

(No Model.)

W. C. HOMAN.
CENTRAL DRAFT LAMP.

No. 477,865.

Patented June 28, 1892.

Fig 1

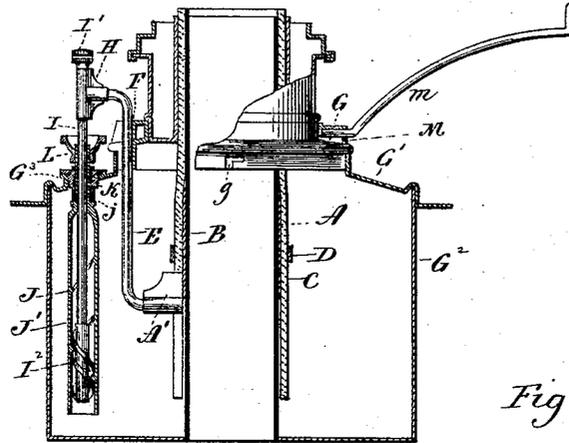


Fig 6

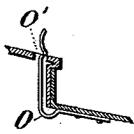


Fig 3

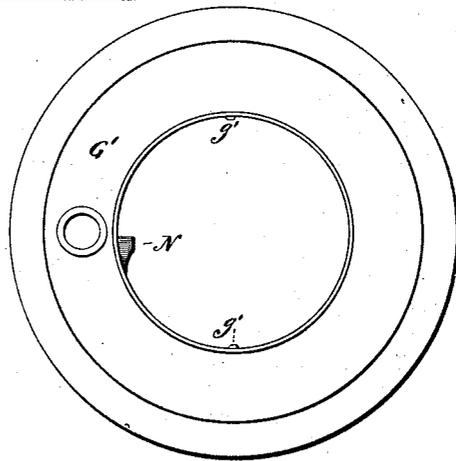


Fig 2

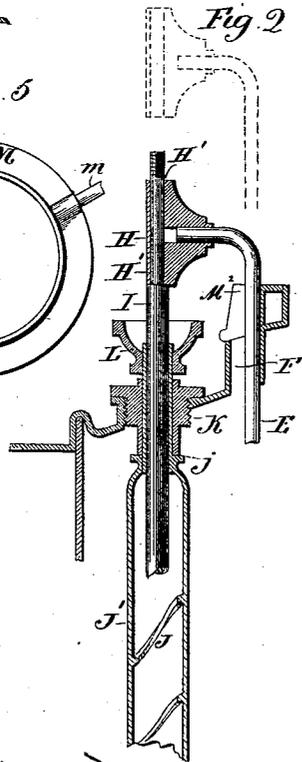


Fig 5

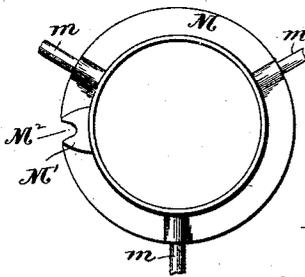
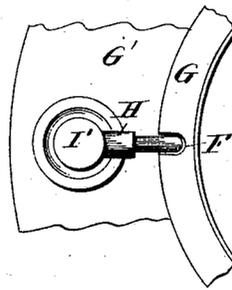


Fig 4



Witnesses.
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UNITED STATES PATENT OFFICE.

WILLIAM C. HOMAN, OF MERIDEN, CONNECTICUT, ASSIGNOR TO THE EDWARD MILLER & COMPANY, OF SAME PLACE.

CENTRAL-DRAFT LAMP.

SPECIFICATION forming part of Letters Patent No. 477,865, dated June 28, 1892.

Application filed January 4, 1892. Serial No. 416,952. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. HOMAN, of Meriden, in the county of New Haven and State of Connecticut, have invented a new
5 Improvement in Central-Draft Lamps; 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 vertical section of a lamp provided with a wick-adjusting device constructed in accordance with my invention;
15 Fig. 2, an enlarged sectional view of the said device; Fig. 3, a detached plan view of the top of the lamp-fount with the removable ring and the wick-adjusting device taken out; Fig. 4, an enlarged broken plan view of the
20 top of the lamp-fount, showing the wick-adjusting device and the removable ring in position; Fig. 5, a detached broken plan view of the shade-holder; Fig. 6, a sectional view showing a modified construction of the
25 removable ring to be adopted in case of making the wick-adjusting device non-separable.

My invention relates to an improvement in wick-adjusting devices for central-draft lamps, the object being to produce a simple,
30 convenient, and effective device, combining the advantages of a screw and a direct thrust action in the adjustment of the wick and extinguishment of the light, respectively.

With these ends in view my invention consists in the combination, with a wick-band,
35 of a draw-bar attached thereto, a stem connected at its upper end with the upper end of the said draw-bar and provided at its lower end with coarse screw-threads, a tube
40 having a centrally-perforated knurled thumb-nut located at its upper end and constructed with internal screw-threads corresponding in pitch to the threads of the stem aforesaid, and a rotatable suspension-sleeve mounted
45 on the tube below said nut and adapted to be removably secured to the said lamp-fount in which it suspends the said tube.

My invention further consists in certain details of construction and combinations of
50 parts, as will be hereinafter described, and pointed out in the claims.

The wick-band A is of any approved construction, and, as herein shown, arranged for direct sliding contact upon the central-draft
tube B, the wick C being applied over the
55 said band and secured thereto by the fastening-ring D. The said band is provided at its lower edge with an outwardly-projecting shank A', to which is rigidly secured the
60 lower end of a draw-bar E, consisting of a rod, which passes upward and plays up and down through a slot F opening outward and formed in the outer edge of a removable ring G, which
65 constitutes the inner portion of the top G' of the lamp-fount G². The wick-band A, forming the wick-holder proper, is of ordinary construction, and may be replaced by any other
suitable means of holding the wick. As herein shown, the said ring G is provided at
70 opposite points in its periphery with bayonet slots or grooves g, located opposite each other and designed for engagement with suitable
75 retaining-points g' g', projecting inwardly from the outer portion G' of the top of the fount, as shown by Fig. 3 of the drawings. The said ring
is secured in place by first aligning the vertical
80 portions of its grooves or slots g with the retaining-points g' g' aforesaid, and then pressing it downward into place and turning it to enter the said points into the horizontal
85 portions of the said slots. The upper portion of the draw-bar E is bent outward, and has rigidly secured to it a union or coupler H, which has a long vertical opening H', receiving the
90 upper end of a stem or rod I, the said end of which projects above the said coupler, where it receives a small coupling-nut I', which thus
95 secures the stem to the coupler, and hence to the draw-bar, with which the said stem is parallel. The lower end of this stem is provided
with coarsely-pitched screw-threads I², which
100 take into correspondingly-pitched screw-threads J, formed upon the interior of a tube J', suspended in the lamp-fount by means of a threaded sleeve K, rotatably mounted upon
the upper end of the tube between a shoulder
j, formed toward the upper end thereof, and
a centrally-perforated operating-nut L, rigidly
fastened to the extreme upper end of the tube
and extending above the fount, the said stem
I passing through and above the said nut.
The sleeve K, before mentioned, is provided

with threads, whereby it is removably secured in a neck G³, formed in the top of the fount, whereby it serves to suspend the tube and stem therein.

5 To guide and support the draw-bar E as it is moved up and down, the ring M of the shade-holder is constructed with a boss M', having a vertical groove M² opening outward and forming a long bearing for the said draw-
10 bar, the said ring being furnished with holding-arms *m m m*.

In order to prevent the removable ring G from being rotated and unlocked in the ordinary use of the lamp, the outer portion G' of
15 the top of the lamp-fount is furnished with a horizontal stop N, which is engaged by the draw-bar E in the ordinary operating positions thereof, whereby the said bar prevents the ring G from being rotated, inasmuch as it
20 passes upward through the slot F, formed therein, and as it is firmly coupled with the upper end of the stem I, which has only vertical movement. In order, therefore, to un-
25 lock the ring to remove the draw-bar and wick-band from the fount, the draw-bar must be lifted until its lower end has been elevated above the stop N, so that it will be free to pass over the same when the ring is rotated for being unlocked prior to removal; but
30 before the ring can be rotated the draw-bar must be disconnected from the screw-stem I, which is done by removing the small nut I' and then pushing the stem downward, so as to entirely disengage it from the union or
35 coupling H. It will be apparent that after this the removable ring G may be freely turned. In case, however, it is found desirable to make the wick-adjuster non-separable, in which instance the upper ends of the draw-
40 bar and stem would be rigidly connected together, provision must be made for locking the removable ring G in place without turning it, or, in other words, by some direct vertical movement. Such provision is shown in
45 a modification represented in Fig. 6 of the drawings, in which the outer portion of the top of the fount is provided with a spring O, extending upward, so as to pass through a small opening O', formed in the removable
50 ring G'. In practice several such springs and corresponding openings would be employed, or at least two of each. Under that construction the removable ring would be pressed down over the springs, which would then recover and hold the ring in place by
55 their bent upper ends, which would be seized and drawn toward the center of the lamp for releasing the ring again. This construction will be recognized as practically the same device as has been long employed for securing the founts of hand-lanterns in place.

In using a wick-adjuster constructed in accordance with the foregoing description the wick may be raised and lowered with care
65 and accuracy by simply turning the operating-nut L, while when it is desired to lift the wick very quickly or push it down suddenly

the coupler is taken hold of and a direct upward or downward thrust given to the draw-
70 bar and stem, which will at once respond to such movement, owing to the coarseness of the threads upon the stem and within the tube, the latter turning idly as the stem and bar are thus suddenly raised or lowered, as
75 the case may be. I am thus enabled by my construction to combine in one device all the advantages of the screw and direct-thrust wick-adjusters for lamps.

I would have it understood that I do not
80 limit myself to the exact construction herein shown and described, but hold myself at liberty to make such changes and alterations therein as fairly fall within the spirit and scope of my invention.

I am aware that it is not broadly new to
85 couple the upper ends of a draw-bar and a stem mounted in the fount and having means applied to it for moving it up and down. I therefore do not broadly claim such a con-
90 struction.

I do not in this case broadly claim the re-
movable ring G and the stop N, as they have been claimed in a concurrent application, Serial No. 413,575, filed January 4, 1892.

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

1. In a wick-adjuster for central-draft lamps, the combination, with a wick-band, of a draw-
100 bar attached thereto, a stem connected at its upper end with the upper end of the said bar and provided at its lower end with coarse screw-threads, a tube having a centrally-perforated knurled operating-nut located at its
105 upper end and constructed with internal screw-threads corresponding in pitch to the threads of the stem aforesaid, and a rotatable suspension-sleeve mounted on the tube below the said nut and adapted to be removably secured to the lamp-fount in which it suspends
110 the said tube, substantially as described.

2. In a central-draft lamp, the combination, with the fount thereof, of a removable ring forming the inner portion of its top and hav-
115 ing an open slot formed in its outer edge, a central draft-tube, a wick-band encircling the same, a draw-bar attached to the said band and at its lower end and passing upward through the slot in the said ring, a stem
120 connected at its upper end with the upper end of the said bar and provided at its lower end with coarse screw-threads, a tube having a centrally-perforated knurled operating-nut located at its upper end and constructed with
125 internal screw-threads corresponding in pitch to the threads of the stem aforesaid, and a rotatable suspension-sleeve mounted on the tube below the said operating-nut and adapted to be removably secured to the lamp-fount in which it suspends the said tube, substan-
130 tially as described.

3. In a central-draft lamp, the combination, with the fount thereof having a removable ring forming the inner portion of its top and

made with an open slot formed in its outer edge and constructed to be secured in place by a rotary movement, of a draft-tube, a wick-band encircling the same, a draw-bar attached 5 to the said band and passing through the said slot, a stem separably connected at its upper end with the upper end of said bar and provided at its lower end with coarse screw-threads, a tube having a centrally-perforated knurled operating-nut located at its 10 upper end and constructed with internal screw-threads corresponding in pitch to the stem aforesaid, and a rotatable suspension-sleeve mounted on the tube below the said 15 nut and adapted to be removably secured to the said lamp-fount in which it suspends the said tube, substantially as described.

4. In a wick-adjusting device for central-draft-lamps, the combination, with a wick-holder, of a draw-bar attached thereto, a stem 20 suspended in the lamp-fount parallel with the said bar and having its upper end threaded, a union or coupler having a lateral opening to receive the upper end of the draw-bar and 25 a vertical opening to receive the threaded upper end of the stem, a removable nut for the

projecting upper end of the stem, whereby the same is secured to the coupler and hence to the draw-bar, and means applied to the stem for raising and lowering it and hence 30 the draw-bar, substantially as set forth, the stem being removable from the union by taking off the said nut.

5. In a central-draft lamp, the combination, with the fount thereof, having a removable 35 ring forming the inner portion of its top and constructed with an open slot formed in its outer edge, of a central draft-tube, a wick-band encircling the same, a draw-bar attached at its lower end to the said band and passing 40 upward through the said slot, and a shade-holder provided in its outer edge with a grooved boss forming a long vertical bearing for the said bar, substantially as described.

In testimony whereof I have signed this 45 specification in the presence of two subscribing witnesses.

WILLIAM C. HOMAN.

Witnesses:

HENRY O. WINSLOW,
CHAS. E. HOMAN.