

(No Model.)

N. JOHNSON.

WICK ADJUSTER FOR CENTRAL DRAFT LAMPS.

No. 573,223.

Patented Dec. 15, 1896.

Fig. 1.

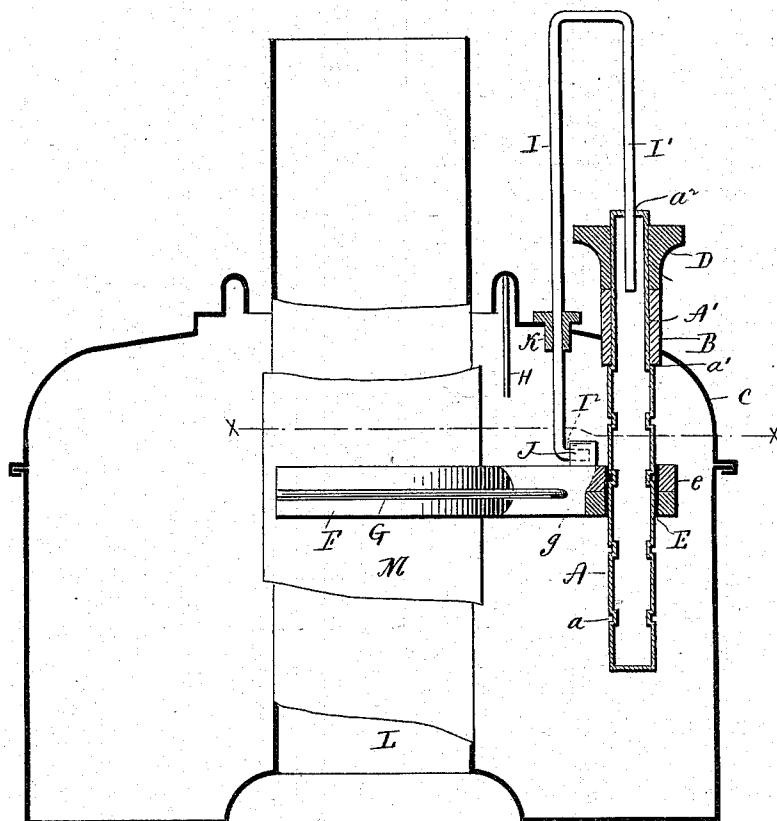
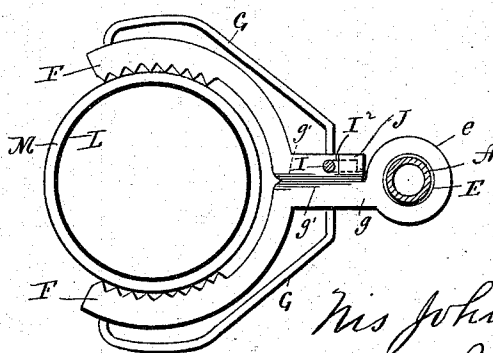


Fig. 2.



Witnesses.
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NIS JOHNSON, OF MERIDEN, CONNECTICUT, ASSIGNOR TO THE MERIDEN BRONZE COMPANY, OF SAME PLACE.

WICK-ADJUSTER FOR CENTRAL-DRAFT LAMPS.

SPECIFICATION forming part of Letters Patent No. 573,223, dated December 15, 1896.

Application filed November 27, 1893. Serial No. 492,126. (No model.)

To all whom it may concern:

Be it known that I, NIS JOHNSON, of Meriden, in the county of New Haven and State of Connecticut, have invented a new Improvement in Wick-Adjusters for 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 same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view, partly in elevation and partly in section, of one form which a central-draft lamp containing my invention may assume; Fig. 2, a view thereof in transverse section on the line *xx* of Fig. 1.

My invention relates to an improvement in that class of wick-adjusters for central-draft lamps which combine the action of wick-adjusters of the draw-bar and screw type, the object being to produce a simple, durable, and effective construction composed of few parts, not liable to derangement, and very easy to operate.

With these ends in view my invention consists in the combination, with a wick-holder, of an externally-threaded operating-screw mounted in the lamp-fount and directly connected by means of its external threads with the holder for raising and lowering the same as it is rotated, and a draw-bar connected with the wick-holder independent of the connection of the same with the said operating-screw and extending upward through the top of the lamp-fount and playing up and down therein.

My invention further consists in a wick-adjuster having certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

As herein shown, the operating-screw *A* of my improved device consists of a hollow sheet-metal tube having an indented exterior screw-thread *a* of coarse pitch and constructed at its upper end with a long neck *A'*, which passes upward through a bearing-sleeve *B*, mounted in the top of the lamp-fount *C*, the projecting upper end of the sleeve having a knurled operating-nut *D* rigidly secured to it. The said screw is free to rotate in the bearing-sleeve

B, but is prevented from longitudinal movement therein by the shoulder *a'*, formed between the lower end of the neck *A'* and the main portion of the screw and abutting against the lower edge of the bearing-sleeve *B*, and by the abutment of the lower edge of the operating-nut *D* upon the upper edge of the said sleeve. The external screw-thread *a* of the screw is taken into by a section *e* of a screw-thread of corresponding pitch projecting inward from a short tube *E*, through which the operating-screw passes and which forms a hollow pivot for the jaws *F F* of the wick-holder, which swivel upon the said tube and which are normally drawn together by means of a wire spring *G*, the respective ends of which are connected with the jaws, and which passes through horizontal openings *g*, formed in their shanks. The upper edges of the shanks of the jaws are beveled, as at *g' g'*, for engagement by a wedge *H*, depending from the top of the fount and arranged so as to enter between the jaws when the wick-holder is raised and separate them for releasing the wick. On the other hand, when the wick-holder is lowered the jaws are carried beyond the range of the wedge and close upon the wick under the action of their spring. I do not, however, limit myself to constructing the wick-holder in the manner described, for my invention embraces any wick-holder so long as the same is adapted to be connected with the operating-screw for being raised and lowered thereby as the same is rotated, and to have the draw-bar removably connected with it independently of the connection with it of the operating-screw.

The draw-bar, as herein shown, is formed from a single piece of wire and comprises an inner member or leg *I* and a parallel outer member or leg *I'*, the former being constructed at its lower end with an outwardly-turned finger *L*², adapted to be entered into a socket or sleeve *J*, arranged horizontally upon the shank of one of the jaws *F* of the wick-holder. The other member or leg of the draw-bar is entered into the operating-screw through the upper end thereof and plays up and down therein, and to afford a better bearing therefor the neck *A'* of the said screw is extended above the operating-nut *D* for a

short distance and partly closed, so as to form a small opening a^2 , just large enough for the said leg to play up and down in it freely. As thus arranged, the outer leg or member of the draw-bar prevents the inner leg or member thereof from turning and steadies and guides the draw-bar as a whole. It is not essential, however, that the draw-bar be provided with an outer leg, for it is apparent that if its inner leg were simply extended upward through the top of the fount it might be grasped for being pushed down and drawn up through its bearing K, mounted in the top of the fount. But however constructed the draw-bar should by preference be detachably connected with the wick-holder, so that it may be disconnected therefrom and the screw used alone for raising and lowering the wick.

In the construction shown the draw-bar is detached from the wick-holder by drawing it upward until the lower end of its outer member or leg is cleared from the upper end of the operating-screw and the operating-nut or finger-button D, after which the bar may be manipulated so as to disengage its finger I² from the socket or sleeve J. The draw-bar is then removed from the fount. The particular construction shown for connecting the inner leg or member of the draw-bar with the wick-holder is of course not imperative. Thus if the draw-bar when much raised, as when the wick is short, interferes with the globe-holder, or any other obstacle, it may be removed. This is an obvious advantage.

The central draft-tube L of the lamp is of ordinary construction and receives a tubular wick M, which is engaged by the arms of the wick-holder already described. The construction of the draft-tube and fount C of the lamp may of course vary according to the dictates of circumstances.

It will be readily understood that by rotating the operating-screw in one direction or the other by means of its nut D the wick-holder, and hence the wick, may be raised and lowered. In this way the fine or close adjustment of the wick is by preference secured. On the other hand, if it is desired to quickly extinguish the flame the draw-bar will be seized or struck and forced downward, carrying the wick-holder and the wick with it and causing the operating-screw to rotate by the power thus indirectly applied through the wick-holder. On the other hand, if it is desired to quickly raise the wick the draw-bar is seized and drawn upward, bringing the wick-holder and wick with it and causing the screw to rotate in the other direction by indirectly-applied power.

In view of the modifications suggested and

of others which may apparently be made I would have it understood that I do not limit myself to the exact construction herein 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.

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

1. In a central-draft lamp, the combination with a wick-holder, of an externally-threaded operating-screw directly connected by means of its external threads with the said wick-holder for raising and lowering the same, and a draw-bar connected with the wick-holder independent of the connection of the same with the said operating-screw and extending upward through the top of the lamp-fount, substantially as set forth, and whereby the wick-holder may be raised and lowered by the screw or by the draw-bar which when operated causes the screw to rotate in one direction or the other.

2. In a central-draft lamp, the combination with the wick-holder thereof, of an externally-threaded operating-screw mounted in the lamp-fount for rotation therein, and directly connected by means of its external threads with the wick-holder for raising and lowering the same, and a draw-bar connected at its lower end with the wick-holder independently of the connection of the same with the said operating-screw, and extending upward through the top of the lamp-fount, and downward into the screw which affords a bearing for it, substantially as described.

3. In a central-draft lamp, the combination with a wick-holder comprising two jaws and a short tube upon which they are swiveled, and which has an internally-projecting screw-thread, of an operating-screw mounted in the lamp-fount and having an external screw-thread taking into the thread of the short tube through which the screw passes, projecting at its upper end above the lamp-fount, and furnished with an operating-nut, and a draw-bar connected with the wick-holder independently of the connection of the same with the said operating-screw, extending upward through the lamp-fount and downward into the operating-screw which affords a bearing for it, substantially as described.

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

NIS JOHNSON.

Witnesses:

E. A. MERRIMAN,
M. B. PUTMAN.