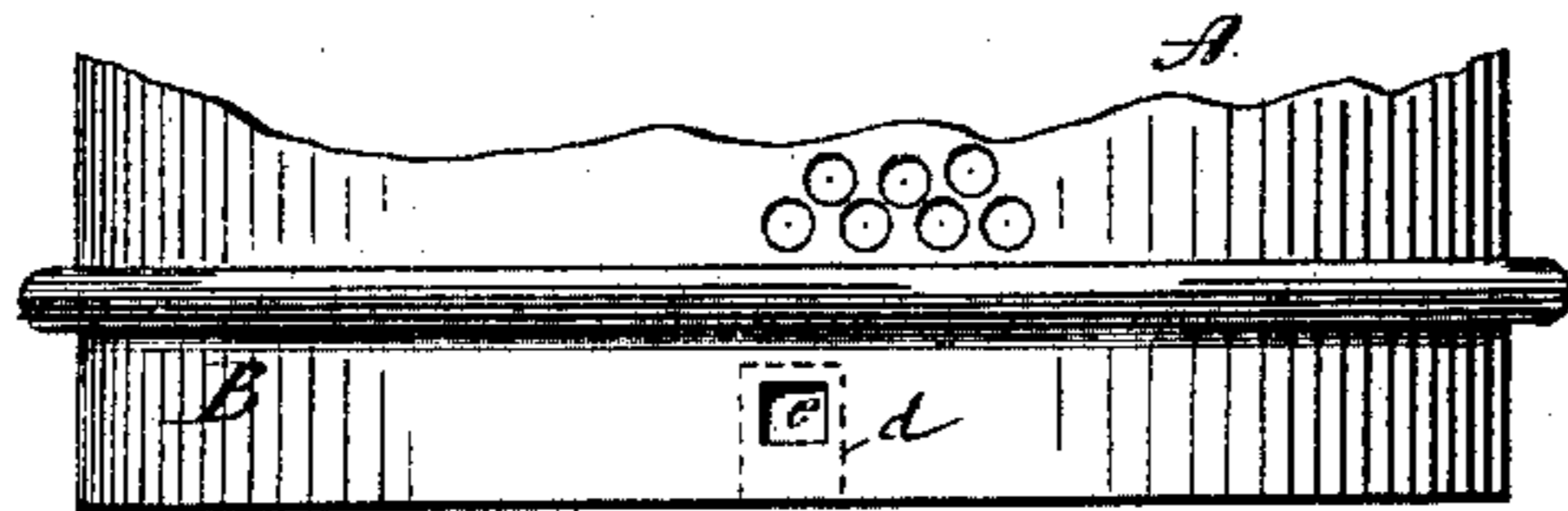


Fig. 6.

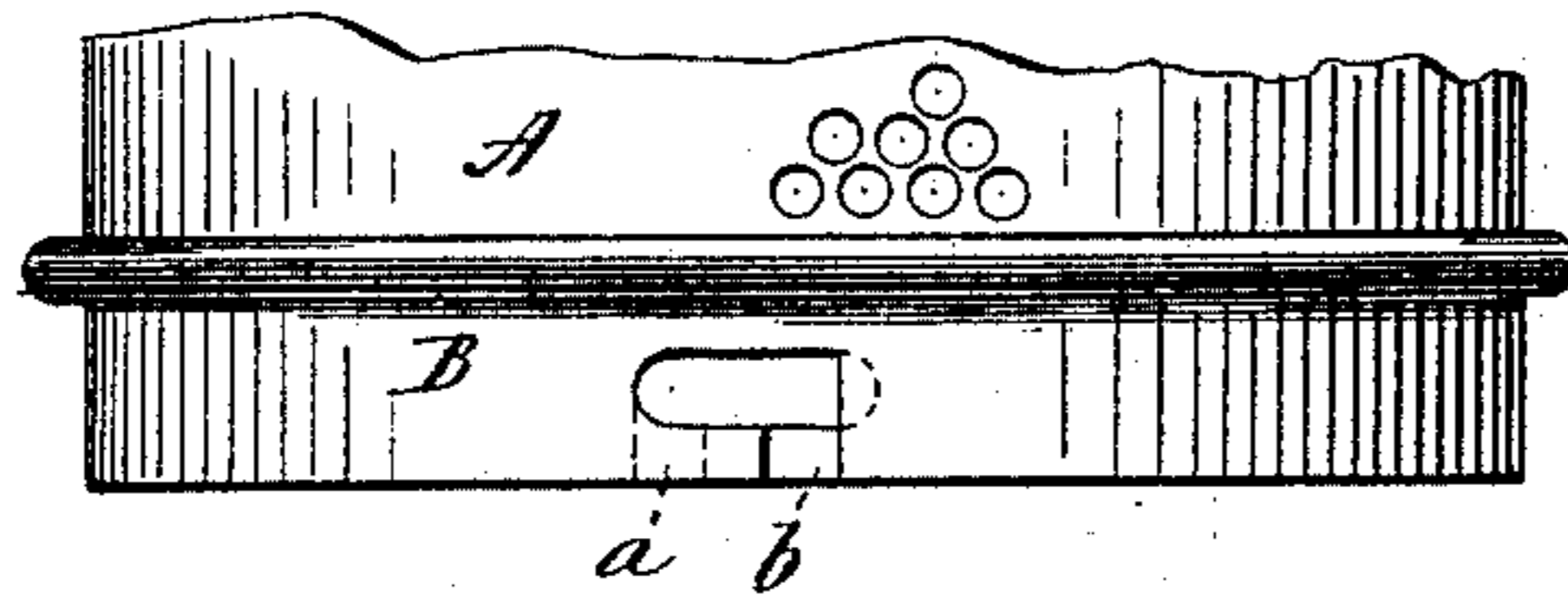
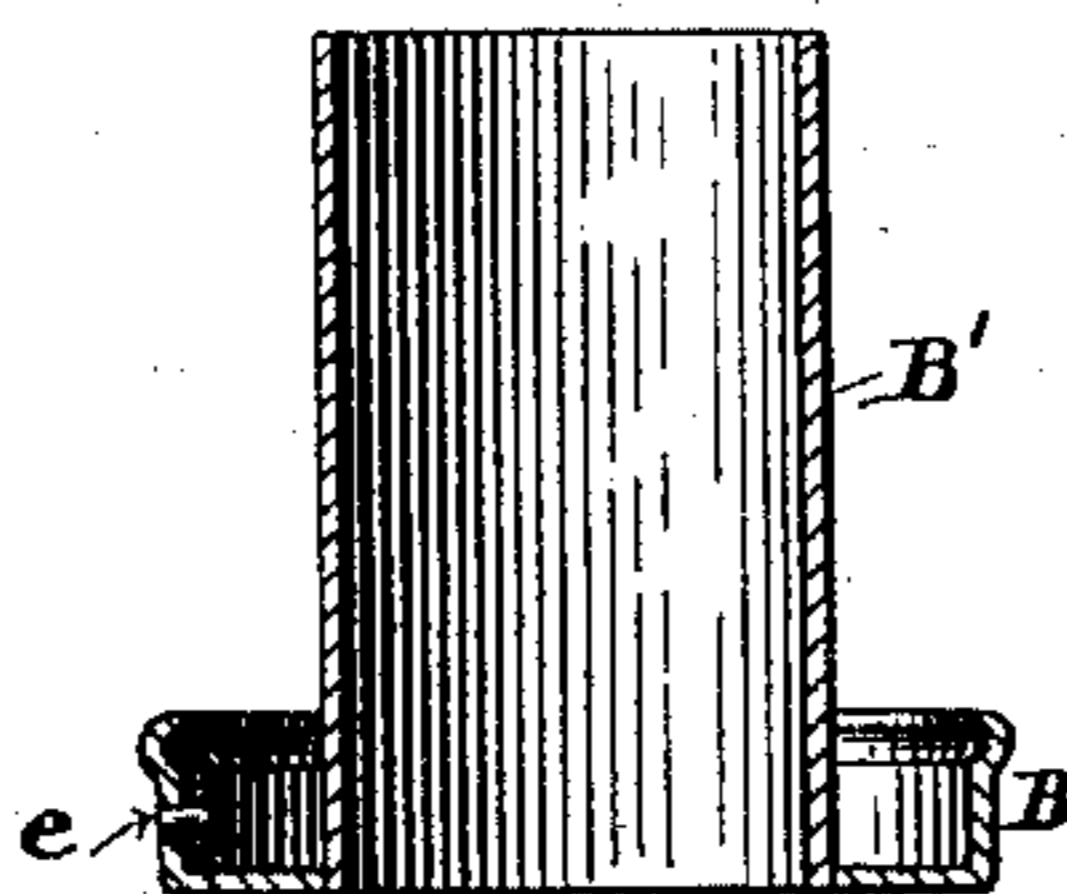


Fig. 7.



Witnesses

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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. 477,035, dated June 14, 1892.

Application filed October 2, 1891. Serial No. 407,549. (No model.)

To all whom it may concern:

Be it known that I, FRANK THEODORE WILLIAMS, of Meriden, in the county of New Haven and State of Connecticut, have invented
5 a new Improvement in Lamp-Burners; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the
10 same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view in side elevation of a lamp-fount, a burner-socket, and a burner-slip constructed in accordance with my invention
15 and arranged one above the other in the order of their assemblance; Fig. 2, a view in transverse section through the neck of the lamp-fount and the burner-socket when the latter is locked thereto; Fig. 3, a similar view
20 through the neck of the lamp-fount, the burner-socket, and the burner-slip, showing the burner-slip locked in place and how the burner-socket may then be unlocked though held in place by the slip instead of the retaining-
25 points; Fig. 4, a broken view, in vertical section, on line *a b* of Fig. 3. Fig. 5 is an enlarged broken view in elevation of the burner-slip and burner-socket coupled for positive rotation together by the combination of the
30 point *e* of the said socket with the vertical slot *d* of the said slip. Fig. 6 is a similar view of the same parts, showing the relative positions of their bayonet-slots when the parts are positively coupled, as shown by the
35 preceding figure. Fig. 7 is a view of the burner-socket in vertical central section.

My invention relates to an improvement in central-draft lamp-burners, the object being to produce a simple and cheap burner in
40 which the burner-slip may be disconnected from the burner-socket for cleaning the burner without disconnecting the said socket from the lamp-fount.

With these ends in view my invention consists in the combination, with a burner-socket
45 having one or more bayonet-slots formed in its flange, of a burner-slip having one or more bayonet-slots formed in its flange and corresponding in location but extending in reverse direction from the slot or slots in the
50 flange of the socket and one or more retain-

ing-points extending inward from the neck of the lamp-fount and adapted in length to be engaged by both the burner-socket and the burner-slip through the slots thereof, the
55 said socket and slip being constructed to be coupled for rotation together.

Under my invention the burner-slip A, which may be of any approved construction, has one or more ordinary bayonet-slots *a* formed in the
60 flange at its lower end. As herein shown, it is provided with two of such slots. The burner-socket B, which is also of any approved construction and comprises the outer wick-tube B', attached to it, as shown by Fig. 7 of the
65 drawings, is provided with one or more bayonet-slots *b*, according to the number of slots *a* in the burner-slip. The slots *a* and *b* in the burner-slip and burner-socket, respectively, correspond to each other in location, but extend
70 in opposite directions, whereby the corresponding slots will receive retaining-points *c c*, consisting of pins mounted in the neck C of the lamp-fount D, the said pins being of sufficient length to adapt them to be engaged
75 both by the burner-socket and the burner-slip through the slots of those parts. The flange of the burner-slip is also constructed with a vertical slot *d*, which co-operates with an inwardly-projecting point *e* in coupling the
80 burner-socket and burner-slip for rotation together, said point *e* projecting inwardly from said neck C of the fount D. This coupling, however, only unites them for lateral move-
85 ment together, for they are still free to separate when pulled longitudinally away from each other.

When in a lamp-burner constructed as described the burner-slip is set into the burner-socket with its bayonet-slots *a* in line with the
90 retaining-points *c*, mounted in the lamp-fount, and turned to lock it in place, it will also positively turn the burner-socket, with which it is coupled by the slot *d* and the point *e*, and thus bring the vertical portions of the bayo-
95 net-slots *b* thereof into line with the said retaining-points, whereby the burner-socket is unlocked so far as the said points are concerned, although it is firmly held in place by the burner-slip. When, however, the burner-
100 slip is turned in the opposite direction to bring the vertical portions of its bayonet-

slots *a* into line with said retaining-points, the burner-socket will be again turned positively by the slot *d* and the pin *e* and this time in the direction required to enter the said points into the horizontal portions of its slots *b*, whereby it is again locked to the lamp-fount by means of the said points, so that the burner-slip may now be removed, leaving the burner-socket locked to the lamp-fount.

It may be stated here that when the pin or point *e* is entered into the vertical slot *d* the horizontal portions of the respective slots *a b* of the socket and slip will be in line; but as they extend in opposite directions their vertical portions will be out of line, and therefore closed, as shown by Fig. 6 of the drawings.

This makes it necessary to apply the burner-socket and the burner-slip to the lamp-fount independently and to remove them in the same manner, the burner-socket being first attached to the fount and then the burner-slip, while they are removed therefrom in reverse order.

The terms "burner-slip" and "burner-socket" as used herein are terms used in burner-shops and in the trade to describe the same parts, the burner-socket comprising the outer wick-tube and the collar by which the same is attached to the lamp-fount and the burner-slip comprising the gallery which receives the lamp-chimney, the perforated skirt depending therefrom, and the perforated burner-cone which rises above the said gallery and surrounds the outer wick-tube at a point just below the flame when the burner-slip is in position on the burner-socket.

I am aware that it is old to attach burner-sockets to lamp-founts and burner-slips to burner-sockets by means of simple bayonet-locks. I do not therefore claim such construction, broadly, but only the particular construction shown herein.

It is not material whether the burner-socket is locked to the lamp-fount or not when the burner-slip is locked thereto, for at that time it is held in place thereby; but it is essential that the positive locking of the burner-socket to the lamp-fount be insured at the time the burner-slip is removed, and this is provided for by the slot *d* and pin *e*, which couple the socket and slip for rotation together. It will thus be seen that by making the bayonet-slots on the burner-slip and the burner-socket correspond in location but extending them in opposite directions and by making the retaining-points long enough to be engaged by the slots of both of the said parts the burner-slip may be connected with and disconnected from the burner-socket in a very simple manner and without ever disconnecting the same from the fount.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a lamp-burner, the combination, with a burner-socket having one or more bayonet-slots formed in its flange, of a burner-slip having one or more bayonet-slots formed in its flange and corresponding in location but extending in reverse direction from the slot or slots in the burner-socket, and one or more retaining-points extending inward from the neck of the lamp-fount and adapted in length to be engaged by both the burner-socket and the burner-slip through the slots thereof, and means for positively coupling the burner-socket and the burner-slip for rotation together, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

FRANK THEODORE WILLIAMS.

Witnesses:

W. C. HOMAN,
CHAS. E. HOMAN.