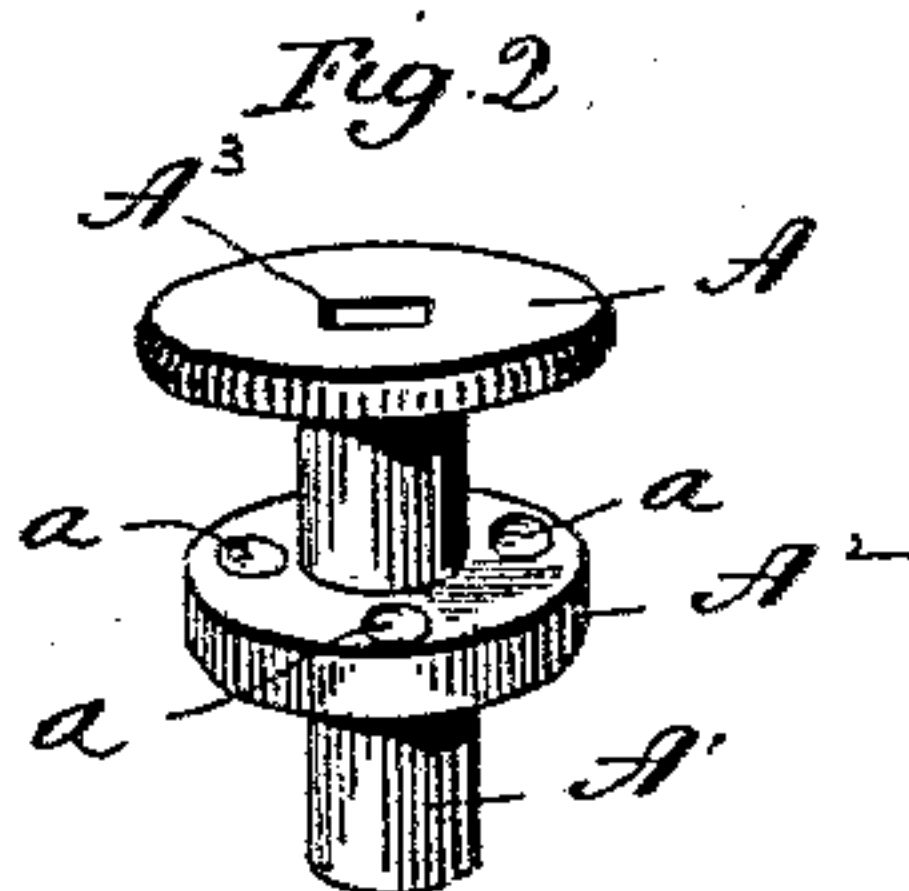
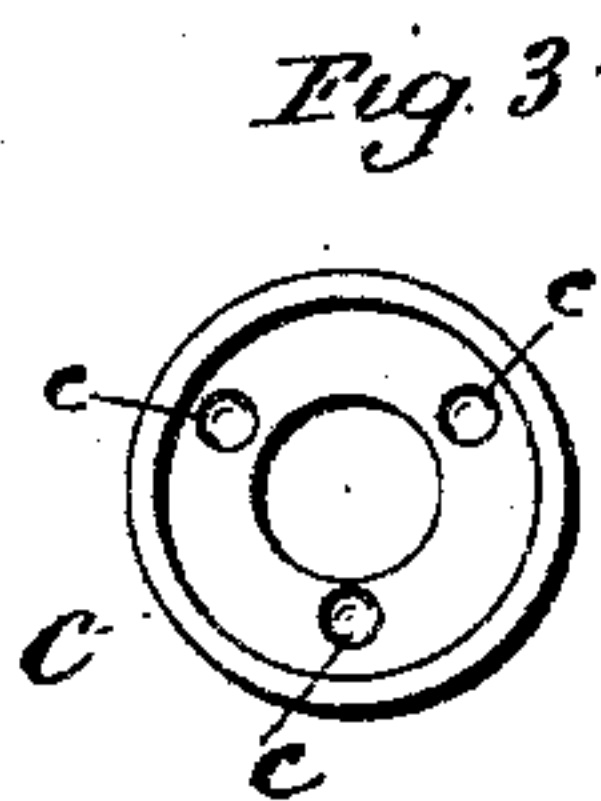
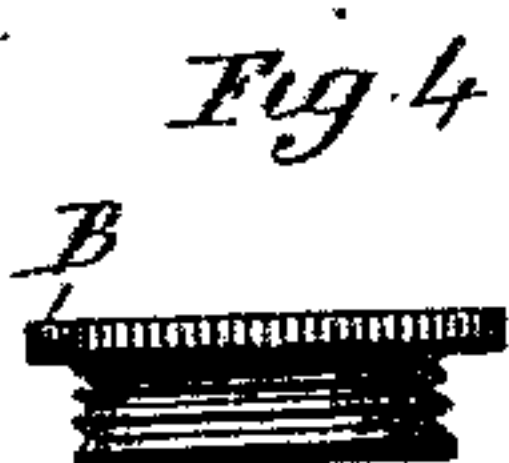
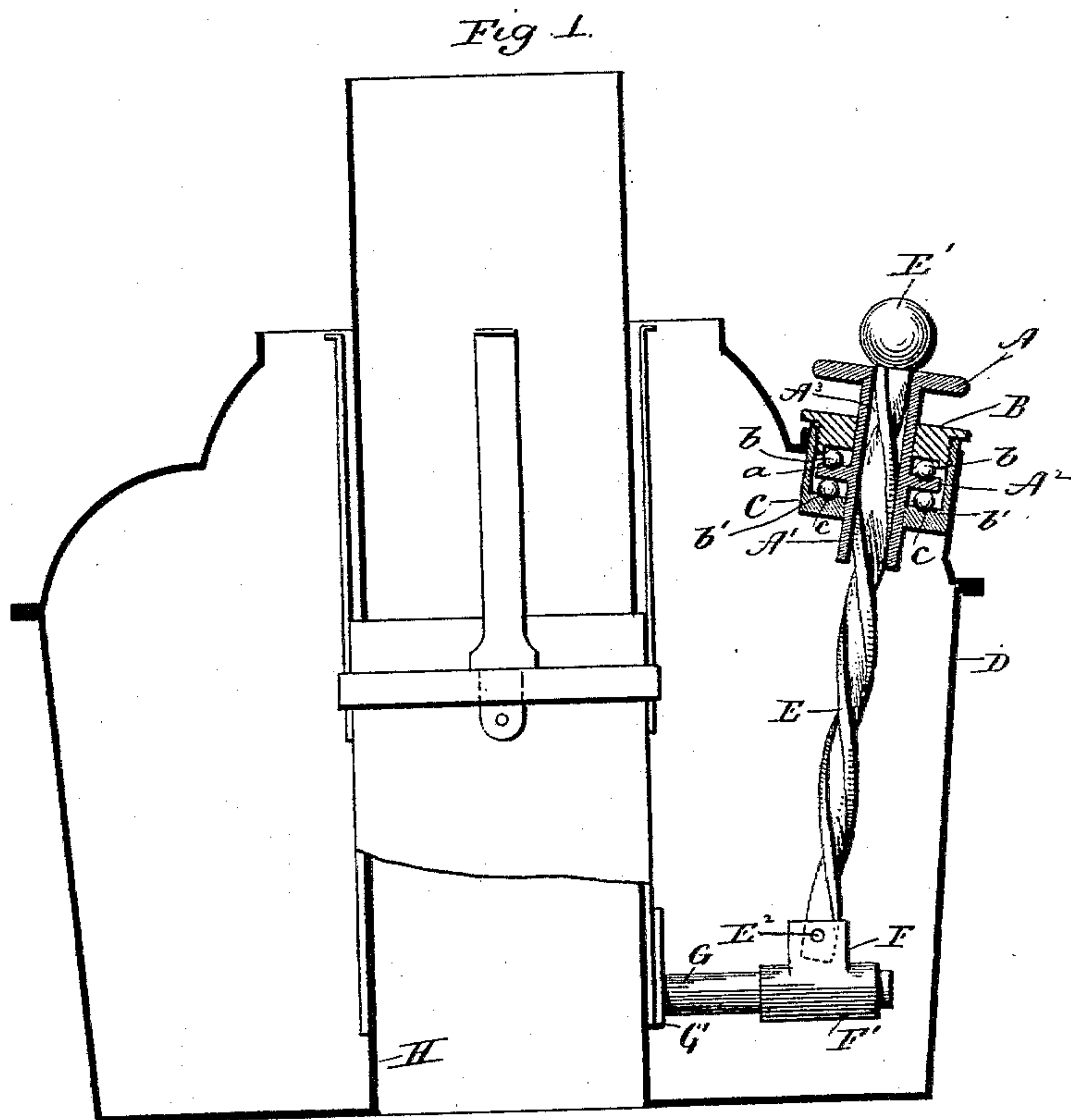


(No Model.)

J. C. MILLER.  
WICK ADJUSTING DEVICE.

No. 596,783.

Patented Jan. 4, 1898.



Witnesses,  
J. St. Shumway.  
Lillian D. Kelsey.

John C. Miller  
Inventor.  
By Atty's  
Earle Seymour



# UNITED STATES PATENT OFFICE.

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

## WICK-ADJUSTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 596,783, dated January 4, 1898.

Application filed May 6, 1895. Serial No. 548,289. (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-Adjusting Devices; 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 de-  
10 scription of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view in vertical section of one form which a lamp containing a wick-adjust-  
15 ing device constructed in accordance with my invention may assume; Fig. 2, a detached perspective view of the finger-button, showing also its tubular shank and bearing-flange; Fig. 3, a detached plan view of the cup-shaped  
20 nipple; Fig. 4, a similar view of the retaining-nut.

My invention relates to an improvement in that class of wick-adjusting devices for central-draft lamps in which the plunging-and-  
25 lifting action of a draw-bar is combined with the gradual raising-and-lowering action of a screw, the object being to produce a simple, compact, durable, effective, and convenient device constructed with particular reference  
30 to the reduction of friction to the minimum.

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

35 In carrying out my invention, as herein shown, I construct the finger-button A with a tubular shank A', provided with a bearing-flange A<sup>2</sup>, located in a parallel plane and having its upper face constructed with three ball-  
40 pockets a a a, respectively, receiving three small balls b, which bear against the under face of the retaining-nut B, which is screwed into a cup-shaped nipple C, mounted in the top of the lamp-fount D. The lower face of  
45 the bearing-flange A<sup>2</sup> is made plain and rests upon three balls b', located in the ball-pockets c c c, formed in the bottom of the said cup-shaped nipple C, as shown in Fig. 3.

By constructing the ball-flange A<sup>2</sup> with ball-  
50 pockets a and the cup-shaped nipple C with

ball-pockets c I reduce the number of balls which it is necessary to employ to the minimum, whereby an economy is effected, for in the absence of these pockets to prevent the balls from running loose I should be obliged  
55 to employ a much larger number of balls with a corresponding increase in expense.

It will be readily understood that by forming ball-pockets within the lower end of the nipple the balls of the lower group of balls  
60 may be inserted therein and retained in place therein during the introduction of the hollow shank of the finger-button and the bearing-flange thereof, and, further, that by forming ball-pockets in the upper face of the  
65 said bearing-flange the balls of the upper group of balls may be inserted therein and retained in place therein during the final adjustment of the retaining-nut which enters the upper end of the nipple.  
70

The draw-bar E, which passes through an elongated opening A<sup>3</sup>, formed in the center of the finger-button and through the center of the shank A' thereof, is provided at its upper end with a knob E', forming a handle, and  
75 is pivotally connected at its lower end by means of a pin E<sup>2</sup> with the shank F of a sleeve F', mounted so as to slide back and forth upon a horizontally-arranged stud G, secured to the lower end of the wick-carrier band G',  
80 which slides up and down on the draft-tube H. As herein shown, the draw-bar is formed from a suitable strip of wrought metal uniform in width and twisted longitudinally to form a screw. The opening A<sup>3</sup>, formed in  
85 the center of the finger-button, conforms in shape to the shape of the draw-bar in cross-section, whereby the two parts coact, for when the draw-bar is seized by its knob E' and pushed down or drawn up its spiral form com-  
90 pels the rotation of the finger-button in one direction or the other, while when the finger-button is engaged by its knurled edge and turned in one direction or the other the draw-bar will be forced to idly move up or down,  
95 as the case may be. It will be seen that under the construction described the finger-button is virtually suspended by means of its flange A<sup>2</sup>, the upper and lower faces of which are relieved of frictional bearing by means of  
100



the balls *b* and *b'*, which so far reduce the friction of the action of the finger-button that it readily turns in one direction or the other, and so little resists the plunging and lifting action of the draw-bar that the same has practically the same freedom of action that it has when it is used alone and without being combined with a screw.

It is apparent that in carrying out my invention some changes may be made in the particular construction herein illustrated and set forth. I would therefore have it understood that I do not limit myself to the exact construction herein shown, 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—

In a central-draft lamp, the combination with the fount, central draft-tube and wick-carrier thereof, of a cup-shaped nipple mounted in the fount and formed with a plurality of ball-pockets which are located within its lower end, a finger-button having a depending hollow shank which extends downward through the said nipple, and which is pro-

vided with a bearing-flange adapted to be rotated within the said nipple, the upper face of the said flange being formed with a plurality of ball-pockets, a retaining-nut mounted in the upper end of the nipple and adapted to have the hollow shank of the finger-button passed through it, a group of antifriction-balls located in the said ball-pockets formed within the lower end of the nipple and engaged by the lower face of the said bearing-flange, a group of antifriction-balls located in the ball-pockets formed in the upper face of the said bearing-flange and engaged by the lower face of the said nut; a draw-bar passing down through the hollow shank of the finger-button and constructed for coaction on the screw principle therewith, and connection between the lower end of the draw-bar and the wick-carrier, substantially as described.

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

JOHN C. MILLER.

Witnesses:

CHARLES H. SKILTON,  
TRUMAN A. WARREN.