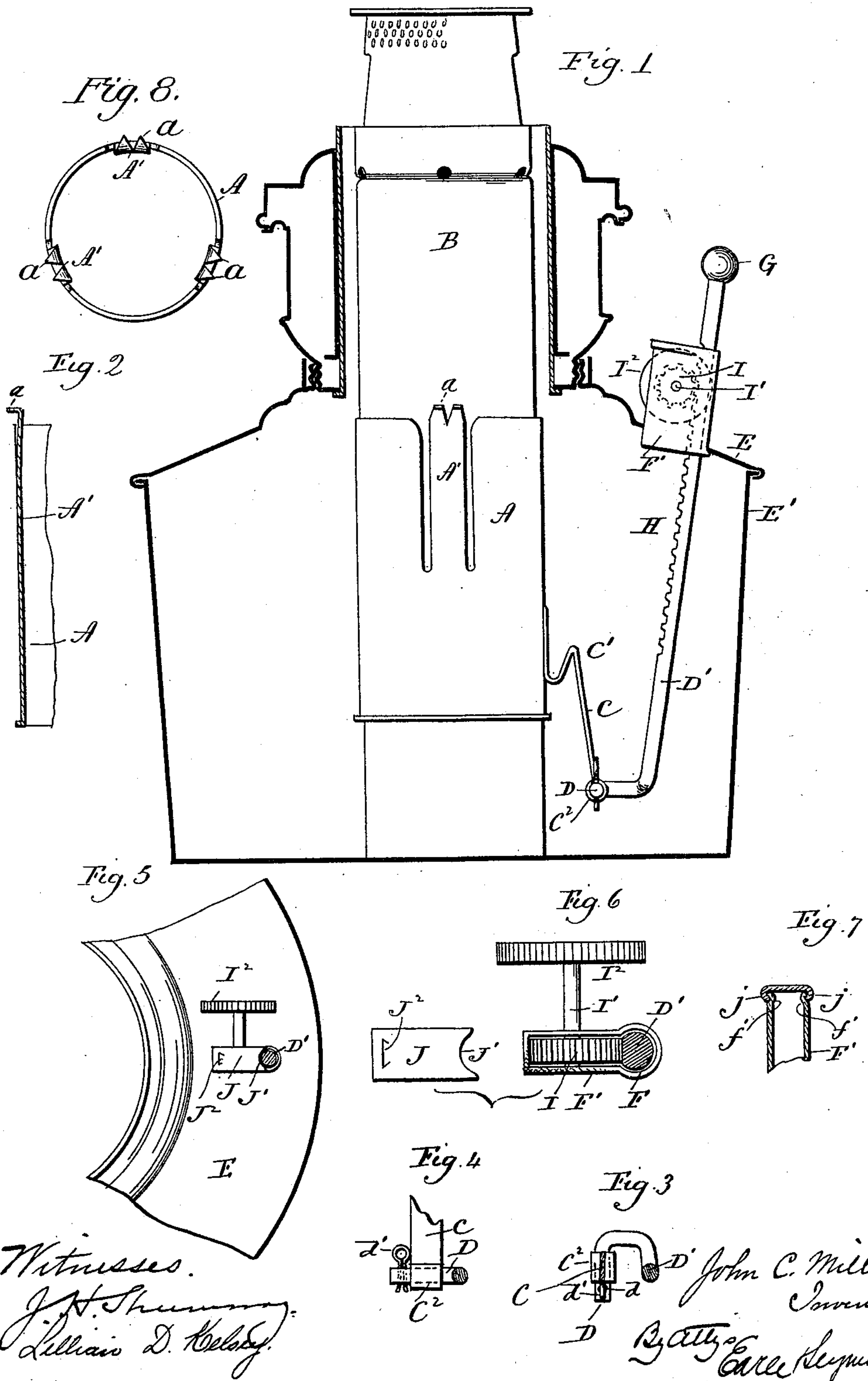


(No Model.)

J. C. MILLER.
WICK ADJUSTER.

No. 594,264.

Patented Nov. 23, 1897.



UNITED STATES PATENT OFFICE.

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

WICK-ADJUSTER.

SPECIFICATION forming part of Letters Patent No. 594,264, dated November 23, 1897.

Application filed September 12, 1896. Serial No. 605,571. (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 Wick-Adjusters; and I do hereby declare the following, when taken in connection with the 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 central section of one form which a wick-adjuster constructed in accordance with my invention may assume; Fig. 2, a detached broken view in vertical section of the wick-tube; Fig. 3, a detached plan view of the foot formed at the lower end of the draw-bar; Fig. 4, a broken
15 view in outside elevation, showing the lower end of the draw-bar, the connecting-strap, and the cotter-pin; Fig. 5, a broken plan view of a portion of the fount, showing the exposed parts of the wick-adjuster with the upper end of the draw-bar broken away; Fig. 6, a detached plan view of portions of the wick-adjuster with the bearing-tube and draw-bar shown in horizontal section; Fig. 7, a detached broken view of the bearing-tube in vertical transverse section and designed particularly to show the sliding cover thereof;
20 Fig. 8, a detached plan view of the wick-band.

My invention relates to an improvement in wick-adjusters for central-draft lamps, the object being to provide such lamps with a
35 wick-adjuster adapted to be operated either on the "plunge-and-lift" or on the "rack-and-pinion" principle and constructed with particular reference to convenience of operation, durability, simplicity, and non-liability
40 of derangement.

With these ends in view my invention consists in a wick-adjuster having certain details of construction and combinations of parts, as will be hereinafter described, and
45 pointed out in the claim.

In carrying out my invention, as herein shown, I employ a wick-band A, provided with integral wick-jaws A', the upper ends of which are extended above the upper edge of
50 the band and cut to form teeth *a*, which are bent outward at a right angle. These jaws

are set so that they will spring inward away from the wick when the wick-band is lifted high enough to clear their upper ends from the upper end of the draft-tube B, which may
55 be of any approved construction. The lower end of the band has rigidly connected to it in any approved manner a spring connecting-strap C, formed, as shown, of a strip of flat sheet metal and bent crosswise midway of its
60 length to form a loop C', which increases its flexibility and range of spring movement. Its lower end is bent to form a horizontally-arranged tube or sleeve C², which receives the end of an inwardly-projecting horizontally-
65 arranged hook D, extending crosswise of the tube B and formed at the lower end of the rigid straight inclined cross-bar D', the extreme end of the hook having a transverse opening *d*, receiving a cotter-pin *d'*, by means
70 of which the sleeve C² is held in place. The described connection thus established between the bar and strap is of a pivotal character and leaves the strap free to spring to permit the bar to move up and down, during
75 which time its lower end varies in distance from the draft-tube on account of the fact that the bar is rigid and mounted in an inclined position for the purpose of having the upper end of the draw-bar move away from
80 the lamp-burner as the bar is lifted, whereby the bar is prevented from colliding with the means employed for supporting a lamp globe or shade and whereby also the bar is kept sufficiently away from the burner to prevent it
85 from being so heated thereby as to be too hot to be handled in raising and lowering the wick. At its upper end the said draw-bar extends upward through the top E of the fount E' and has bearing in the circularly-
90 enlarged or tube-like outer edge F of a flat bearing-tube F', which is mounted in the top E of the fount in an inclined position with its upper end tilted outward, the tilting of the bearing-tube being made necessary by the in-
95 clined position of the draw-bar. The extreme upper end of the bar is furnished with a spherical finger-piece G, by means of which it is seized for drawing it up or pushing it down when the wick-adjuster is operated on
100 the plunge-and-lift principle.

For the operation of the wick-adjuster on

the rack-and-pinion principle the inner edge of the bar is toothed to form a rack H, the teeth of which are taken into by a pinion I, located in a vertical plane within the bearing-tube F' and mounted upon the inner end
 5 of a horizontally-arranged stem or arbor I', journaled in the said bearing-tube and having its outer end furnished with a small knurled operating wheel or button I². The
 10 teeth of the pinion and rack are constructed so that the pinion, stem, and operating-button will be idly rotated when the bar is seized and plunged or lifted for coarse adjustments of the wick, while fine adjustments thereof
 15 will be preferably effected through the operating-button.

For closing the upper end of the inclined bearing F, I employ a small flat sheet-metal sliding cover J, having its inner end cut away
 20 on a circle, as at J', to fit around the bar and having its edges turned inwardly to form hooks *j j*, which take into horizontal grooves *ff*, formed close to the upper end of the tube F', by upsetting the same, as shown, or otherwise. It will be understood from this construction that the cover may be readily removed and replaced. For the purpose of
 25 holding it in place it is preferably provided with a slight indentation J, formed near its outer end and engaging with the inner face of the inner edge of the said bearing-tube. The said cover not only forms a neat and attractive finish for the upper end of the bearing-tube, but prevents the access thereinto
 30 of any foreign matters which might clog the pinion located therein, and also prevents any oil from splashing out through the tube as well as reduces the evaporation of the oil to the minimum.

40 It is apparent that in carrying out my invention some changes in the construction herein shown and described may be made, and I would therefore have it understood that I do not limit myself to such construction,
 45 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—

50 In a central-draft lamp, the combination with the fount and the central draft-tube thereof, of a wick-holder mounted upon the said tube so as to slide up and down thereupon, a flat bearing-tube permanently mounted
 55 in the top of the fount in an outwardly-inclined position, having its outer edge made tubular in cross-section and having horizontal grooves formed in its flat sides and close to its upper end, a straight rigid draw-bar
 60 mounted in an inclined position in the said inclined bearing-tube, located in the tubular outer edge thereof, and having a rack formed upon its inner face, a pinion located in the flat main portion of the said tube and mesh-
 65 ing into the rack formed upon the inner face of the bar, a horizontally-arranged stem journaled in the said tube, having the said pinion mounted upon it, and furnished with an operating-button, means for connecting the
 70 lower end of the inclined draw-bar with the wick-holder, and made flexible so as to provide for the movement of the bar toward and away from the draft-tube due to its inclination, and a sliding cover applied to the flat
 75 main portion of the top of the said bearing-tube, having its inner end cut away to fit around the said draw-bar, having its edges turned inwardly to form hooks which enter the said horizontal grooves formed in the up-
 80 per end of the tube, and having its outer end adapted to be engaged with the inner face of the inner edge of the said tube.

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

JOHN C. MILLER.

Witnesses:

STANLEY N. BLAKESLEE,
 CLARENCE C. BOSTWICK.