

(No Model.)

E. BLACKMAN.  
WICK RAISER FOR CENTRAL DRAFT LAMPS.

No. 461,101.

Patented Oct. 13, 1891.

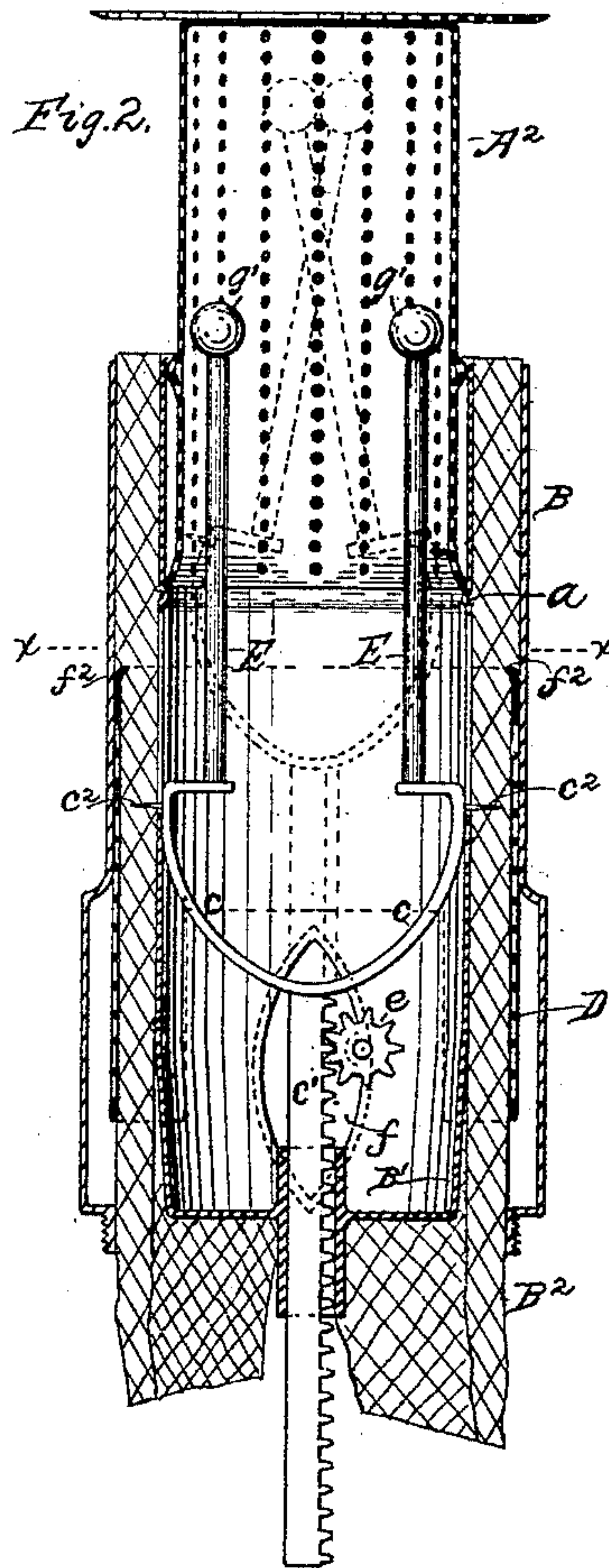
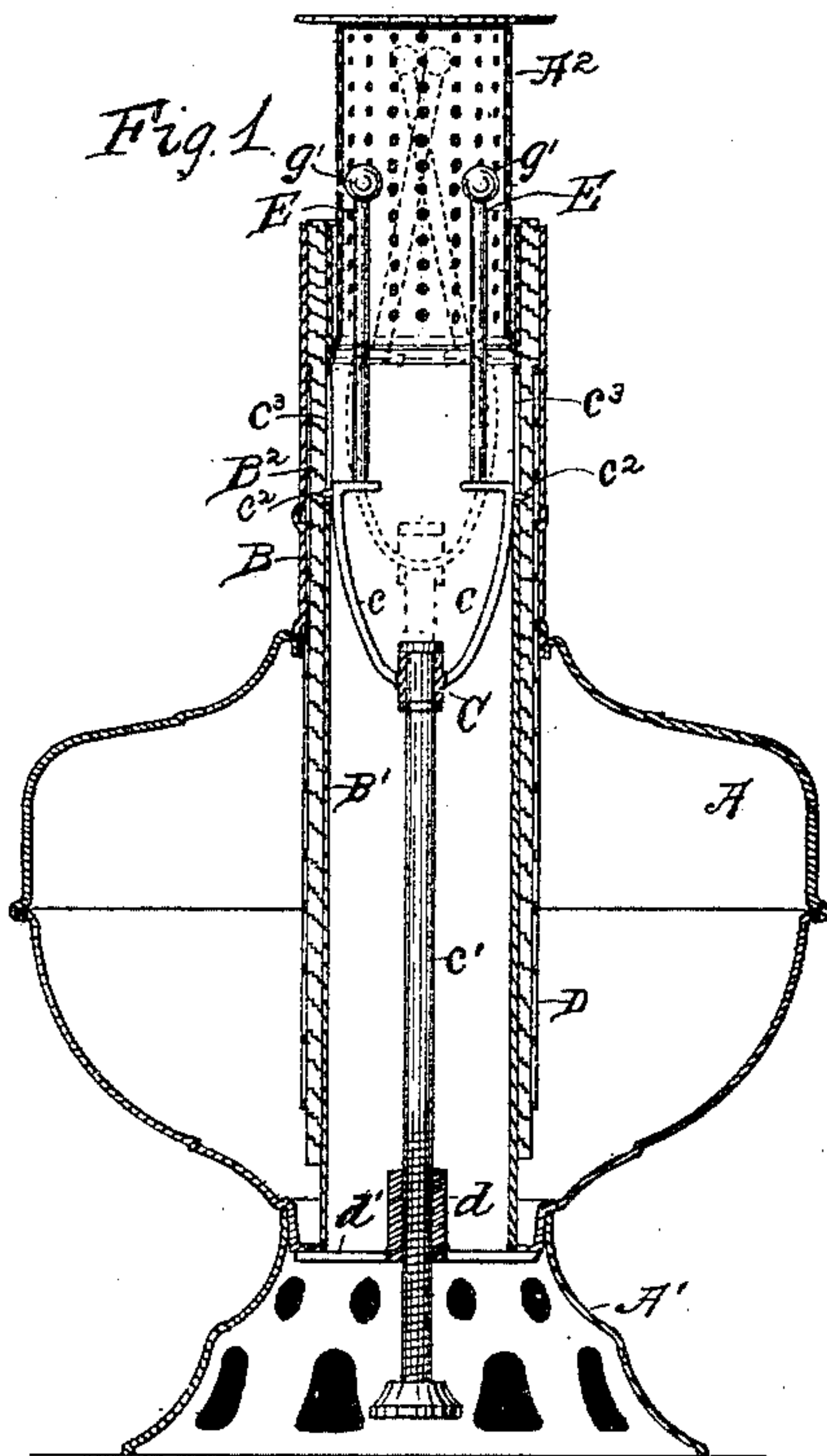
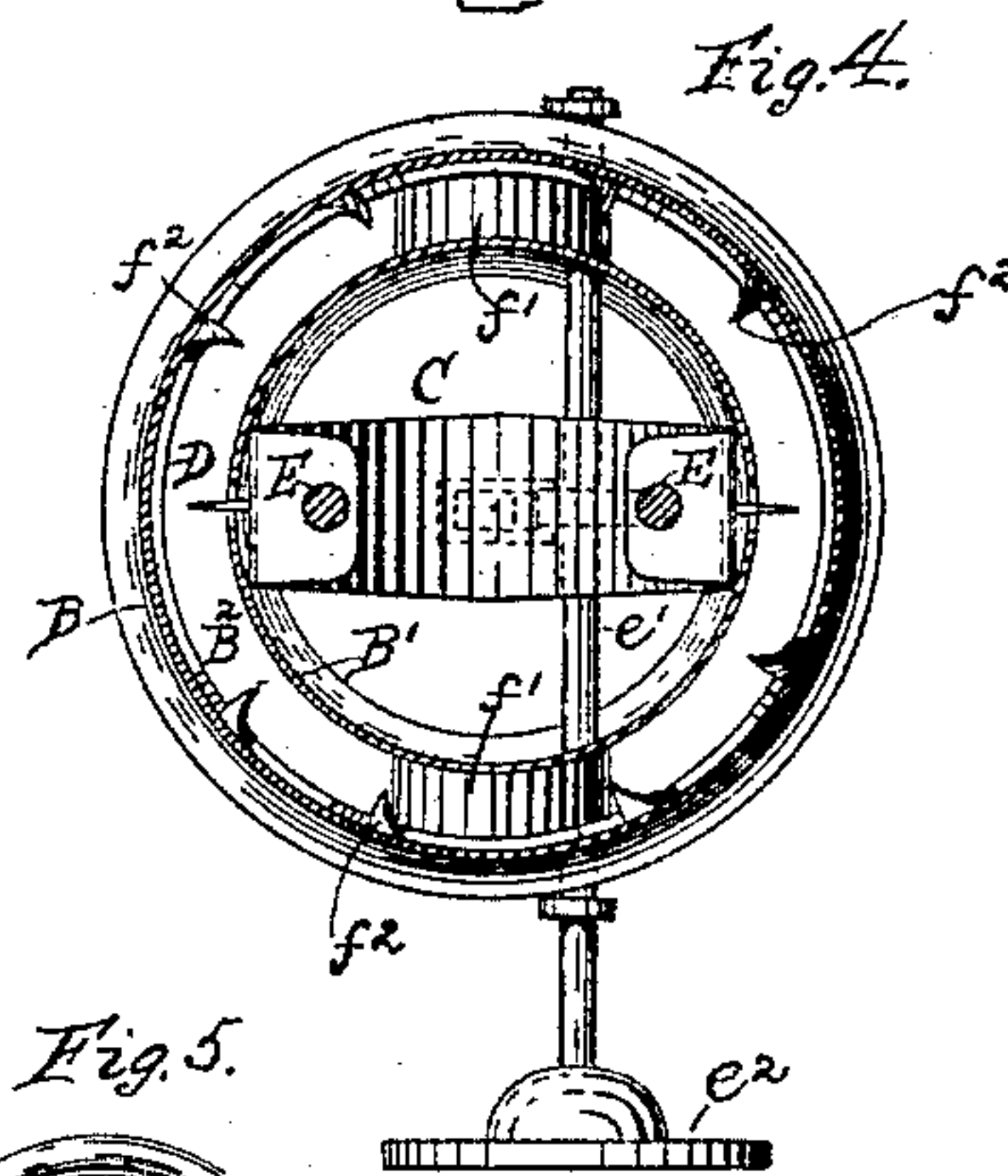
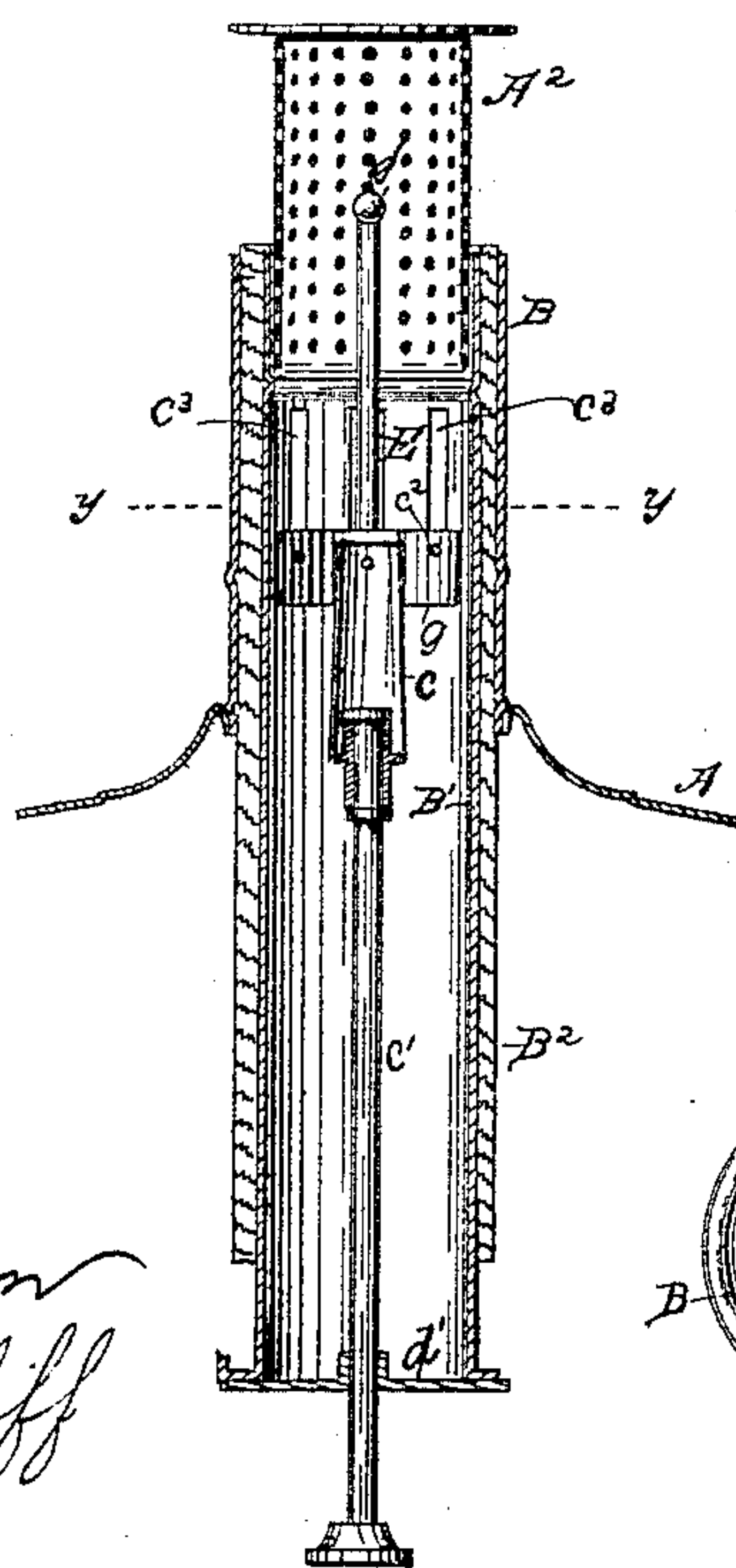


Fig. 3.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

EBENEZER BLACKMAN, OF BROOKLYN, NEW YORK, ASSIGNOR OF ONE-HALF  
TO EDWIN H. BROWN, OF SAME PLACE.

## WICK-RAISER FOR CENTRAL-DRAFT LAMPS.

SPECIFICATION forming part of Letters Patent No. 461,101, dated October 13, 1891.

Application filed August 26, 1890. Serial No. 363,104. (No model.)

*To all whom it may concern:*

Be it known that I, EBENEZER BLACKMAN, of Brooklyn, county of Kings, and State of New York, have invented a certain new and  
5 useful Improvement in Wick - Raisers, of which the following is a specification.

This invention relates to wick-raisers for central-draft lamps; and it consists of a slotted central draft-tube, a wick-carrier comprising  
10 divergent resilient arms constructed to engage a wick, upwardly-extending portions on the arms for disengaging the arms from the wick, and means for moving the carrier vertically.

15 I will describe a wick-raiser embodying my improvement, and then point out the novel features in the claims.

In the accompanying drawings, Figure 1 is a vertical section of a lamp embodying my invention. Fig. 2 is an enlarged vertical section  
20 of a wick-tube embodying my invention. Fig. 3 is a vertical section showing a modified construction. Fig. 4 is a transverse section on the line  $x x$  of Fig. 2, and Fig. 5 is a transverse section on the line  $y y$  of Fig. 3.

Referring by letter to the drawings, A designates a lamp-fount having a base  $A'$ , provided with openings for the admission of air.

30  $B B'$  designate the outer and inner shells of a wick-tube, and  $B^2$  shows the wick therein. The inner shell  $B'$  constitutes a central draft-tube. As shown in Fig. 1, it extends upward from the bottom of the fount and communicates and receives air from the base of the  
35 lamp. A perforated thimble  $A^2$  extends into the upper portion of the inner draft-tube  $B'$  and rests upon an annular bead or stop  $a$ .

C designates a wick-raiser comprising an arm or arms  $c$  movable vertically within the  
40 draft-tube  $B'$ . The arms  $c$  are preferably of resilient metal divergent from an operating rod or bar  $c'$  and provided at the outer side of the free ends with points or pins  $c^2$ , which pass through vertical slots  $c^3$  in the tube  $B'$  to  
45 engage with the wick. It is obvious that when the arms  $c$  are moved up and down the wick will be correspondingly moved. In the drawings I have shown some of the means by which the arms  $c$  may be operated. For instance, in  
50 Fig. 1 I have shown the rod  $c'$  as having a rotary connection with the arms  $c$  and having a

threaded portion engaging in an interiorally-threaded boss  $d$  on a bar  $d'$ , extending across and secured to the bottom of the tube  $B'$ . In this example the wick-carrier may be operated  
55 by rotating the rod  $c'$ . In Fig. 3 the rod  $c'$  is not threaded, but passes through a guide in the bar  $d'$ . In this example it is obvious that by simply pushing upward or pulling downward the rod  $c'$  the carrier will be similarly moved. In Fig. 2 the rod  $c'$  is shown in the form of a rack-bar, the teeth of which engage with a pinion  $e$  on a shaft  $e'$ , journaled through the wick-tube and provided at its  
60 outer end with a finger-piece  $e^2$ , by means of which the shaft and pinion may be rotated to move the wick-carrier up or down.

In Figs. 1 and 3 a cylindric wick may be used; but in Fig. 2 I prefer to use two wicks, which, when placed in position, form in effect  
70 a single cylindric wick, and by employing the two wicks the shaft  $e'$  may extend between the adjacent edges and not interfere with the movement of the wick. The draft-tube  $B'$ , as shown in Fig. 2, is not intended to extend through the fount, but is closed at its lower  
75 end, excepting a guide-opening for the bar  $c'$ , and terminates approximately on a level with the collar of the fount, into which the burner is fitted. Air is admitted to the lower portion of the tube  $B'$ , in this example, through a lateral opening or openings  $f$ , the walls  $f'$  of which extend across the space between the shells  $B B'$ .

In some of the examples of my improvement  
85 I find it desirable to employ an annular stay D. This stay D surrounds a portion of the wick and is adapted to move with it inside of the shell B. It is provided at its upper edge with inwardly-projecting prongs  $f^2$ , which engage with the wick. This stay serves to hold  
90 the wick closely against the pin  $c^2$ , and it may be perforated for the passage of oil when it extends into the fount, as in Fig. 1.

In Fig. 3 I have not shown the annular stay; but in lieu thereof I employ segmental plates  
95  $g$ , attached to the arms  $c$  and provided with a series of pins  $c^2$ .

It is sometimes desirable to move the wick-carrier without imparting motion to the wick—  
100 for instance, to change the position of engagement with the wick. For this purpose it is



necessary to move the pins  $c^2$  from the wick, and as a means thereof I provide each of the resilient arms  $c$  with an upwardly-extending portion or rod  $E$ , having locking device, (here  
5 shown in the form of a ball  $g'$  at the top.) By forcing the upper ends of the rods  $E$  toward each other the ends of the arms  $c$  will be caused to approach and draw the pins  $c^2$  out of the wick. The rods  $E$  may be held in this posi-  
10 tion by hand and the carrier moved, as desired, or the rods may be crossed, as shown in dotted lines, Figs. 1 and 2, so that the balls  $g'$  pass and interlock or engage with each other.

Having described my invention, what I desire to secure by Letters Patent is—

15 1. In a lamp, the combination, with a wick-tube having a slotted inner shell forming a central draft-tube, of a wick-carrier comprising divergent resilient arms constructed to  
20 engage a wick, means for moving the carrier vertically, and upwardly-extending portions on said arms for disengaging the arms from the wick, substantially as specified.

2. In a lamp, the combination, with a wick-tube having a slotted inner shell forming a  
25 central draft-tube, of a wick-carrier comprising divergent resilient arms constructed to engage with a wick, means, substantially such as described, for moving the carrier vertically within the draft-tube, rods extending upward  
30 from said arms, and locking devices on the rods, substantially as specified.

3. In a lamp, the combination, with a wick-tube having a slotted inner shell forming a  
35 central draft-tube, of a wick-carrier engaging a wick and movable vertically within the draft-tube, and an annular stay surrounding and movable with the wick, substantially as specified.

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

EBENEZER BLACKMAN.

Witnesses:

C. R. FERGUSON,  
ANTHONY GREF.