

(No Model.)

E. MORGAN.
ROLL PAPER HOLDER.

No. 432,738.

Patented July 22, 1890.

Fig. 1.

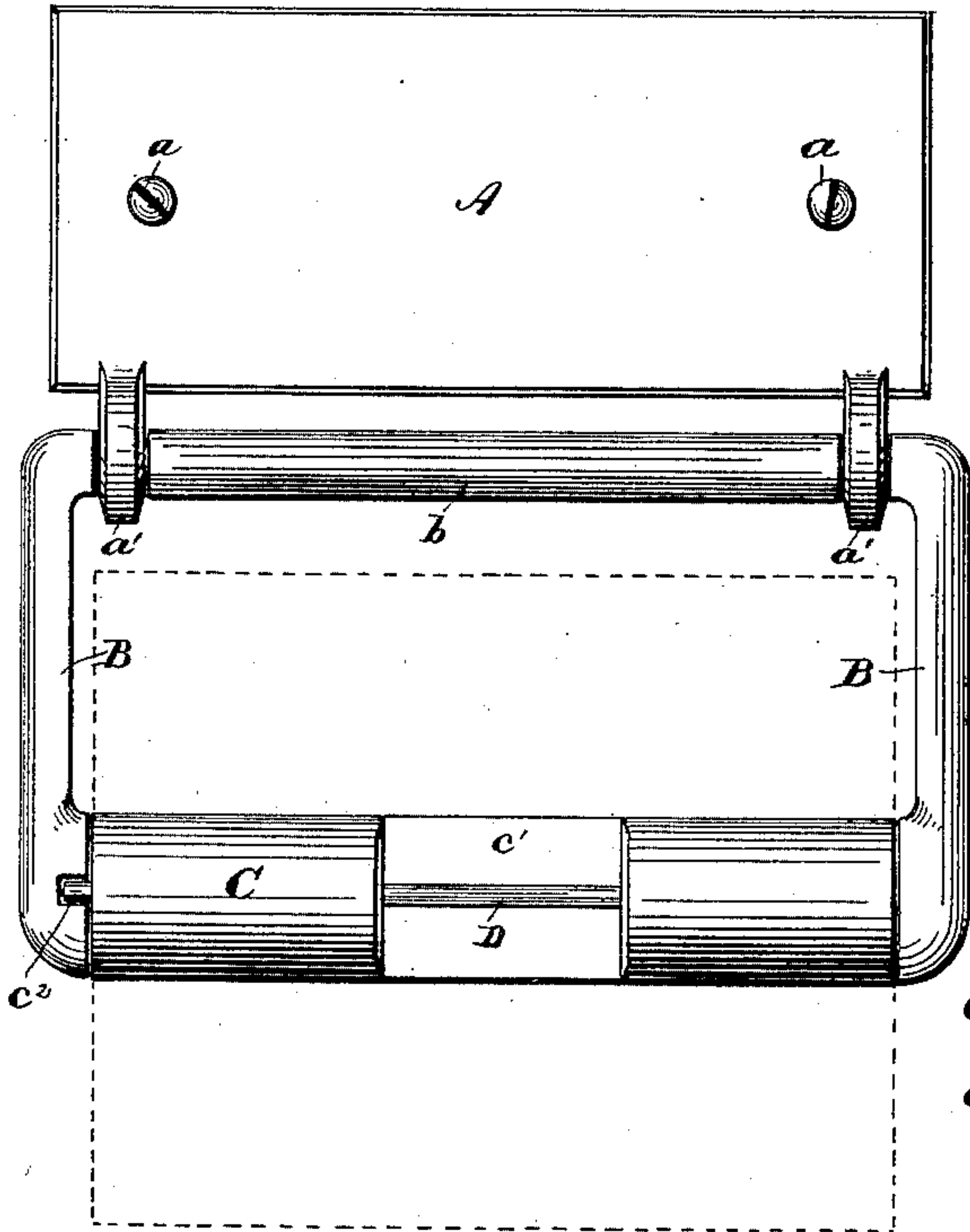


Fig. 2.

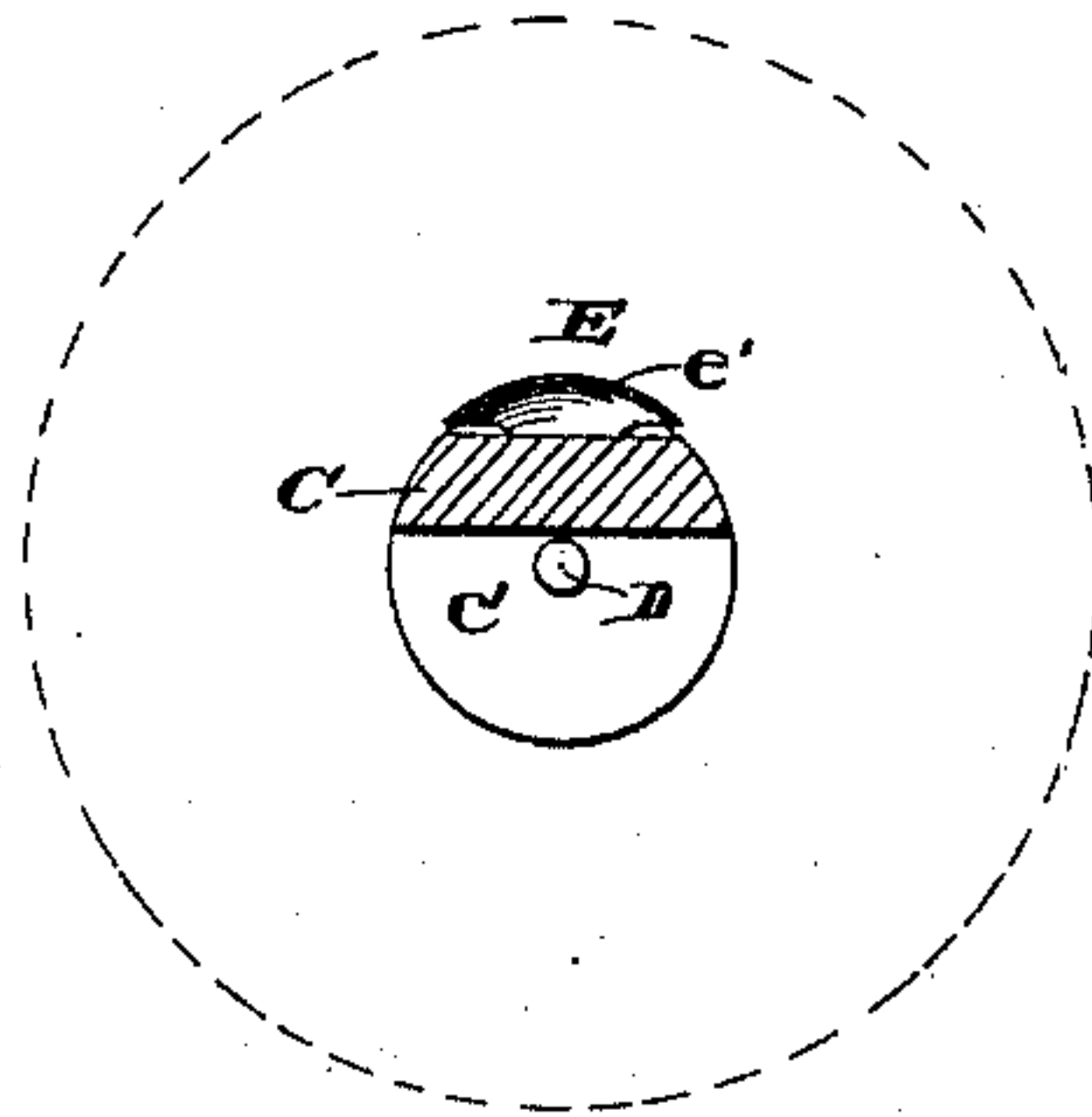


Fig. 3.

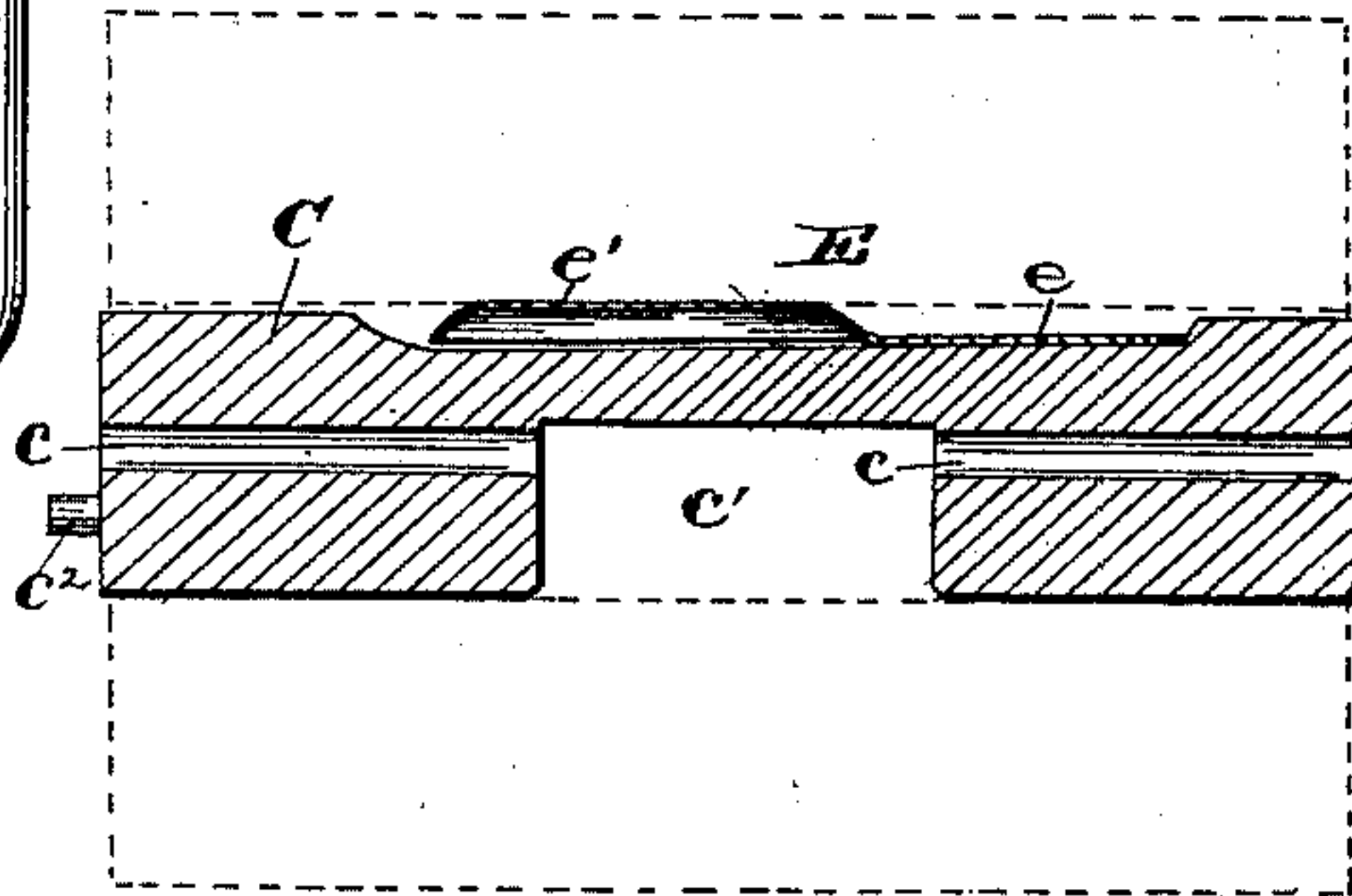


Fig. 4.

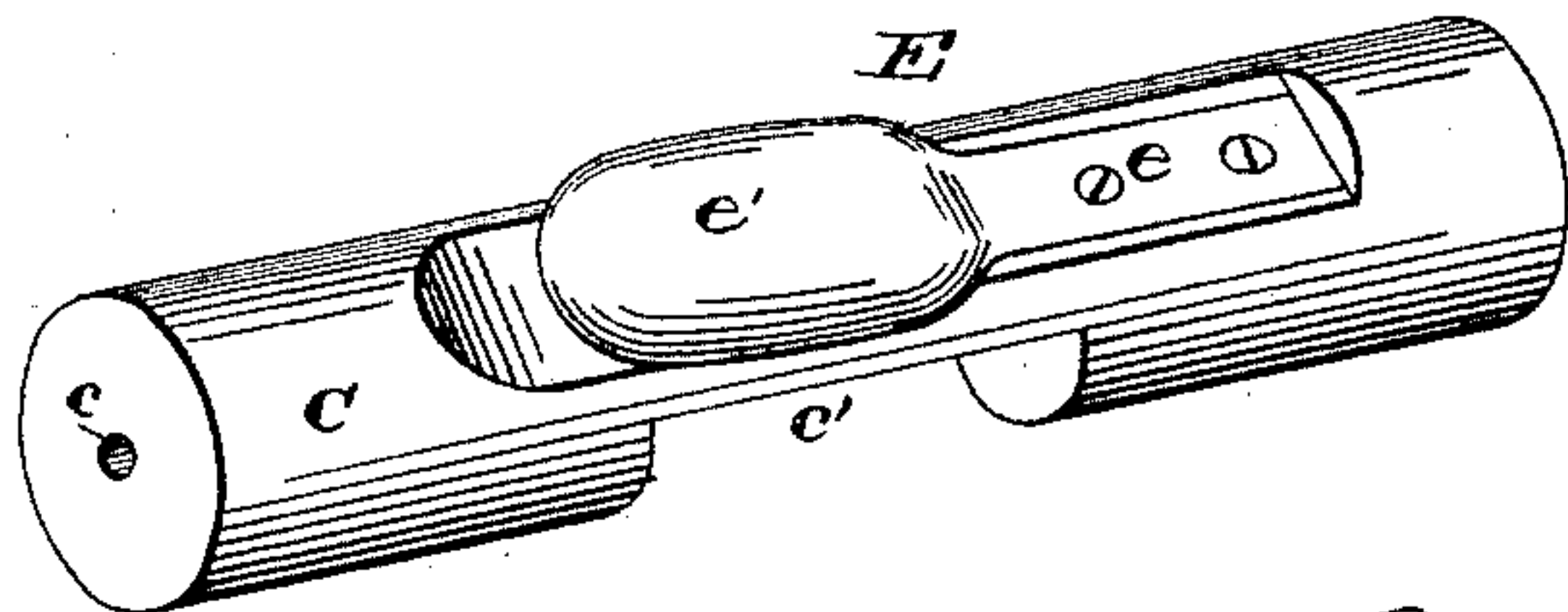


Fig. 5.

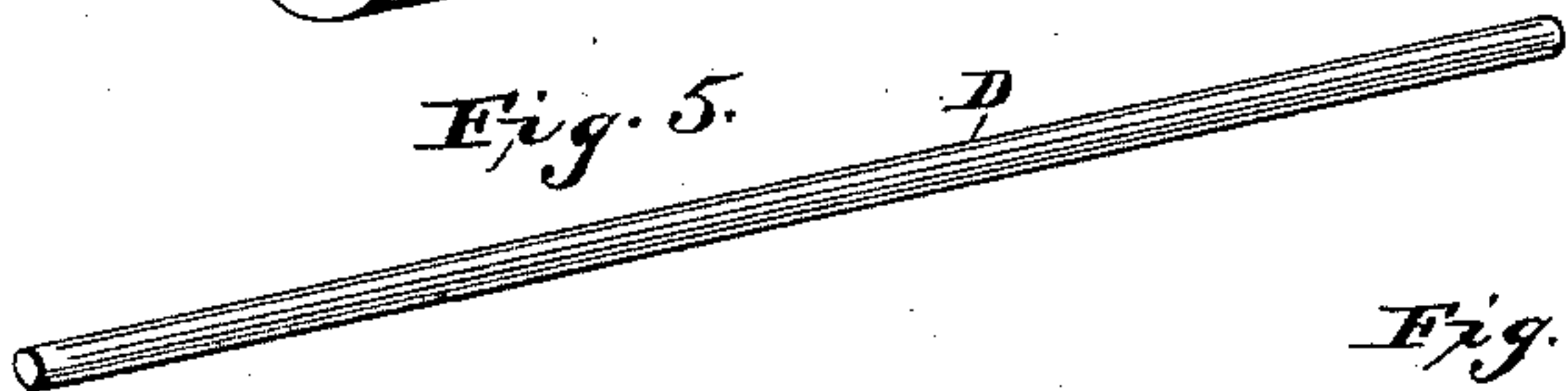


Fig. 6.

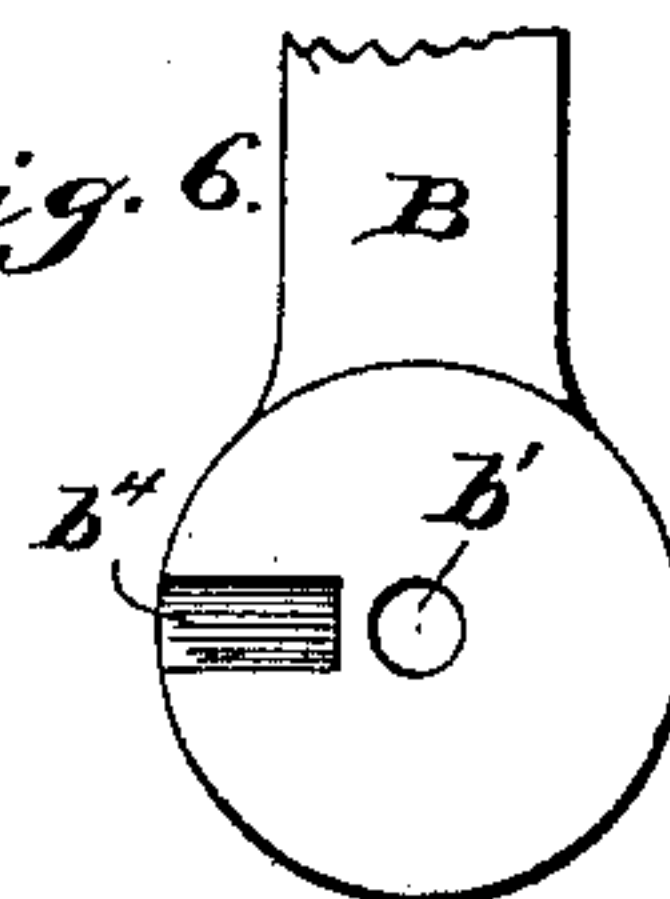


Fig. 7.

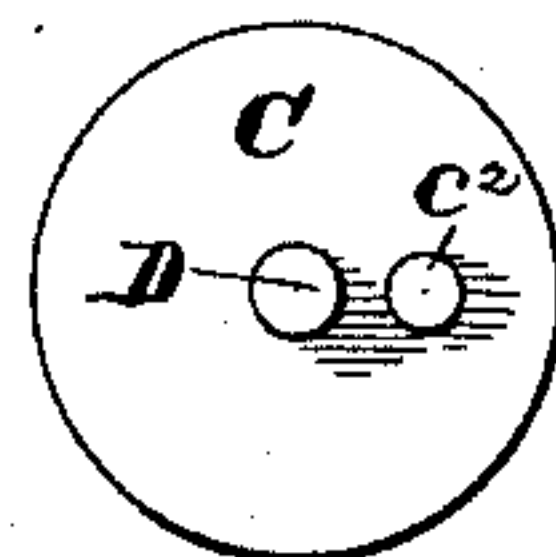
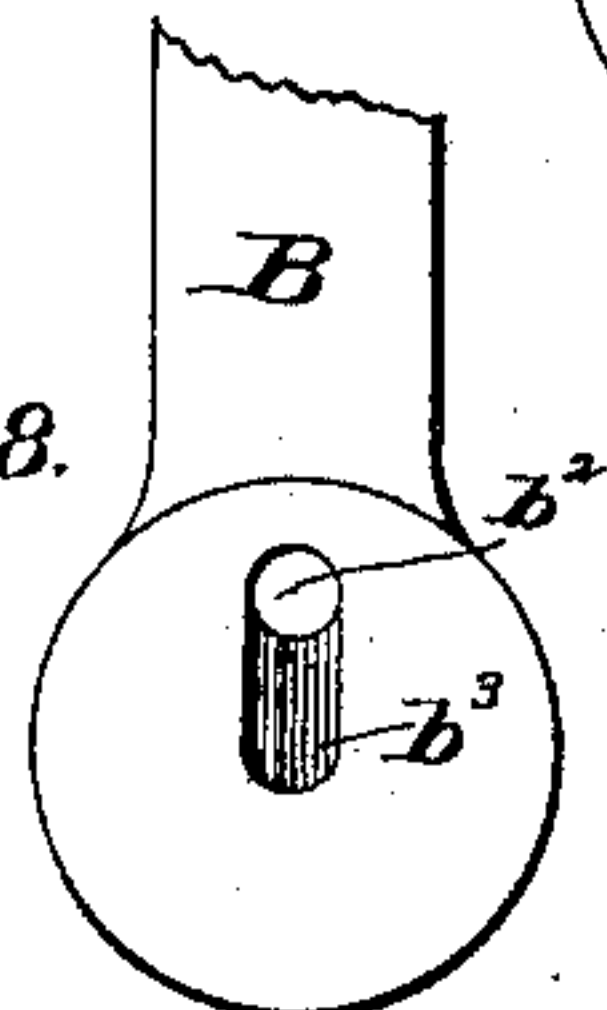


Fig. 8.



Witnesses.

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ELISHA MORGAN, OF SPRINGFIELD, MASSACHUSETTS.

ROLL-PAPER HOLDER.

SPECIFICATION forming part of Letters Patent No. 432,738, dated July 22, 1890.

Application filed November 7, 1888. Serial No. 290,200. (No model.)

To all whom it may concern:

Be it known that I, ELISHA MORGAN, of Springfield, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Paper-Roll Holders; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked thereon.

My invention relates to fixtures for holding toilet-paper in roll form, and particularly rolls made up of paper that is perforated, indented, or otherwise weakened at regular intervals for the purpose of enabling sheets of uniform size to be detached as desired for use.

The object of my invention is to so improve fixtures of this class as to prevent the too free unwinding of paper from the roll, and thus measurably diminish the vast amount of wastage that results where the roll is freely suspended, as ordinarily.

To this end it consists, first, in the combination, with the core or center, which is adapted to be passed through the aperture of the roll, of a spring or springs applied to said core and exerting such frictional resistance upon the roll when the core is inserted therein as to retard the free rotation of the roll, though permitting it to be turned and the paper unwound therefrom when the free end of the paper is steadily pulled; secondly, in the novel construction of said core-spring, whereby the core provided with it is enabled to be readily slipped into and out of the roll without tearing the latter, and, thirdly, in the combination, with the core and its friction appliance and the arms in which the core is supported, of means, substantially such as hereinafter described, for locking the core to said supporting-arms, so as to prevent the core from rotating with the paper, all as I will now proceed to set forth.

Referring to the accompanying drawings, Figure 1 represents a front view of a fixture embodying my improvements, the roll of paper being shown in dotted lines. Fig. 2 is a cross-section taken on the line $x x$, Fig. 1; Fig. 3, a longitudinal section taken on the line $y y$, Fig. 2. Fig. 4 is a perspective view of the core-plate and its friction device de-

tached from the arms of the fixture; Fig. 5, a view of the supporting pin or wire; Fig. 6, a view of the inner face of one of the supporting-arms, showing the locking-recess into which the locking-pin on the end of the core enters; Fig. 7, a view of the end of the core, showing the said locking-pin; and Fig. 8 is a view of the inner face of the opposite supporting-arm.

Similar letters of reference in the several figures indicate the same parts.

A represents a plate or bracket adapted to be secured to a wall or other support by screws $a a$ or otherwise, and having lugs $a' a'$, which serve as the bearings for a bar b , which connects a pair of swinging arms B B, as shown.

C is the core, constructed preferably of wood, having an aperture c extending through it longitudinally for the accommodation of the supporting-pin D, and a cut-away portion c' to enable the said pin to be conveniently removed when the roll of paper is used up. Upon this core is secured the friction device, consisting, preferably, of a spring E, having a shank e , preferably recessed or countersunk in the core, as shown, and provided with a yielding or springy portion e' , which is preferably made crowning or somewhat in the shape of the bowl of an inverted spoon, in order that it may be readily introduced into or withdrawn from the aperture of a paper-roll without tearing the latter. Beneath this yielding part e' the core is cut away, so that when the said part is compressed its surface will be about flush with the general surface of the core.

As shown in Fig. 6, a socket b' is formed in one of the swinging arms B for the reception of the end of the supporting-pin D, while, as shown in Fig. 8, the other swinging arm is provided with a perforation b^2 for the passage of said supporting-pin, and with a recess b^3 , into which the rear end of the pin drops when it is fully inserted into the opposite socket b' .

Upon one end of the core C is arranged a pin c^2 , (see Fig. 7,) which is adapted to enter a recess b^4 in the adjacent arm B, as shown in Fig. 6, and prevent the rotation of the core upon the supporting-pin D.

To mount a roll of paper, the core is thrust into the central aperture of the roll until its

ends are substantially flush with the ends of the latter, as shown in Fig. 3, this operation putting the friction-spring E under compression and causing it to bind against the roll.

5 The roll and core are next adjusted between the swinging arms B B, with the locking-pin c^2 in engagement with the recess b^4 and the longitudinal aperture c in line with the socket b' in one arm B and the perforation b^2 in the

10 other arm B, which done, the pin D is inserted and pushed in till its front end engages with the socket b' and its rear end passes through the perforation b^2 and falls into the recess b^3 . The roll is now locked in

15 the fixture, and while it can be gradually unwound against the tension of the friction-spring by pulling upon its free end, it cannot be removed bodily until all of it has been used up and the supporting-pin D is rendered accessible through the cut-away portion c' , as will be readily understood.

Having thus described my invention, what I claim as new is—

1. In a paper-roll holder, the combination, 25 with a core, of a friction-spring adapted to engage the interior of the roll, having a sub-

stantially straight shank secured to the core and an elevated smooth crowning yielding part, substantially as described.

2. In a paper-roll holder, the combination, 30 with a core, of a spring having a shank secured to the core and a yielding or springy portion, said core being cut away below said yielding portion, substantially as described, and for the purpose specified. 35

3. In a paper-roll holder, the combination, with the swinging arms having the perforation, socket, and recesses, as described, of the core having a friction-spring substantially such as described, and a locking-pin on its 40 end, and the supporting-pin, as set forth.

4. In a paper-roll holder, the combination, with the arms, of a core mounted on a central pin and carrying a friction-spring, and a pin 45 connecting said core and arms at one side of the center-pin, whereby the core is prevented from rotating, substantially as described.

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Witnesses:

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