

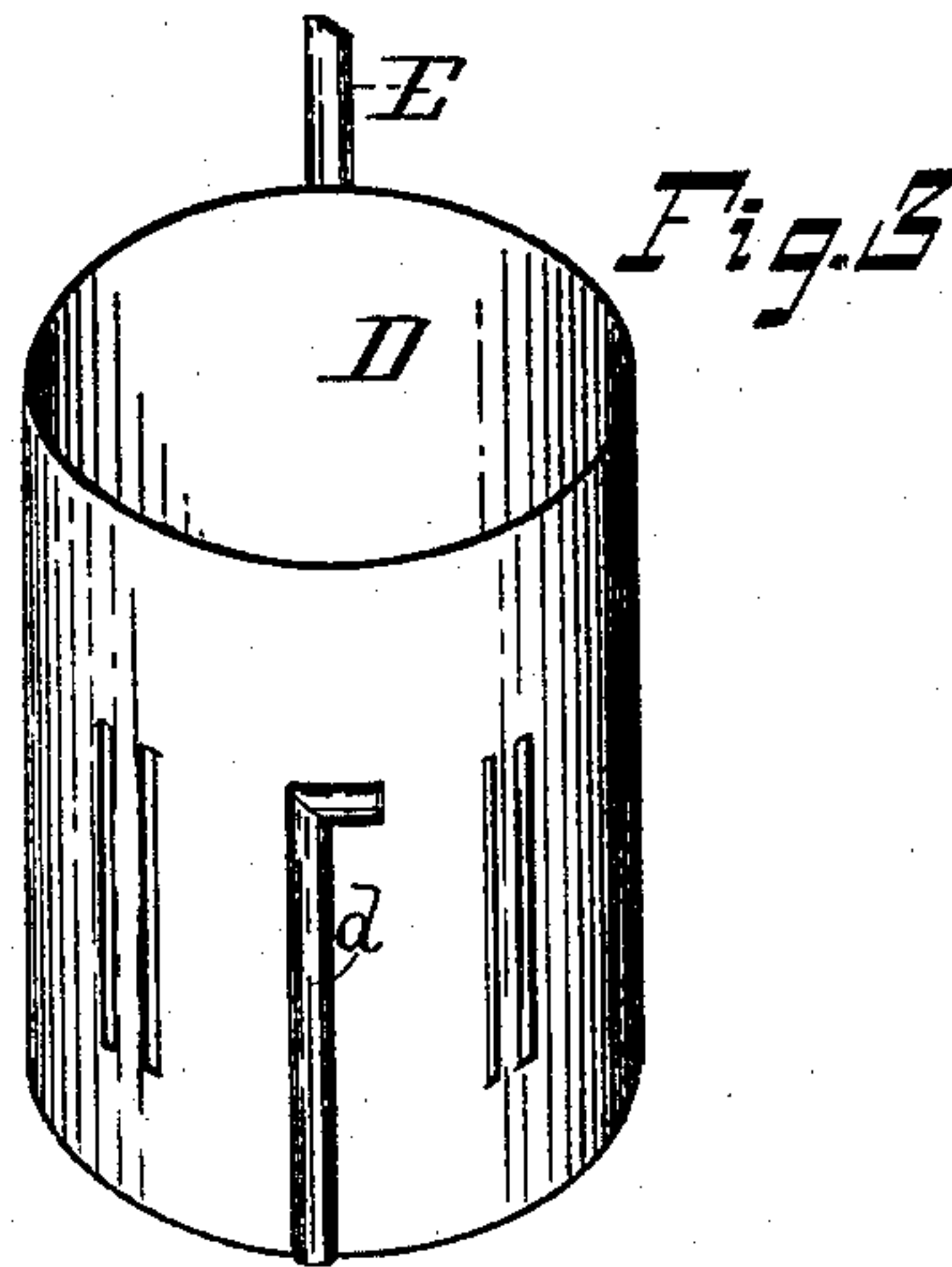
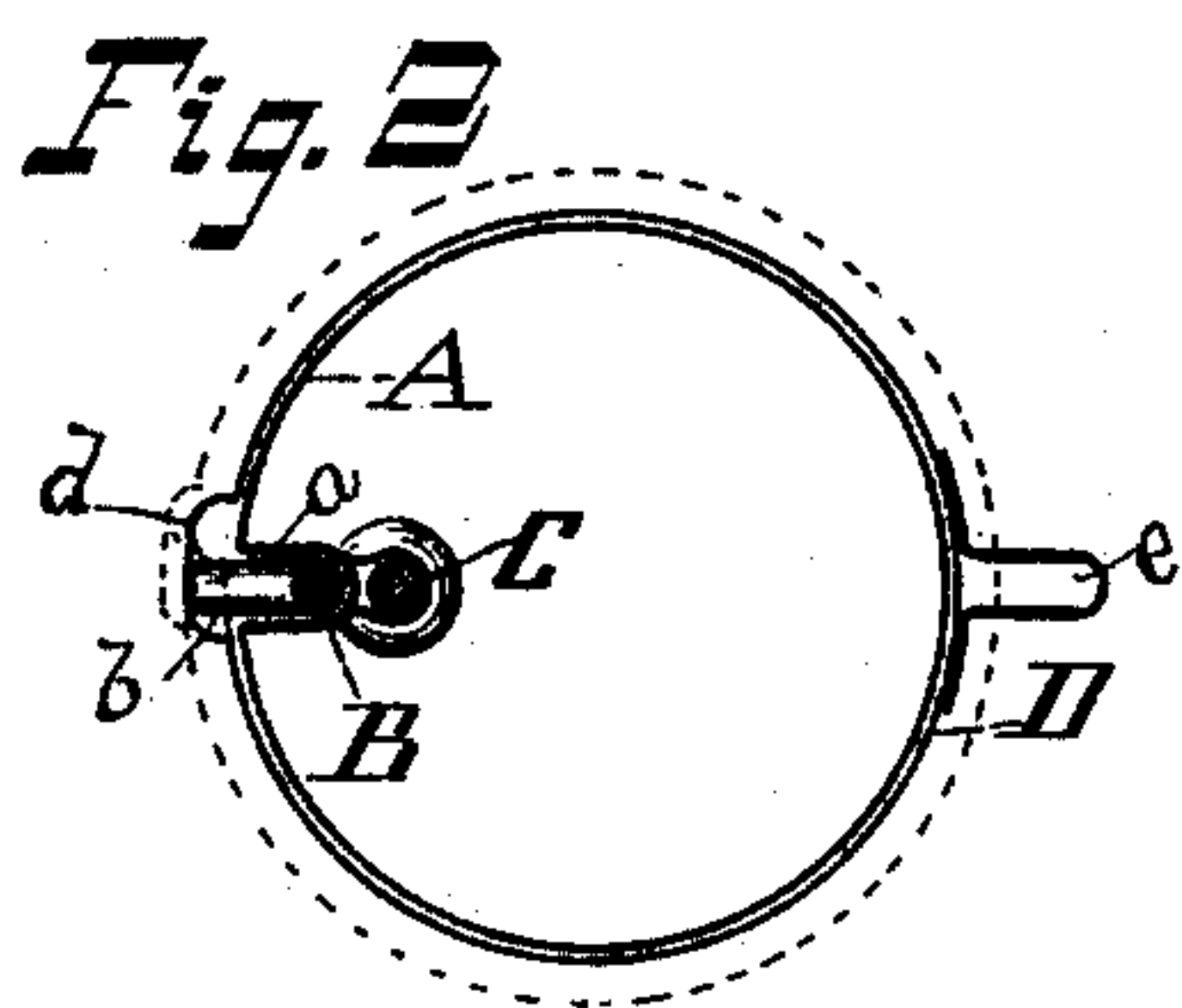
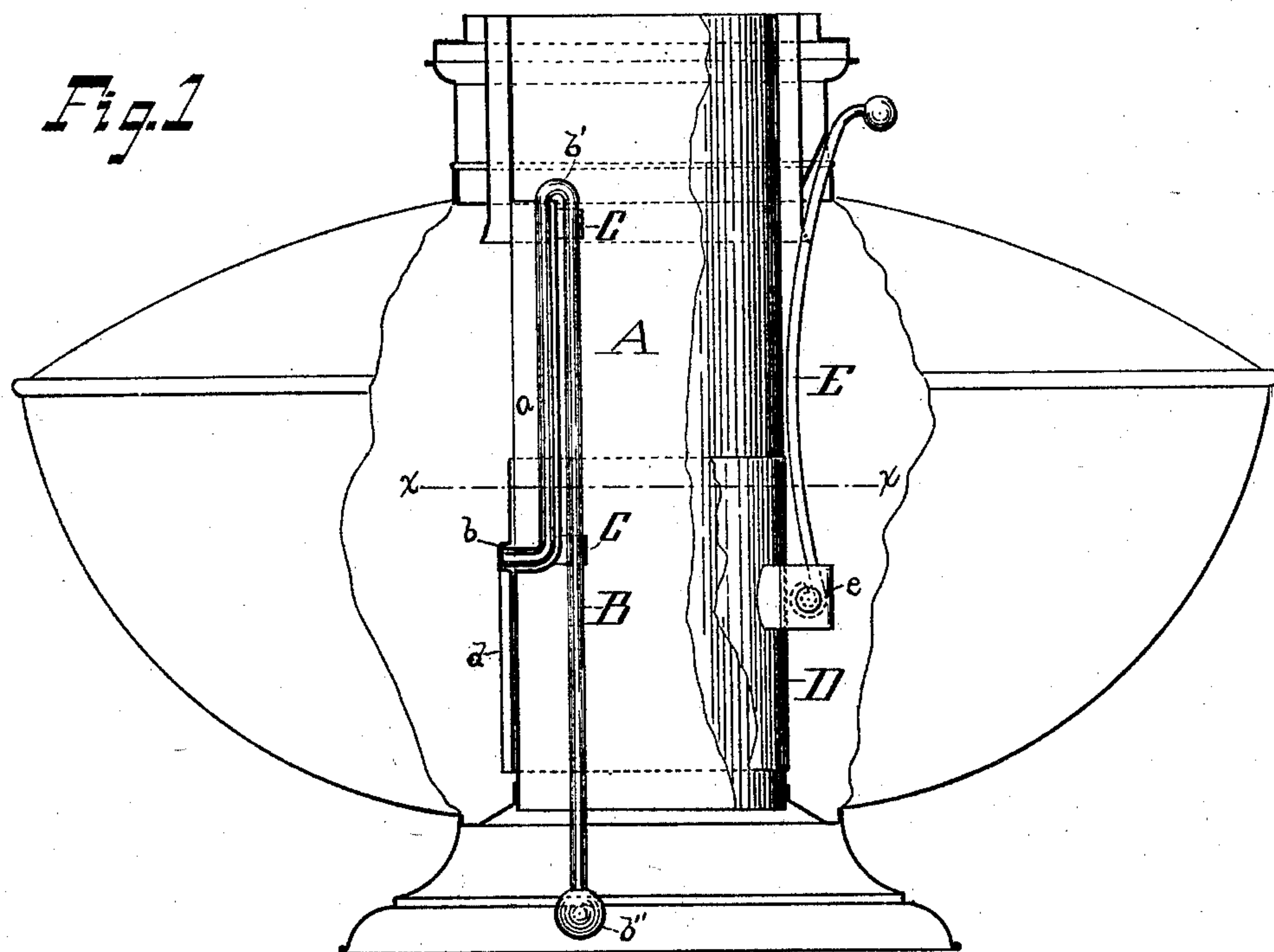
(No Model.)

2 Sheets—Sheet 1.

F. RHIND.
WICK LIFTING DEVICE.

No. 395,757.

Patented Jan. 8, 1889.



WITNESSES
Benj. C. Kinnard.
J. Harris.

Frank Rhind
INVENTOR
Per: Geo. H. Cooper Atty.

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Fig. 4

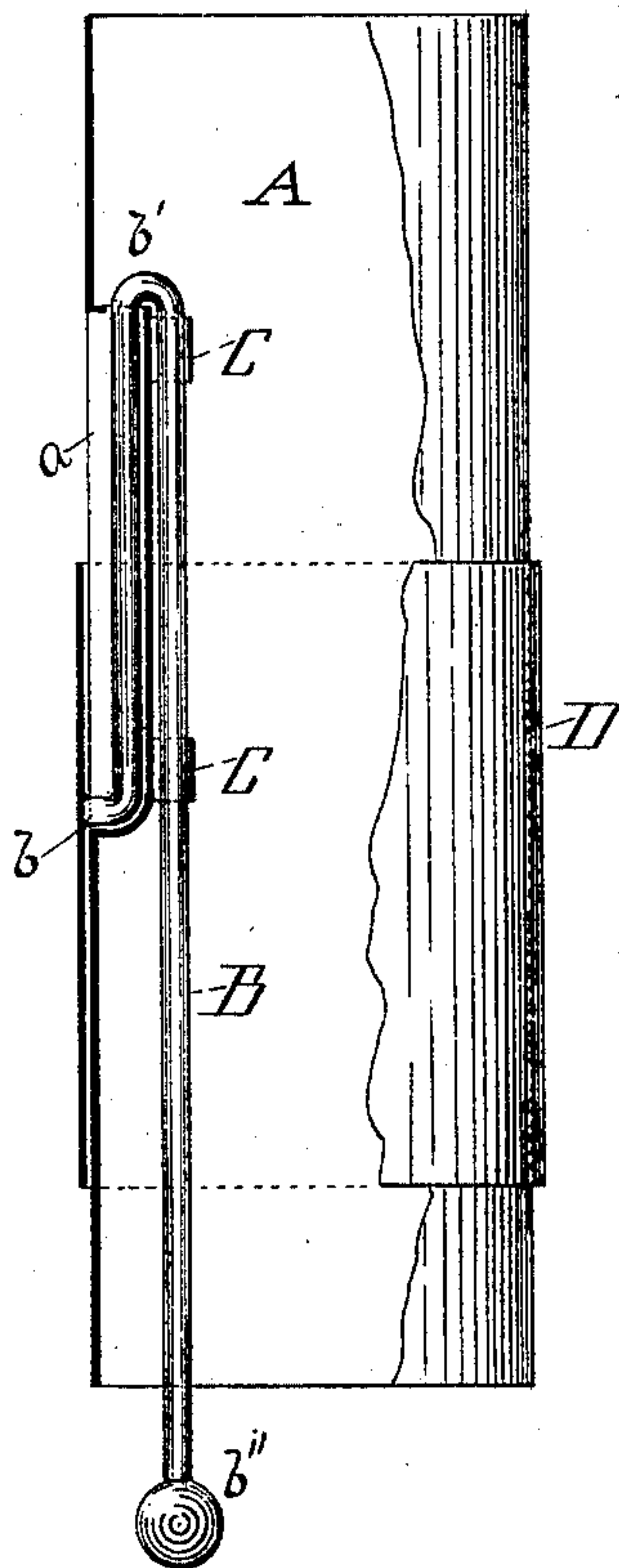
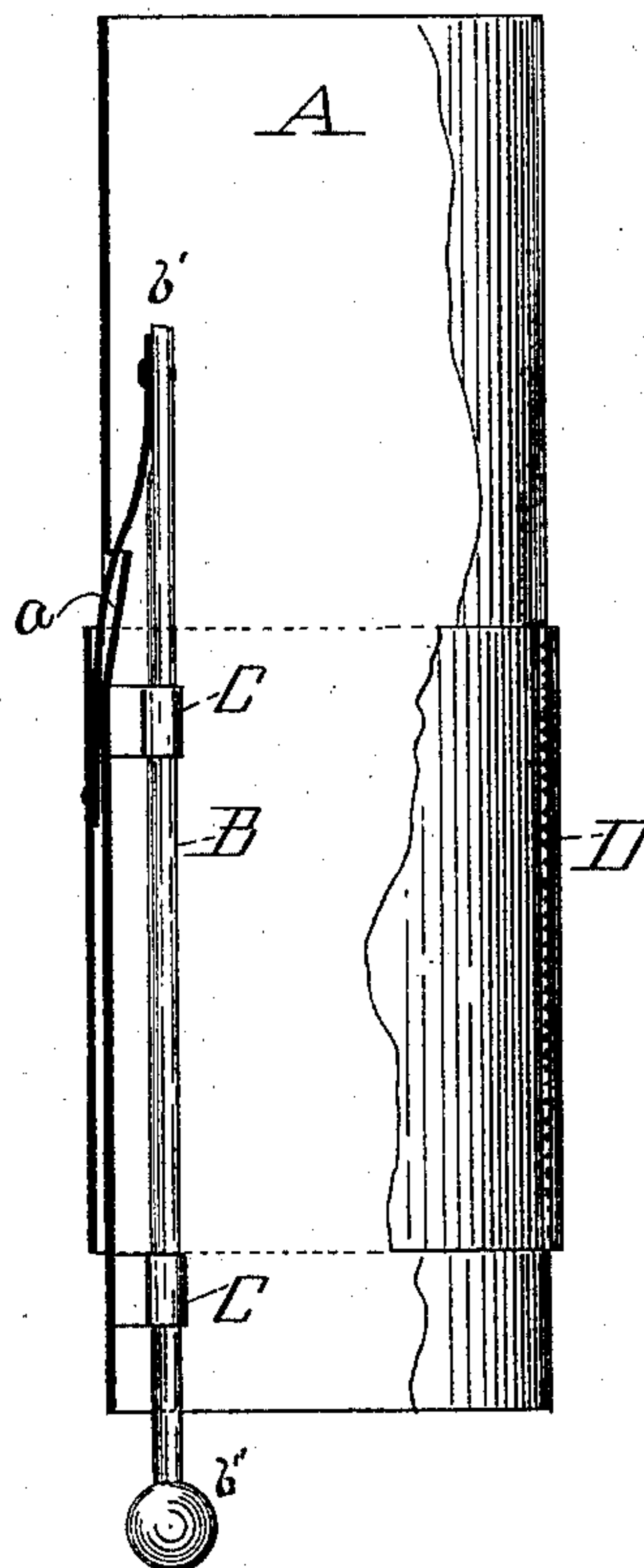


Fig. 5



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UNITED STATES PATENT OFFICE.

FRANK RHIND, OF MERIDEN, CONNECTICUT, ASSIGNOR OF ONE-HALF TO THE
EDWARD MILLER & COMPANY, OF SAME PLACE.

WICK-LIFTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 395,757, dated January 8, 1889.

Application filed August 13, 1888. Serial No. 282,630. (No model.)

To all whom it may concern:

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

My invention relates to that class of wick-lifting devices used in Argand lamps, which has a vertically-adjustable sleeve surrounding the central draft-tube and engaging with the wick.

It consists of an improved device by which the operator is enabled to adjust such sleeve and wick, and is especially adapted to lamps suspended from above, as in chandeliers, library-lamps, and the like.

In the accompanying drawings, Figure 1 represents in elevation a lamp embodying my invention, partly broken away to show the interior mechanism; Fig. 2, a horizontal section through the lines $x x$, Fig. 1; Fig. 3, in perspective, a wick-adjusting sleeve detached from the tube; Figs. 4 and 5, in vertical section, modifications of my device.

Similar letters refer to like parts in the several views.

A designates a central-draft or inner wick-tube; a , a niche or recess in the tube A; B, a wick-adjusting stem or draw-bar; b , an end of the stem B, projecting out of the niche or recess a ; b' , a bend in the stem or draw-bar B; b'' , a knob or handle at the lower end of the stem B; C, a guide through which the stem B moves; D, a wick-adjusting sleeve; d , a hollow rib on the sleeve D; E, Figs. 1 and 3, an auxiliary draw bar or handle; e , Figs. 1 and 2, a lug on the sleeve D, to which the draw-bar E is attached.

In explaining the construction and operation of my invention I will first refer to Figs. 1, 2, and 3 of the drawings. The central-draft or inner wick-tube, A, is formed with a longitudinal re-entering recess, niche, or groove, a , which is closed at its lower end and sufficiently open at its upper end to permit the vertical motion of the draw-bar B. This upper open end of the groove a is preferably above the central opening or collar of the lamp and considerably above the filler-opening, as shown in Fig. 1, so that there is no danger of oil leaking or being splashed out of such open-

ing. The wick-lift stem or draw-bar B is preferably made of wire, is bent back on itself at b' , one leg or portion passing downward into the groove a , the other leg through guides C, attached to the groove a and within the tube A. The leg which moves in the groove a is bent near its lower end at a right angle, the end b projecting from the groove a slightly beyond the periphery of the tube A. The other leg of the draw-bar B has at its lower end a knob, b'' , or any convenient handle. A wick-adjusting sleeve, D, surrounds the tube A and may be provided with any convenient means—say as shown in Fig. 3—for insuring frictional engagement with the wick. The sleeve D, as here shown, is made with its interior diameter slightly greater than the exterior diameter of the inner wick-tube, A, and so as to slide smoothly on said tube. In this case the wick engages with the exterior surface of the sleeve. It is advantageous to detachably connect the sleeve D and the stem or draw-bar B, so that when the lamp requires rewicking the sleeve D may, if desired, be entirely removed from the wick-tube A. This detachable connection may be made in any convenient manner, of which the bayonet-catch shown in Figs. 1, 2, and 3 is one of the simplest. This bayonet-catch consists of a hollow exterior rib, d , on the sleeve D, extending longitudinally upward from the lower edge of the sleeve, then turning at a right angle. The projecting end b of the draw-bar B is adapted to move in the hollow rib d until it reaches the upper end of the longitudinal portion, when a slight turn of the sleeve D causes it to engage with the draw-bar B as to vertical motion. To prevent the sleeve D from being accidentally turned out of engagement as to vertical motion with the draw-bar B, the sleeve may be provided with a second or auxiliary draw-bar, E, pivotally connected to the lug e on the sleeve, as shown in Fig. 1, and extending out of the top of the lamp. This draw-bar E moves in a guide or recess formed in the lamp-collar or in the detachable portion of the burner, so that by means of this guide or recess and the auxiliary draw-bar E the sleeve D is prevented from turning on the tube A, except when the detachable portion of the burner is removed

from the lamp. As the draw-bar B is only adapted to convenient use when the lamp is suspended from above, the auxiliary draw-bar E will be found useful when the lamp is
5 placed on a table for filling or otherwise.

As I have already made application for a patent on a draw-bar pivotally attached to a wick-adjusting sleeve and passing out of the top of the lamp, which application has received Serial No. 251,012, filed September 29,
10 1887, and for a detachable burner portion recessed to receive and guide a draw-bar, which application has received Serial No. 261,622, filed January 23, 1888, I do not claim either
15 of these features as part of my present invention.

It will be seen that the wick-adjusting sleeve D, as shown in dotted lines in Fig. 2, may be made of sufficient size to surround
20 the wick. In this case it would be necessary to slot the wick to enable it to pass over the projecting end *b* of the draw-bar B. In Fig. 4 of the drawings I have shown a modification of my device, in which the sleeve D is rigidly
25 connected, as by soldering or riveting, to the draw-bar B. To rewick a lamp so constructed, the sleeve D is raised to its highest point and the wick forced down over it.

In Fig. 5 is shown a form of my device in
30 which the draw-bar B consists of two parts—one a straight rod within the wick-tube A, the other preferably a strip of resilient sheet metal connecting the upper end, *b'*, of the rod with the sleeve D. The niche or recess in
35 the tube A may in this construction be much shorter than that before described, and is preferably made as shown in the drawings. The resilient strip may be made integral with or securely fastened to the sleeve D.

It will be seen that my present invention dispenses with any tube passing through the lamp-fount parallel with the wick-tubes through
40 which the draw-bar B may pass, thereby lessening expense and danger of leakage; also, that by the use of my draw-bar a quick downward movement may be given to the wick, by
45 which the flame may be extinguished. In this particular it differs from any screw-actuated device. It will also be seen that if either
50 the draw-bar B or the auxiliary draw-bar E

were screw-actuated the other would be rendered useless.

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

1. In an Argand lamp, the combination of a central-draft or inner wick-tube, a groove or recess in said tube, a wick-adjusting sleeve surrounding said tube, and a vertically-movable wick-lift stem or draw-bar, one leg of
60 which passes into said groove or recess and engages with said sleeve, the other leg passing downward through said inner wick-tube, substantially as described.

2. In an Argand lamp, the combination of
65 a central-draft or inner wick-tube, a groove or recess in said tube, a removable wick-adjusting sleeve surrounding said tube, and a vertically-moving wick-lift stem or draw-bar, one leg of which passes into said groove or
70 recess and is adapted for detachable engagement with said sleeve, the other leg passing downward through said inner wick-tube, substantially as described.

3. In an Argand lamp, the combination of
75 a central-draft or inner wick-tube, a groove or recess in said tube, a wick-adjusting sleeve surrounding said tube, a hollow exterior rib on said sleeve, and a vertically-movable wick-lift stem or draw-bar, one leg of which passes
80 into said groove or recess and is bent outward at its lower end to enter and engage with said exterior rib, the other leg passing downward through said inner wick-tube, substantially
85 as described.

4. In an Argand lamp, the combination of a central-draft or inner wick-tube, a groove or recess in said tube, a wick-adjusting sleeve surrounding said tube, a vertically-movable
90 wick-lift stem or draw-bar, one leg of which passes into said groove or recess and is adapted to engage with said sleeve, the other leg passing downward through said inner wick-tube, and an auxiliary draw-bar connected with
95 said sleeve and passing out of the top of the lamp, substantially as described.

FRANK RHIND.

Witnesses:

BENJ. C. KENNARD,
J. A. HARRIS.