

(No Model.)

J. C. MILLER.
CENTRAL DRAFT LAMP BURNER.

No. 487,955.

Patented Dec. 13, 1892.

Fig 1

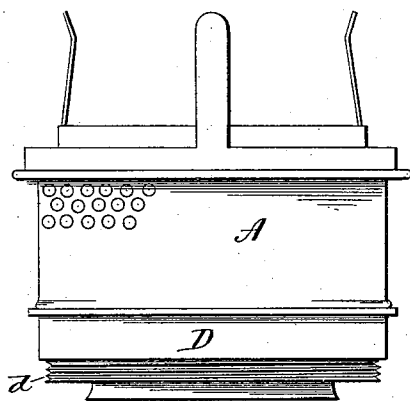


Fig 2

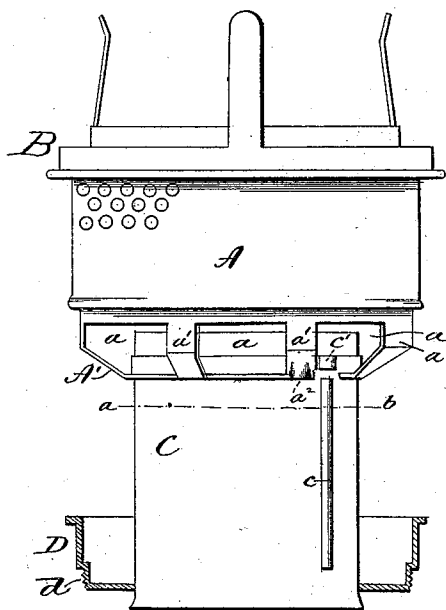


Fig 3

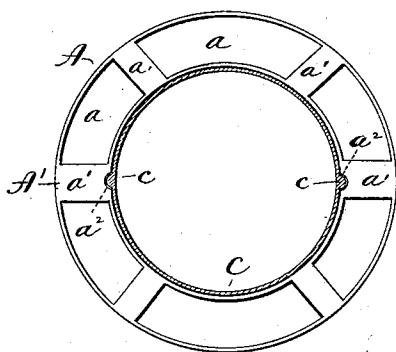


Fig 4

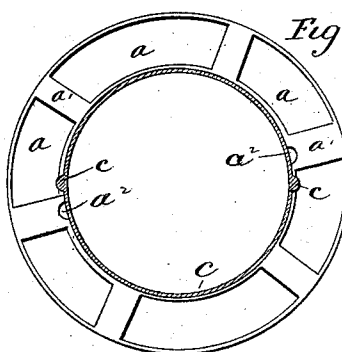
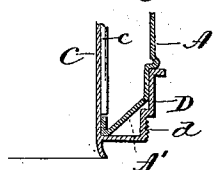


Fig 5



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UNITED STATES PATENT OFFICE.

JOHN C. MILLER, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE MATTHEWS & WILLARD MANUFACTURING COMPANY, OF SAME PLACE.

CENTRAL-DRAFT-LAMP BURNER.

SPECIFICATION forming part of Letters Patent No. 487,955, dated December 13, 1892.

Application filed January 6, 1892. Serial No. 417,139. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. MILLER, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new
5 Improvement in Central-Draft-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 descrip-
10 tion of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view in side elevation of a burner constructed in accordance with my invention in its normal adjustment, as in use; Fig. 2, a
15 similar view with the gallery and perforated band or skirt elevated, as for lighting the lamp, and locked in such position; Fig. 3, a view of the burner partly in transverse section on line
20 *a b* of Fig. 2 and partly in reverse plan, with the gallery and band adjusted for raising and lowering; Fig. 4, a similar view with the gallery and band locked in their elevated positions; Fig. 5, a broken view of the burner in
25 vertical section, showing the gallery and band locked in their normal position.

My invention relates to an improvement in that class of central-draft-lamp burners in which the outer wick-tube is provided at its
30 lower end with a cup-like collar adapted to be removably attached to the lamp-fount and in which the gallery is vertically movable on the said tube to facilitate the lighting of the lamp, the object being to produce a simple,
35 cheap, and convenient device constructed to avoid the accumulation of charred portions of the wick removed in trimming or wiping the same.

With these ends in view my invention consists in a central-draft-lamp burner having the upper edge of its perforated band or skirt fixed to the lower edge of the gallery and its lower edge turned inward to meet the outer wick-tube and constructed with one or more
45 lighting-openings, the said gallery and band being vertically movable together upon the wick-tube and the openings in the band permitting the insertion of a match or taper to the wick and the escape of detached frag-
50 ments thereof.

My invention further consists in certain de-

tails of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In carrying out my invention I have, as
55 herein shown, rigidly connected the upper edge of the perforated cylindrical band or skirt A to the lower edge of the gallery B, from which it thus depends, the said gallery and band being vertically movable on the cy-
60 lindrical outer wick-tube C, than which they are considerably larger in diameter, and which is provided at its lower end with a shallow imperforate cup-like collar D, adapted to be removably connected with a lamp-fount by
65 threads *d* or otherwise by means too obvious to require illustration—such, for instance, as by a bayonet-joint. The lower edge of the said band is turned inward to meet and ride upon the said tube, forming a tapering ter-
70 mination A', adapted to fit into the said collar D, and constructed with one or more lighting-openings *a*. As shown, the said portion A' is made with a circular series of said openings, which are separated from each other only by
75 narrow webs *a'*, whereby the lamp may be conveniently lighted from any side of the burner when the said gallery and band are lifted, and whereby the fragments dropping from the wick when the same is trimmed or
80 wiped pass entirely out of the burner, in which they can have no lodgment except upon the narrow webs *a'*, from which any intercepted particles may be readily brushed or
85 blown. When the gallery and band are in their normal positions, the tapering lower end of the latter enters the collar D, whereby its openings are virtually closed, so that they in no wise interfere with the draft of the lamp.

Preferably some provision should be made
90 for guiding the vertical movement of the gallery and band and locking them in their elevated positions, so that they need not be manually held while a match or taper is being ap-
95 plied to the wick and so that, if desired, a number of burners may be adjusted for being lighted in quick succession by a single match or taper, and also in their depressed or normal positions, so that in case the band or gallery should be seized for lifting the lamp either would be
100 firm and avoid a possible accident. To this end I prefer to provide the wick-tube with

one or more vertical outwardly-projecting ribs *c*, terminating within its upper and lower ends and made independently of and attached to the outer face of the tube, as shown, or struck up therefrom. As shown, the tube has two of such ribs located opposite each other. I also provide the tube with a stop *c'* for each rib. Only one of these is seen, and that in Fig. 2 of the drawings. They are located directly above the upper ends of the ribs with a vertical space between them and the same sufficient in width to receive the extreme lower edge of the said band, which has formed in said edge one or more grooves *a*², corresponding in number and location to the ribs on the tube which they receive. They are formed by striking the said edge outwardly. The stops *c'*, it will be noted, are wider than the said grooves *a*² and will not pass through the same.

In the normal adjustment of a lamp-burner constructed as described the gallery and band are rotated, so as to carry the grooves *a*² *a*² of the latter out of line with the lower ends of the ribs *c c* of the tube, whereby the unbroken inwardly-turned lower edge of the band will be brought under the said ends of the ribs and lock the band and gallery against being lifted in case the burner should be taken hold of by either of them.

In order to elevate the gallery and band for lighting the lamp through the opening or openings in the lower edge of the band, the same and the gallery are rotated to bring the said grooves *a*² *a*² into line with the ribs *c c*, after which the band or gallery may be lifted. In lifting them they are raised until the inwardly-turned lower edge of the band is carried above the upper ends of the said ribs, after which they are turned so as to carry the said grooves out of line with the said ribs and to bring the said edge between the upper ends of the latter and the stops *c' c'* aforesaid, whereby the gallery is supported in its elevated position. The said stops being wider than the said grooves prevent the gallery and band from being lifted off the tube when they are being lifted directly upward, while after they have been turned for locking them in their elevated positions the said stops co-operate with the said edge of the band in preventing them from being lifted off the tube.

It will be readily apparent that all fragments of the wick removed by trimming or wiping the same will drop through the lighting-openings in the lower end of the band and into the collar, from which they may be easily brushed or blown. My burner, therefore, affords no lodgment for such refuse, which is so annoying in most burners from the odor emitted by it when it is heated.

I do not limit myself to the use of the exact construction shown and described, but hold myself at liberty to make such changes and alterations as fairly fall within the spirit

and scope of my invention. For instance, I may omit provision for locking the band and gallery in either or both of their adjustments,—i. e., in their lighting or normal positions,—but prefer to employ some such provision, thereby to increase the convenience and safety of the burner.

I am aware that both round and flat wick lamp-burners have had their galleries or chimney-holders made vertically movable to facilitate lighting and trimming the wick, and I do not therefore claim such a construction, broadly.

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

1. In a central-draft-lamp burner, the combination, with a cylindrical outer wick-tube provided at its lower end with a shallow cup-like collar adapted to be removably attached to a lamp-fount, of a perforated cylindrical band or skirt having its lower edge constructed with one or more lighting-openings and turned inwardly to meet and ride upon the said tube and shaped to fit down into the said cup-like collar, whereby the said openings are normally closed, and a gallery rigidly secured to the upper edge of the said band, which depends from the tube, and the lower end of the said skirt being constructed and adapted to confine the skirt to a perpendicular movement until it has reached its elevated or lighting and its depressed or normal positions, in which it is rotatable for being locked in the same, substantially as set forth.

2. In a lamp-burner, the combination, with an outer wick-tube provided with one or more vertical outwardly-projecting ribs terminating within its upper and lower ends, and with one or more stops respectively located above the upper ends of the said ribs, of a cup-like collar secured to the lower end of said tube and adapted to be removably connected with the lamp-fount, a gallery vertically movable on the said tube, and a perforated band or skirt having its upper end attached to the said gallery and its lower edge turned inwardly to meet the tube and fit into said collar and constructed with one or more lighting-openings and with one or more grooves corresponding in number and location to the said rib or ribs on the said tube, substantially as described, and whereby the rib or ribs guide the gallery and band as they are raised or lowered and permit them to be locked in either their raised or lowered positions by turning them to carry the ribs and grooves out of line.

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

JOHN C. MILLER,

Witnesses:

LUCIEN F. BURPEE,
GEO. G. BLAKESLEE.