

(No Model.)

2 Sheets—Sheet 1.

F. T. WILLIAMS.
LAMP BURNER.

No. 477,035.

Patented June 14, 1892.

Fig. 1

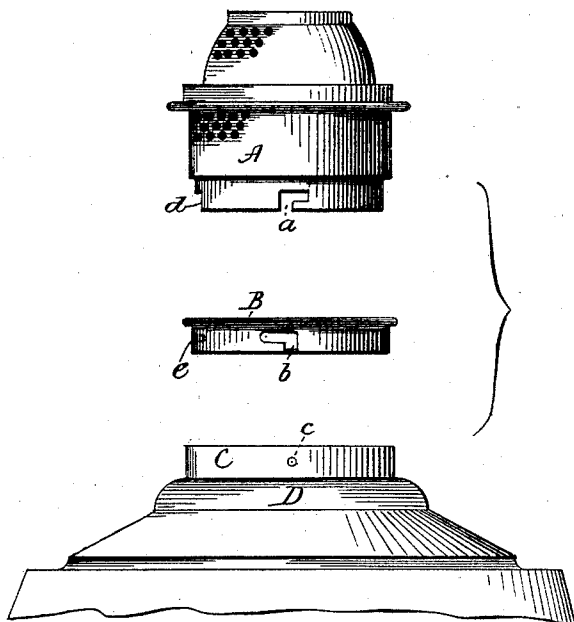
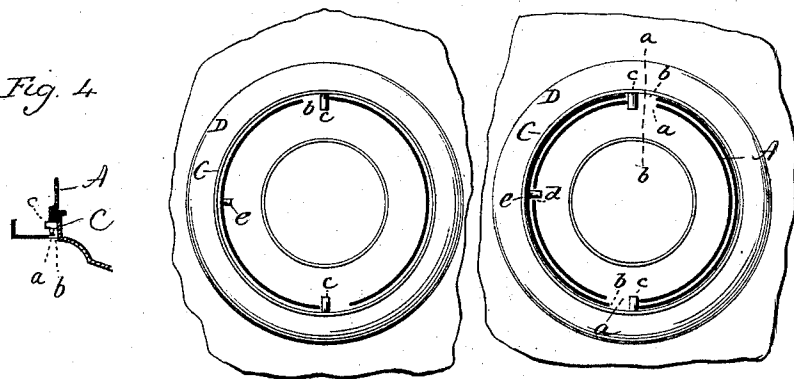


Fig. 2

Fig. 3

Fig. 4



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(No Model.)

2 Sheets—Sheet 2.

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Fig. 5.

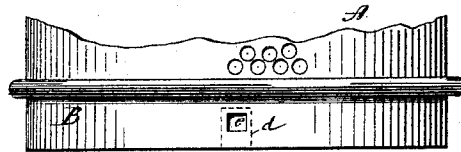


Fig. 6.

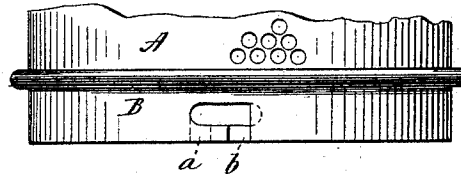
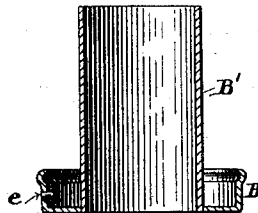


Fig. 7.



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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 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 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 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 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-points; Fig. 4, a broken view, in vertical section, on line *ab* 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 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 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 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 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 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 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 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 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 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 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 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 movement 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 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 bayonet-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-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.