

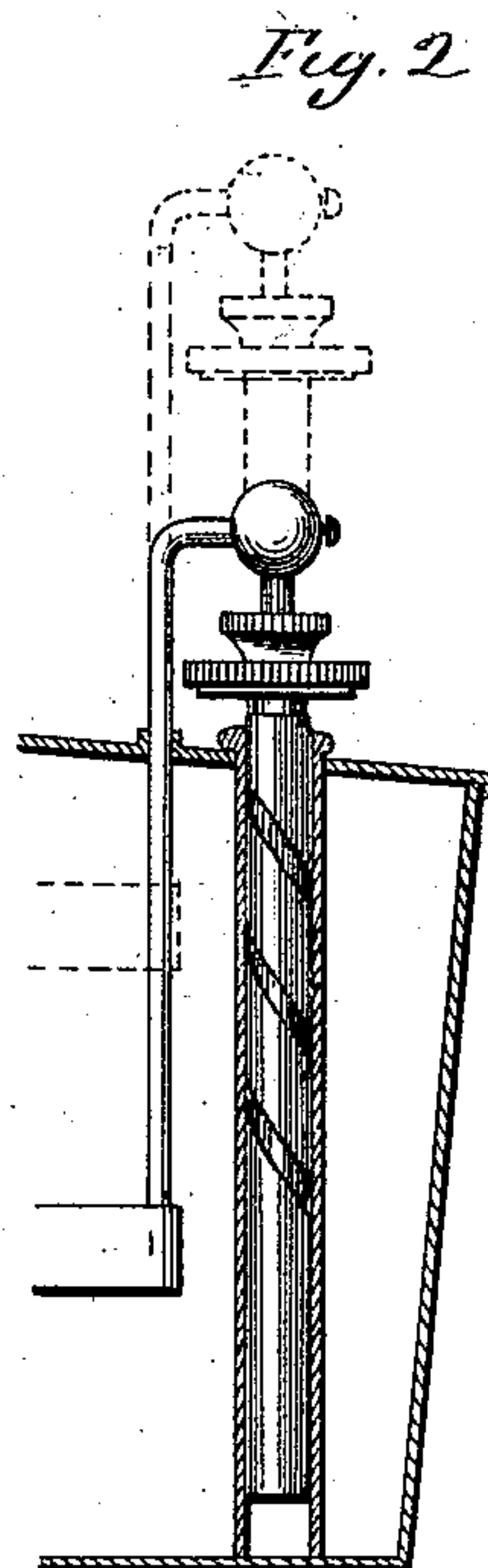
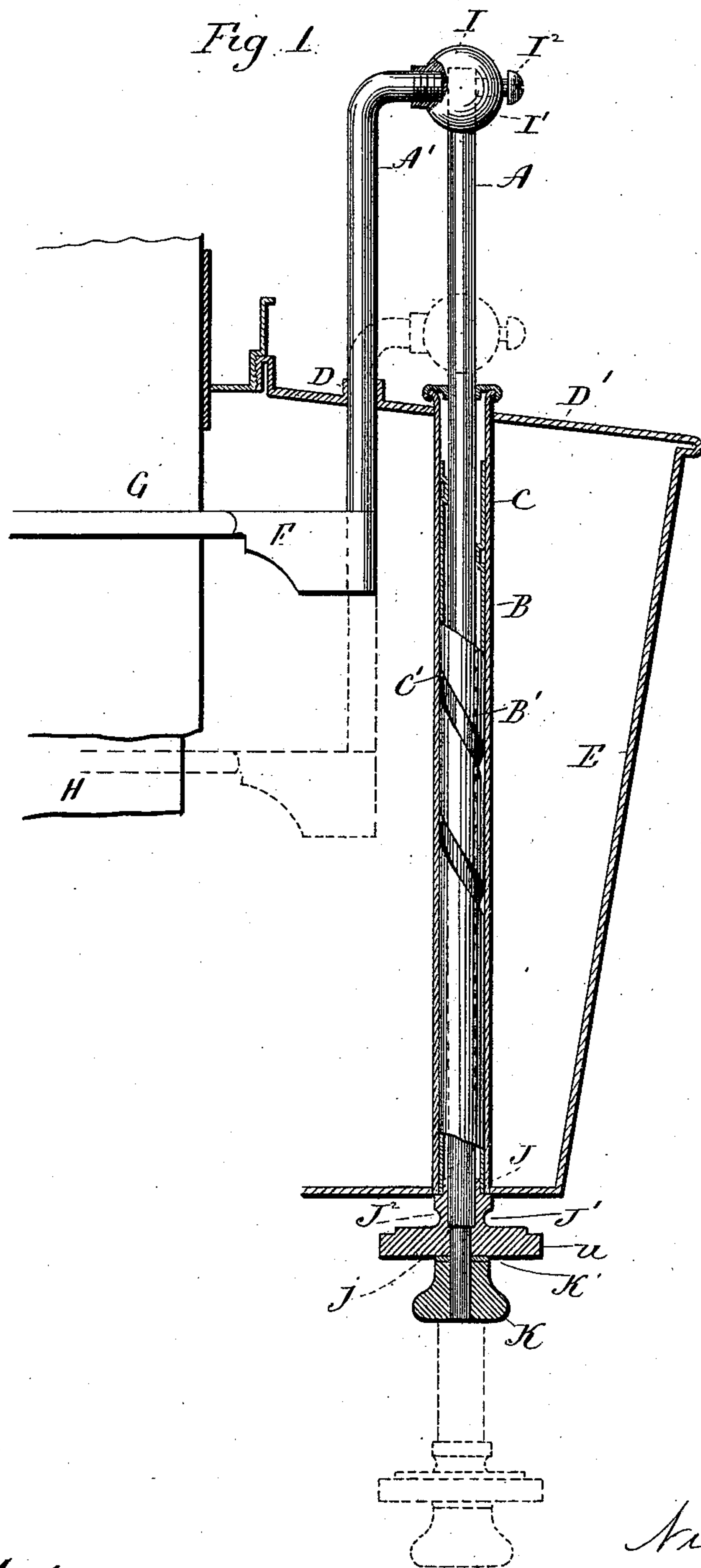
(No Model.)

N. JOHNSON.

WICK ADJUSTER FOR CENTRAL DRAFT LAMPS.

No. 564,018.

Patented July 14, 1896.



Witnesses.
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UNITED STATES PATENT OFFICE.

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. 564,018, dated July 14, 1896.

Application filed November 27, 1893. Serial No. 492,125. (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 section and partly in side elevation, of a hanging lamp containing a wick-adjuster constructed in accordance with my invention; and Fig. 2, a view showing my invention applied to a table-lamp.

My invention relates to an improvement in wick-adjusters for central-draft lamps, the object being to produce a simple convenient device, not liable to derangement, and combining in its action the principles of push-and-pull and screw wick-adjusters.

With these ends in view, my invention consists in a device having certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

As shown in Fig. 1 of the drawings, my improvement is applied to a hanging lamp, and constructed so as to be operated from beneath the same, and comprises a draw-bar having an outer member A and an inner member A', a tubular operating-screw B, a bearing-tube C, and several adjunctive features, to be specified. The inner member A' of the draw-bar plays up and down through a bearing D, located in the top D' of the lamp-fount E, the lower end of the said bar being connected with the wick-holder F, which may be of any approved construction, and which is designed to hold a wick G upon the central-draft tube H. The upper end of the said member A' of the draw-bar is bent outward and screw-threaded to receive a coupling-head I, in the form of a ball, the said head being constructed upon its lower face with a socket I' to receive the upper end of the outer member A of the bar, and furnished with a set-screw 12, by means of which the said member A is firmly connected with the coupling, and hence with

the said member A'. The bearing-tube C is secured at its upper and lower ends in the lamp-fount, and so that no oil enters it therefrom. It is furnished upon its inner face with a section C' of a coarse screw-thread, which takes into a coarsely-pitched external thread B', formed by indenting the operating-screw B, the said thread extending, as shown, only a little below the center of the tube, the extreme lower end of which is sleeved over and soldered or otherwise rigidly secured to the reduced portion J of the operating-nut J', by means of which the tube is rotated in one direction or the other.

The outer member A of the draw-bar extends down through the upper end of the bearing-tube C, and down through the whole length of the operating-screw B, and also through the operating-nut J', projecting beyond the same, which is thereto provided with a central opening J². The lower end of the said member A of the bar is furnished with a shoulder a, which bears upon a corresponding shoulder j, formed within the nut, whereby the said member A is prevented from downward movement through the nut. The projecting end of the said member is furnished with a knurled finger-piece K, separated from the outer face of the nut by a washer K'.

Under the construction just described, the operating-screw and the outer member of the draw-bar are swiveled together at their lower ends, so that they are coupled together for longitudinal movement, although the nut and tube are left free to rotate together at the same time they are longitudinally moved.

It should be observed here that the pitch of the screw-threads is so coarse that the operating-screw rotates very readily, but still not freely enough so but what it frictionally holds the wick-adjuster in any position in which it may be left.

Having thus described my improved device, I will now proceed to set forth the method of its operation. Suppose, for instance, that it is desired to lower the wick by means of the screw. In that case the operating-nut would be grasped by the fingers and the screw rotated in the right direction for causing it to descend, as shown by broken lines. In its descent it carries the outer and hence the inner

member of the draw-bar with it, whereby the wick is depressed. Then if the nut and hence the screw are turned in the opposite direction, the screw will be raised and the draw-bar
 5 with it. On the other hand, suppose that it is desired to raise and lower the wick from the under side of the lamp under the direct action of the bar. In that case the finger-piece will be grasped and the draw-bar drawn directly
 10 down, during which time the screw will follow it and rotate. Then if the draw-bar be raised by means of the finger-piece, the screw will rotate in the opposite direction. So, too, if the upper end of either member of the draw-bar
 15 or their coupling is engaged and the draw-bar pulled up and pushed down, in both of which cases the screw will move with it, rotating in one direction or the other. The screw, however, will afford but little impediment to the direct operation of the draw-bar,
 20 inasmuch as it rotates in one direction or the other with very little friction.

The construction shown by Fig. 2 of the drawings illustrates my invention as applied
 25 to a table-lamp, or a lamp in which the wick is manipulated from the top of the fount. The broken lines of this drawing show the elevated position of the draw-bar, and that the operating-screw moves with it, and as this
 30 construction is on precisely the same principle as the construction shown in Fig. 1, it is not necessary that it be further described.

If preferred, a projection upon the inner face of the bearing-tube might take the place
 35 of a section of a screw-thread, and the outer and inner members of the draw-bar might be made integral instead of independent and coupled together as shown.

It is apparent, therefore, that in carrying
 40 out my invention some changes from the special construction shown and described may be resorted to, and I would therefore have it understood that I do not limit myself to the exact construction herein shown and described, but
 45 hold myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention.

I am aware, however, that wick-adjusting devices providing for the quick and fine adjustment of the wick by means of direct
 50 plunging and lifting action of a draw-bar, and by means of the rotation of a finger-button and adapted to be operated from the bottom or the top of a lamp-fount are old, and
 55 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 wick-adjuster for central-draft
 60 lamps, the combination with the fount and central draft-tube thereof, of a non-rotatable bearing-tube permanently mounted in the fount, a rotatable and longitudinally-movable
 65 operating-screw located within the said bearing-tube and having an external screw-thread coacting with a thread or projection upon the inner surface thereof, a wick-holder applied to the central draft-tube of the lamp, and
 70 movable up and down thereon, and a draw-bar composed of an inner and an outer member, the upper ends of which are detachably connected together, the said inner member of the draw-bar being connected at its lower end with the wick-holder, and the said outer member
 75 thereof passing downward into the operating-screw, and having swivel connection therewith, but no longitudinal movement independent thereof, substantially as set forth.

2. In a wick-adjuster for central-draft
 80 lamps, the combination with the fount, central draft-tube and wick-holder thereof, of a non-rotatable bearing-tube permanently mounted in the fount, a rotatable and longitudinally-movable operating-screw located
 85 within the said tube, and having an external screw-thread which receives a thread or projection located upon the inner face thereof, an operating-nut applied to the lower end of the said screw, and having a central opening; a
 90 draw-bar composed of an inner and an outer member the projecting upper ends of which are detachably connected together, the said outer member of the draw-bar passing downward through the bearing-tube and screw, projecting
 95 below the lower ends thereof and through the said nut, having swivel connection with the screw, but no longitudinal movement independent thereof, and the inner end of the said bar being connected at its lower end
 100 with the wick-holder; and a finger-piece formed independent of the outer member of the draw-bar, applied to the projecting lower end thereof, and bearing against the said operating-nut, substantially as described. 105

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

NIS JOHNSON.

Witnesses:

GEO. D. SEYMOUR,
 FRED. C. EARLE.