

(No Model.)

W. C. HOMAN.
WICK ADJUSTING DEVICE.

No. 428,170.

Patented May 20, 1890.

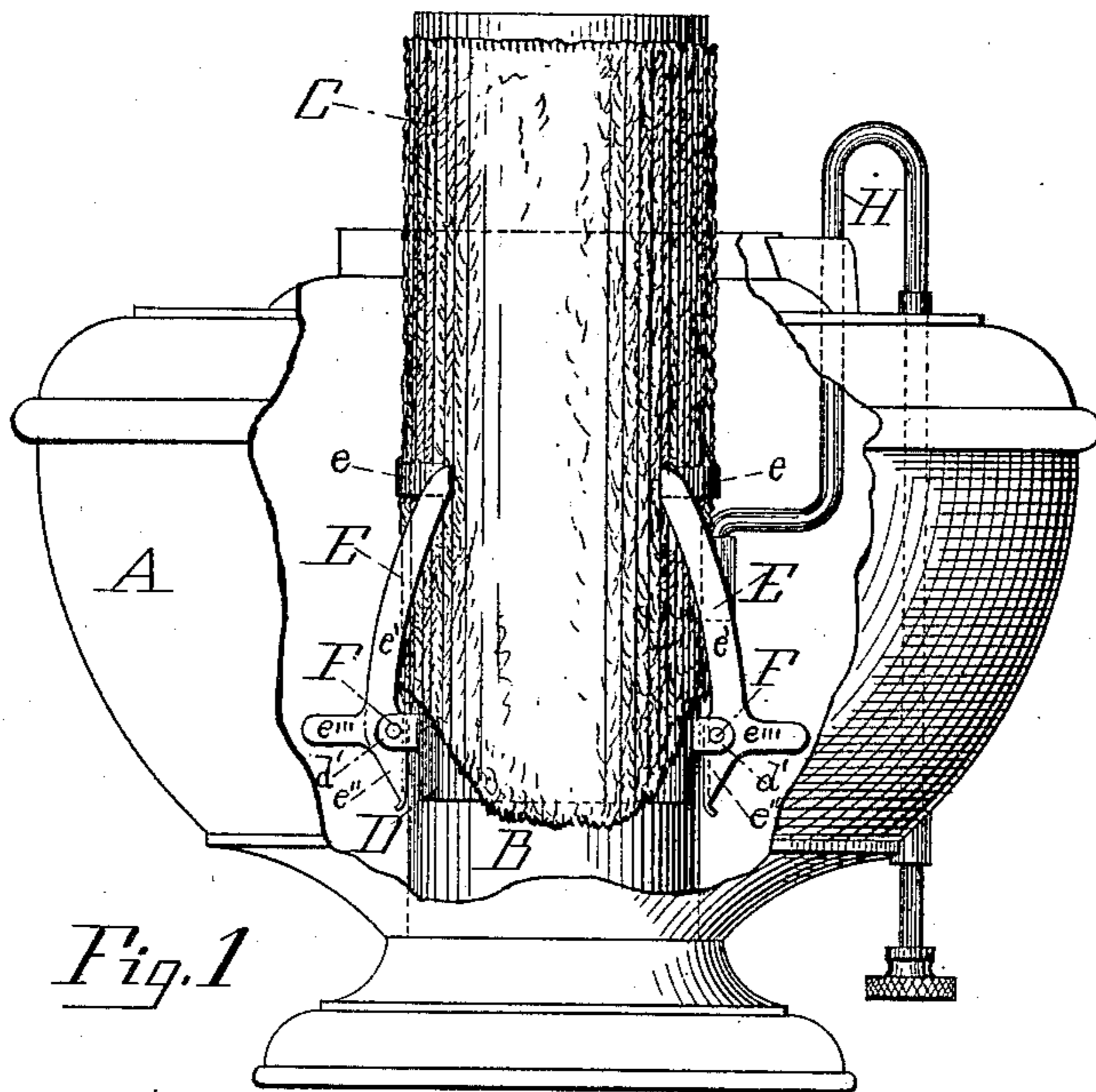


Fig. 1

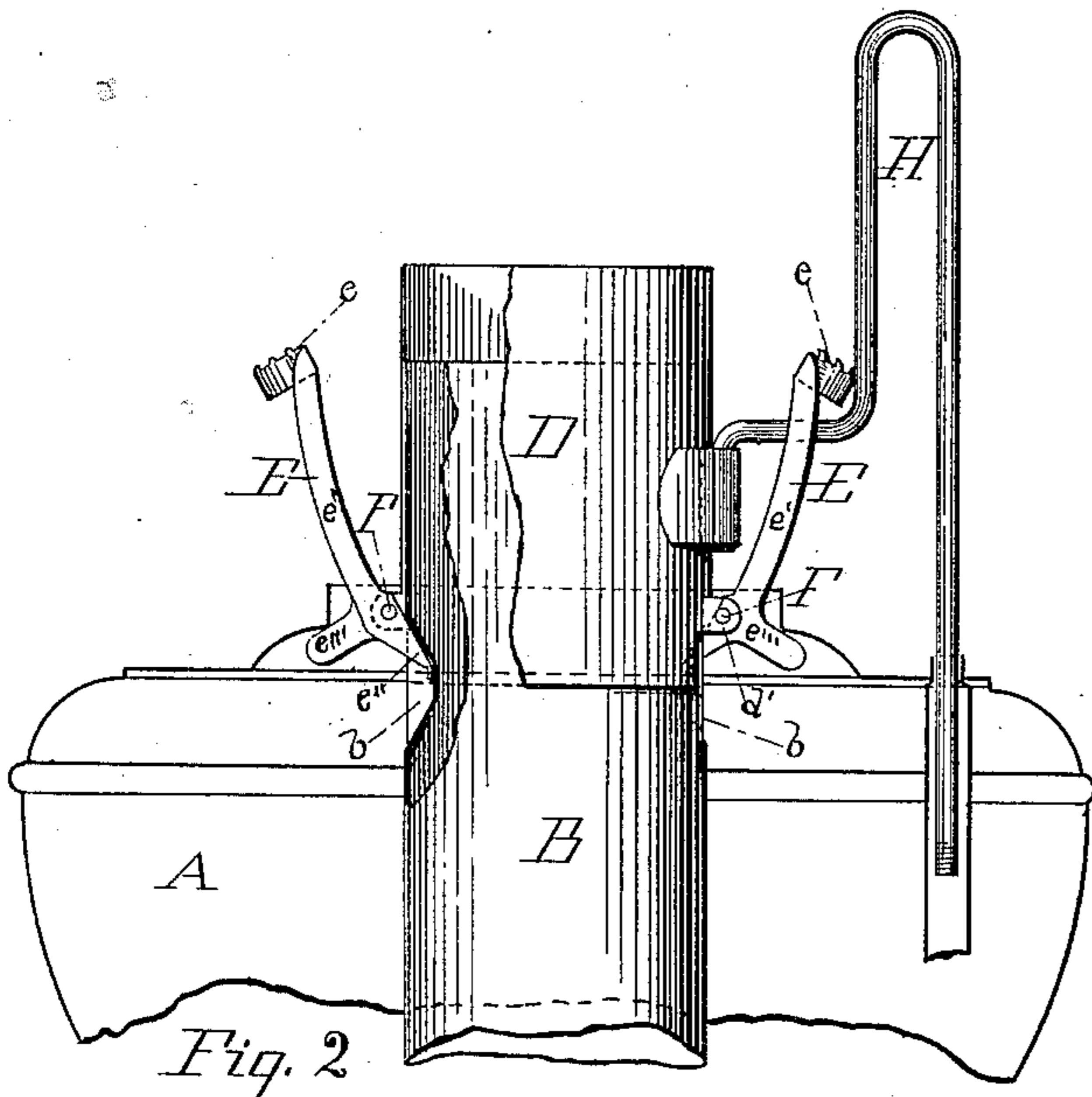


Fig. 2

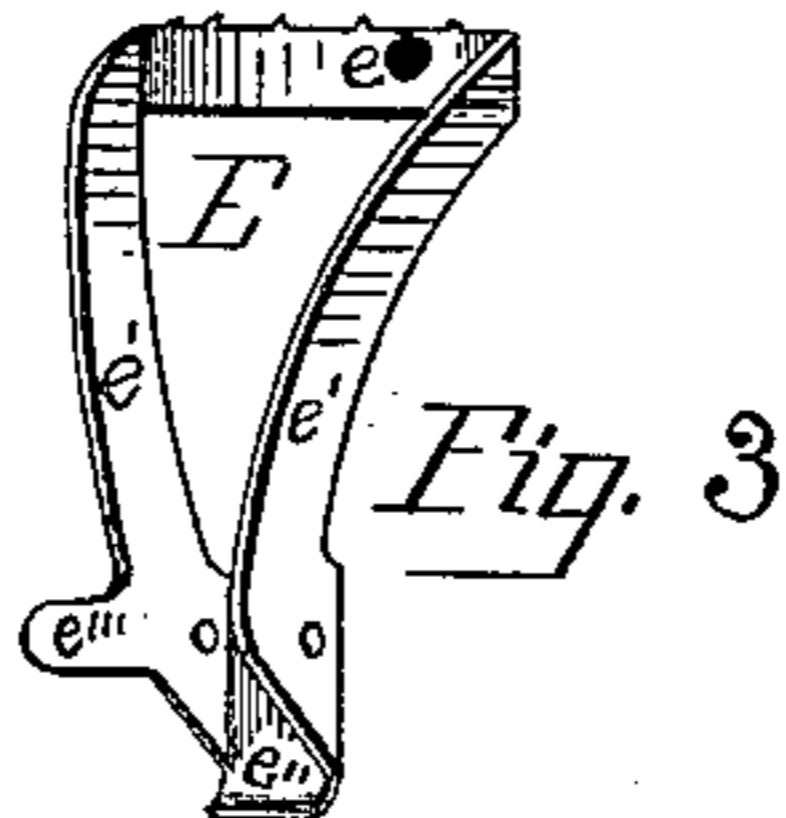


Fig. 3

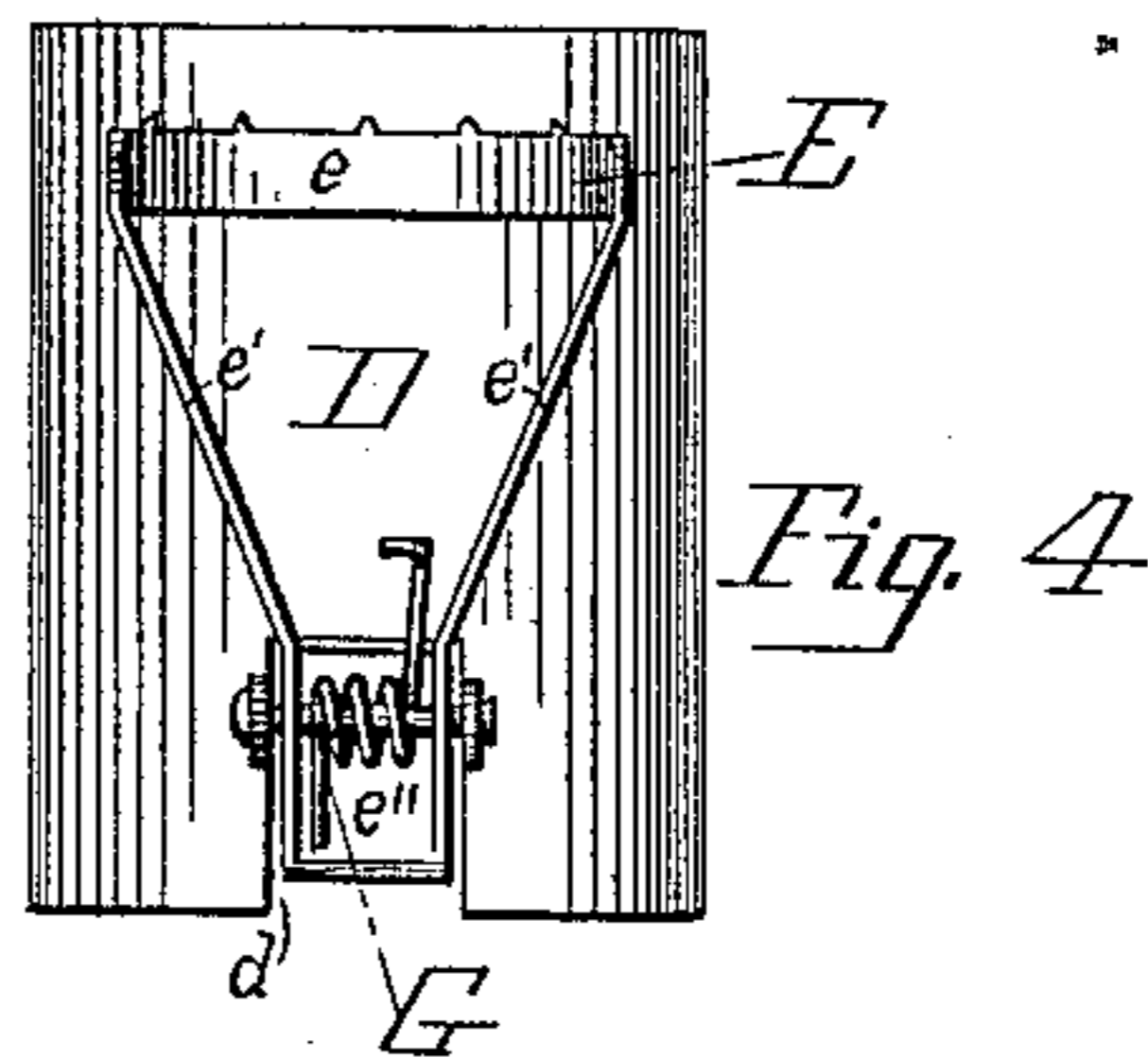


Fig. 4

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WILLIAM C. HOMAN, OF MERIDEN, CONNECTICUT, ASSIGNOR TO THE
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WICK-ADJUSTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 428,170, dated May 20, 1890.

Application filed August 9, 1889. Serial No. 320,318. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. HOMAN, a citizen of the United States, residing at Meriden, New Haven county, Connecticut, have
5 invented an Improvement in Wick-Adjusting Devices, of which the following is a specification.

My invention relates to the class of wick-adjusting devices used in Argand lamps, in
10 which the wick is secured to a vertically-adjustable sleeve and is intended to facilitate the securing of the wick to the wick-sleeve.

In the accompanying drawings, Figure 1 represents an Argand lamp embodying my
15 invention, partly broken away to show the interior construction. Fig. 2 is a view of the same, partly in vertical section, showing the device ready for the introduction of the wick. Fig. 3 is a view in perspective of the wick-clamp detached. Fig. 4, also in perspective,
20 shows a modification.

The same letters refer to like parts in the several views.

A designates a lamp fount or body; B, an inner wick-tube; *b*, indentations in the tube B; C, a wick; D, a wick-sleeve; *d*, a slot in the sleeve D; *d'*, an ear on the sleeve D; E, a wick-lamp consisting of toothed portion *e*,
25 arms *e'*, spring portion *e''*, and lug *e'''*; F, a rivet; G, a spring; H, a draw-bar.

The example of my invention shown in Figs. 1, 2, and 3 of the drawings is constructed as follows: The lamp-fount may be of desired construction and is provided with the inner
35 wick-tube B. The wick-tube B is formed with two opposite indentations *b*, nearly on a level with the fount opening or collar. The wick-sleeve D is of an interior diameter slightly greater than the exterior diameter of the wick-tube, and so as to move freely thereon. It is slotted at opposite sides at its lower
40 edge, as shown at *d*, and portions of the slotted metal are turned outward to form ears *d'*. The clamp E, as shown, is blanked from sheet metal in the form of a hollow triangle, and is provided at its upper side *e* with teeth adapted to engage the wick C. The arms *e'* connect the upper side *e* with the body, which is formed with a bent resilient portion *e''* and
45 an outwardly-projecting lug *e'''*. The clamp E is secured between the ears *d'* of the wick-

sleeve D by means of the rod or rivet F, on which the clamp is capable of limited rotation, the portion *e''* playing through the slot
50 *d*. The draw-bar H is here shown as bifurcated and attached at its inner end by means of an offset to the wick-sleeve D.

The operation of the device is as follows: When it is desired to introduce the wick, the wick-sleeve D and clamps E are raised to the
60 position shown in Fig. 2 of the drawings. When the lugs *e'''* strike against the collar of the lamp, the spring portions *e''* are forced into the indentations *b* on the wick-tube B, and the toothed upper portions *e* outward
65 from the wick-tube. The wick, previously slitted upward from the bottom on opposite sides, is then forced down over the wick-sleeve D, the slits in the wick enabling it to pass by the ears *d'*. The wick-sleeve D is
70 then lowered by means of the draw-bar H, when the lugs *e'''* are released from contact with the fount-collar, the lower spring portions *e''* of the clamps are lifted out of the indentations *b* and made to slide over the surface of
75 the wick-tube B, and the toothed portions *e* of the clamps forced into contact with the wick, holding it firmly against the sleeve D.

In the modification shown in Fig. 4 the lug *e'''* is omitted, and a spring G is coiled on the
80 rivet F, one end of said spring pressing against the portion *e''* of the clamp E, the other against the wick-sleeve D, so as to force the portion *e''* into the indentation *b*, when the wick-sleeve is raised to the proper point,
85 and thus free the toothed portion *e* of the clamp from the wick. In this case the entire wick-adjusting device is integrally removable from the lamp.

It is evident that no particular form of
90 clamp or draw-bar is essential to my invention; also, that three or more clamps may be used, if desired, and that other mechanical changes may be made without prejudice to my invention.

I am aware that lamps have been made in which a wick-adjusting sleeve outside of and surrounding the wick has been provided with spring-clamps formed with teeth adapted to engage the wick, and with a projecting por-
100 tion adapted to bear against the outer wick-tube, said outer wick-tube being in this case

formed with a recess adapted to receive the projecting portion of the clamp when the wick-sleeve is raised to a determined point. In my device the wick-sleeve is within the wick, so that the sleeve moves directly upon the inner wick-tube. This construction is preferred to the one above described, in that the motion of the wick-sleeve and wick is steadier and more uniform, and in that binding of the sleeve on the tube is entirely obviated. In my device also the recess or indentation *d*, adapted to receive the portion *e''* of the clamp, is formed in the inner wick-tube, and the grip of the clamp on the wick is caused by the bearing of a portion of the clamp against the inner instead of the outer wick-tube.

The advantages of my improvement are numerous. It will be sufficient to point out the fact that in modern lamp construction the outer wick-tube is preferably made as short as possible, so that it may not dip into the oil. By this means the oil is less heated, and the detachable portion of the burner, which includes the outer wick-tube, does not drip when removed from the lamp. If, then, the action of the clamp on the wick depends upon its bearing against the outer wick-tube, the clamp will fail to engage the wick if the clamp is lowered so that its projecting portion is below the outer wick-tube. It is desirable, in order to prevent the necessity of frequent readjustment, to clamp the wick as far below its upper end as possible. By causing the action of the clamp to depend upon the bearing of the clamp against the inner wick-tube, which necessarily extends to the bottom of the oil-fount, I am enabled to clamp the wick at a much lower point than is possible with the old construction.

I am also aware of a device patented in the United States in which is shown a sleeve

moving on the inner wick-tube and provided with spring-fingers adapted to force the wick outward toward the outer wick-tube. In this construction, also, it is obviously necessary that the outer wick-tube should be nearly or quite as long as the inner.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is as follows:

1. In a wick-adjusting device, the combination of an inner wick-tube, a wick-sleeve vertically adjustable on said inner wick-tube, one or more clamps pivotally connected with said sleeve, a jaw or equivalent means on said clamp adapted to engage with the outer side of the wick and to press the wick inward against said clamp or said inner wick-tube, and a bearing portion on said clamp adapted to move upon said inner wick-tube, substantially as described.

2. In a wick-adjusting device, the combination of an inner wick-tube, an indentation in said tube, a wick-sleeve vertically adjustable on said inner wick-tube, a clamp pivotally connected with said sleeve, a bearing portion on said clamp adapted to move upon said inner wick-tube, and means for forcing said bearing portion into said indentation when the sleeve is raised on the tube, substantially as described.

3. In a wick-adjusting device, the combination of a central wick-tube, an indentation in said tube, a vertically-adjustable wick-sleeve, a clamp pivotally connected with said sleeve, and a projecting lug on said clamp adapted to strike against the collar of the lamp when the sleeve is raised on the tube, substantially as described.

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Witnesses:

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