

(No Model.)

F. SCHOETTLE.
PAPER BOX MACHINE.

No. 326,338.

Patented Sept. 15, 1885.

Fig. 1.

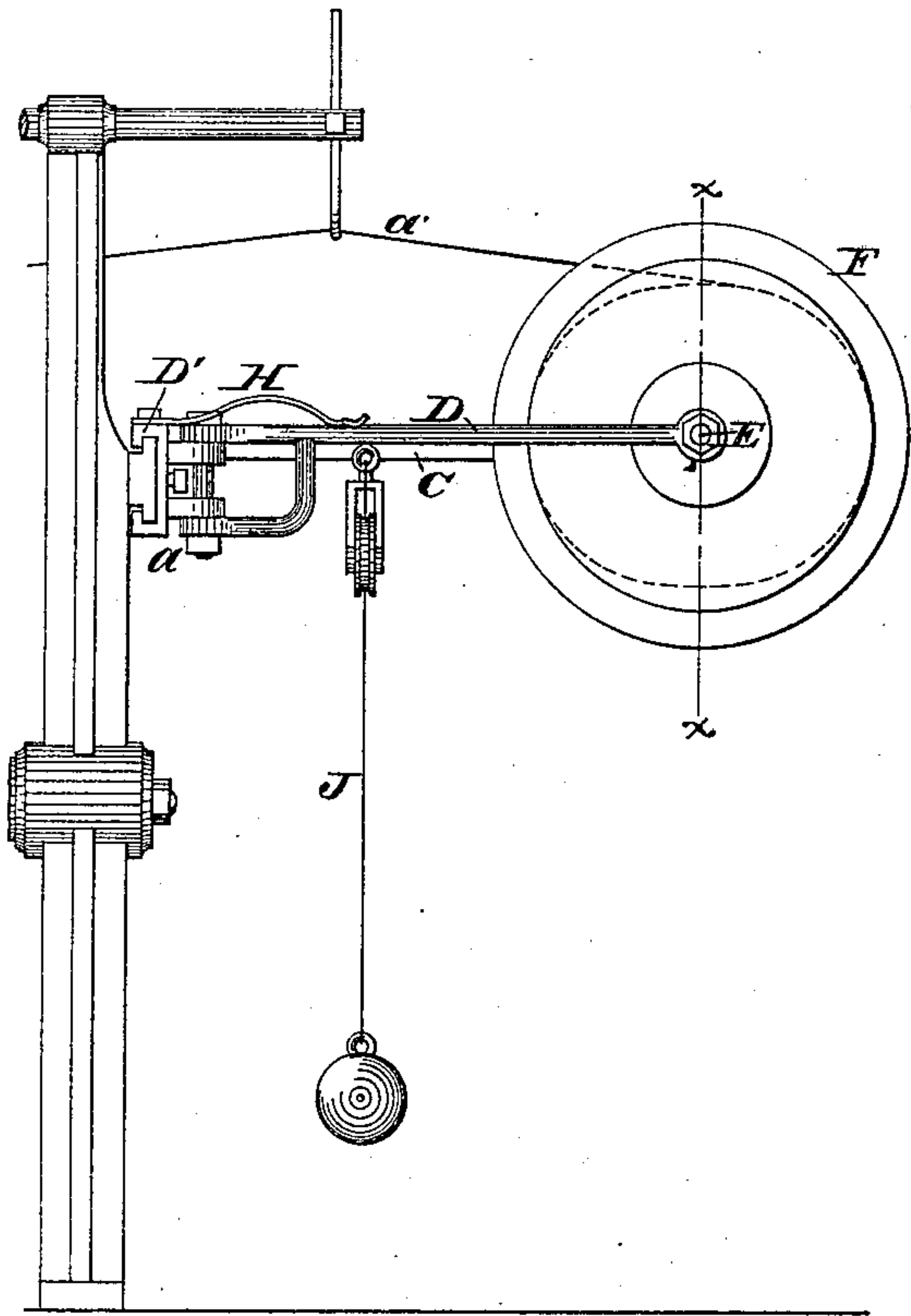


Fig. 2.

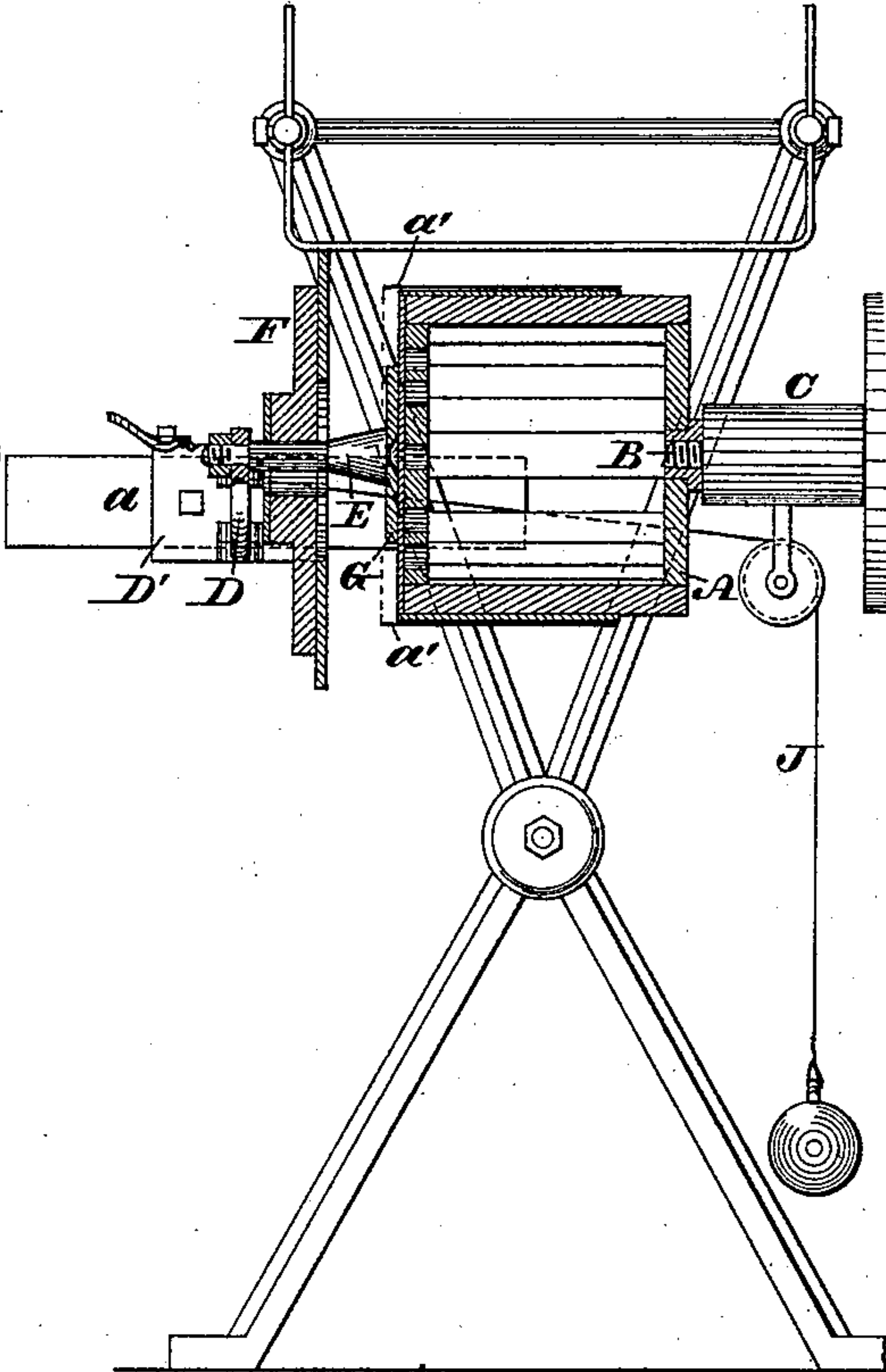


Fig. 3.

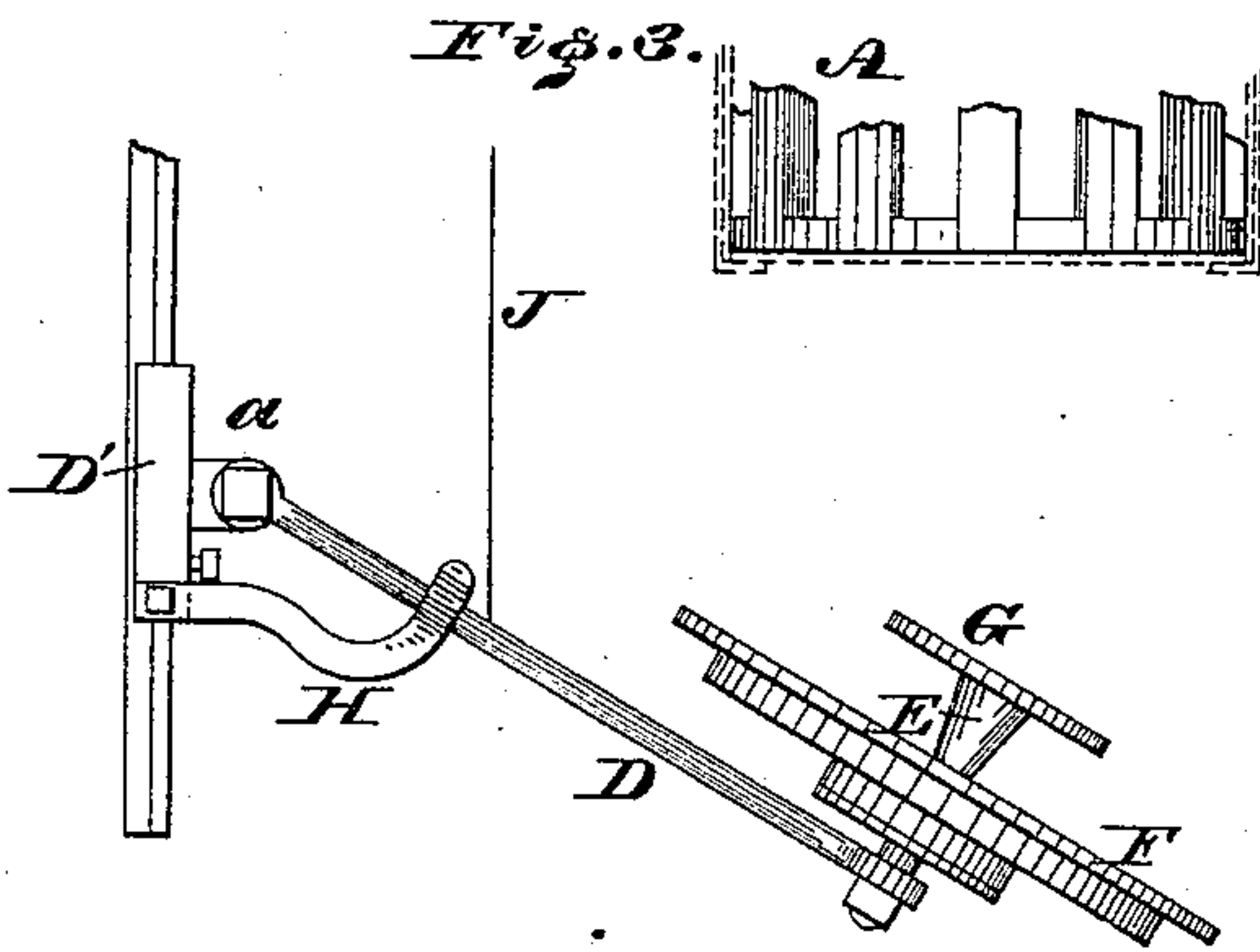


Fig. 4.

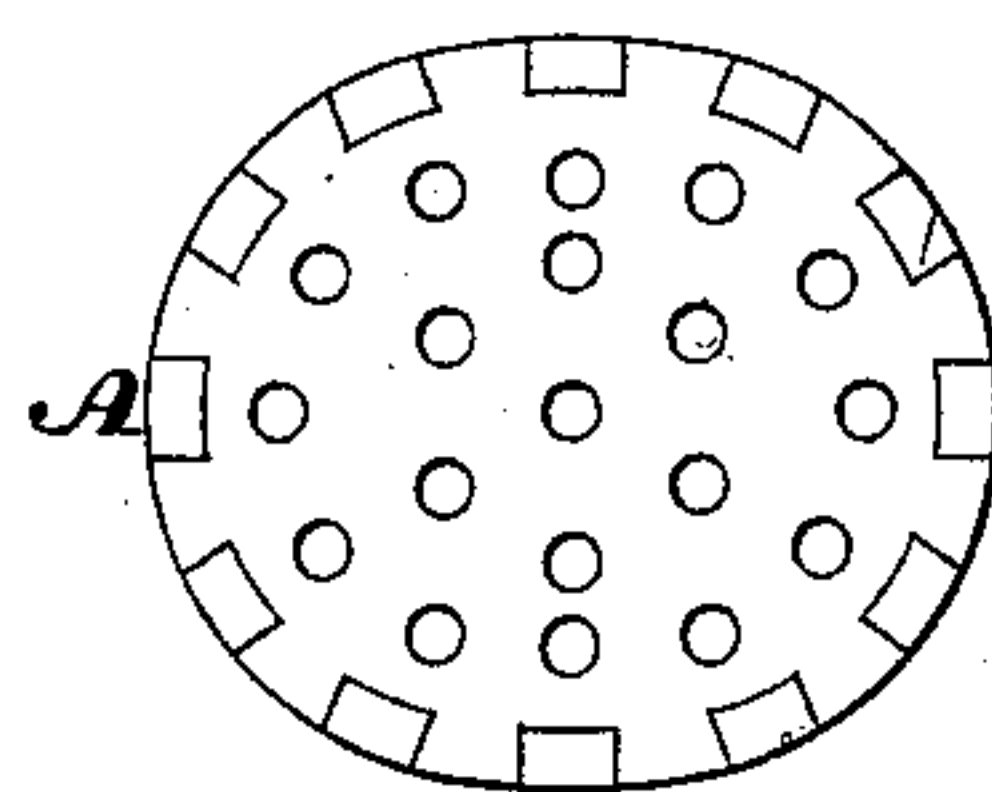
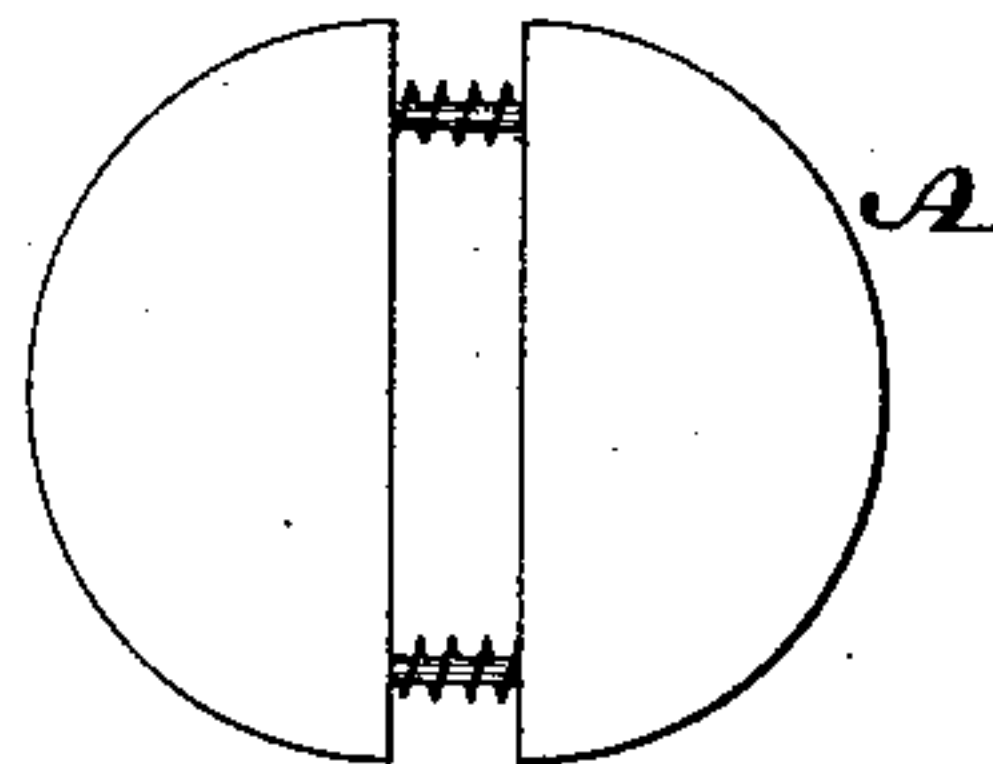


Fig. 5.



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FERDINAND SCHOETTLE, OF PHILADELPHIA, PENNSYLVANIA.

PAPER-BOX MACHINE.

SPECIFICATION forming part of Letters Patent No. 326,338, dated September 15, 1885.

Application filed November 8, 1884. (No model.)

To all whom it may concern:

Be it known that I, FERDINAND SCHOETTLE, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Machines for Making Paper Boxes, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 represents a side elevation of a portion of a machine for making paper boxes embodying my invention. Fig. 2 represents a section of a portion thereof in line *xx*, Fig. 1. Fig. 3 represents a top view of a portion thereof. Fig. 4 represents an end view of a holder employed. Fig. 5 represents an end view of another form of a holder.

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

My invention relates to improvements in machines for making paper boxes; and it consists of an attachment to a machine of said class, whereby a paper box may be quickly and nicely covered, and the edges of the covering material readily secured in position.

Referring to the drawings, A represents a holder for the box to be covered, the same being connected at one end with an axle or shaft, B, which is properly mounted on the part C of the machine, and to which power may be communicated in any suitable manner.

Mounted on the frame of the machine, as at *a*, is a swinging arm, D, the outer end of which carries a piece, E, of conical form, adapted for supporting a slapper, F, and a head, G, it being noticed that said slapper is hung loosely on the piece E, and said head G is swiveled or pivoted to the end thereof; it also being noticed that the piece is of such length that the slapper F is permitted to slide thereon to and from the head G. The slapper F has an opening which is of unequal diameters. On the side toward the head G the diameter for a distance equal to the thickness of the head is a little larger than that of the head, so as to cover the same when the slapper is forced against the holder. For the rest of the opening the diameter is equal to that of the conical portion at its juncture with the head. The arm D is so located that it may be moved toward and from the holder A, it being evident that the slapper F and head G follow the motions of said

arm, the head G being adapted to come in contact with the bottom of the paper box, which is placed on or against the side of the holder A opposite to the shaft B.

Connected with the frame of the machine is a spring-catch, H, the object whereof is to hold the arm D when swung back from the holder A.

A weighted cord, J, is attached to the arm D, and passed around a pulley on the frame of the machine, the object whereof is to draw said arm toward the holder A, and force the head G against the same.

In Fig. 5 is shown an end view of a holder constructed in two parts and adjustably connected by means of springs and bolts, as can be readily understood.

The operation is as follows: The body of a paper box is placed around the holder A, and the bottom of the same fitted within the projecting end of the body and rested against the side of the holder. The slapper F is now grasped and moved toward the holder, and as it rides up the inclined piece E it comes in contact with the head G, whereby the latter is forced against the bottom of the box and caused to retain the same firmly on the side of the holder, said head now being under control of the weighted cord J. The slapper is then let go, and owing to the conical piece E it rides down the latter, thus making room for the insertion of the hand of the operator between said slapper and the head G and bottom of the box. The covering material *a'*, which is passed from a reel or other source of supply and suitably gummed, is now presented to the box, and the holder properly rotated either by power or hand, whereby said material completely surrounds the body and adheres thereto, the proper length of the same then being cut off. A portion of the material is left projecting from the edge of the body adjacent to the bottom of the same, and said portion is turned or folded over said bottom by the hand of the operator, thus connecting the material and bottom. The slapper is now moved smartly toward the holder A, and owing to the size of its opening it passes over the head G and comes in contact with the bottom of the box and the edge of the covering material, firmly pressing said edge against the contiguous portion of said bottom, and

reliably securing the same in position. The slapper is then forced outward or backward, thus removing the head G from contact with the box, and the arm with connected part 5 returns to its normal position, the catch H then engaging with said arm. The paper box is now removed and another body and bottom are fitted in position on the holder, after which the slapper F and head G are again ad- 10 vanced, the subsequent operations being similar to those hereinbefore stated.

In order to prevent the effect of suction of the bottom of the box on the contiguous side of the holder A, said side is perforated, and 15 the periphery of the holder formed of slats, whereby air is freely admitted to the bottom of the box.

It is evident that the lids of paper boxes may be covered similarly to the bodies of 20 the same, and that both the body and lid of a box may have their edge trimmings secured to the same by the means above set forth. There will also be a uniformity of work, as the first operation of the slapper F 25 and head G causes the bottom or top of the box to be held between the body or side of the same and the side or body to be leveled in relation to the bottom or top, and then when the covering material or trimming is 30 applied and turned over or folded the slapper presses the same flat and uniform on the bottom or top and prevents irregularity or material bulging of the bottom of the box at the place of occupation of the covering mate- 35 rial or trimming.

The arm D is mounted on the frame of the machine, as at *a*, as follows: A sliding bracket, D', is supported on the frame of the machine 40 adjacent to the pivotal end of said arm D, whereby it may be moved in a direction nearer to or farther from the holder A, a set-screw being employed for retaining said bracket in adjusted position, the catch H being also se-

cured to the same, so as to move therewith. The bracket is provided with ears or lugs, to 45 which the arm is pivoted. As the bracket is rendered adjustable, as stated, provision is thereby made for setting the head and slapper with precision in relation to the side of the holder, so that the bottom of the body or top 50 of the lid is held true thereon.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a paper-box-covering machine, the 55 holder A, in combination with a movable arm, D, the latter having at its outer end a piece, E, a portion of which is tapering or conical, and the said piece having attached to its end a head, G, and a slapper, F, substantially as 60 described.

2. In a paper-box-covering machine, a movable arm provided with an end piece having a conical portion and a head, in combination with a slapper mounted on said end piece, and 65 having an opening the diameter of which is larger on the side toward the said head than on the opposite side, substantially as and for the purpose set forth.

3. The movable arm D, provided with a 70 piece, E, a head, G, and a slapper, F, in combination with the catch H and bracket D', said bracket being adjustably mounted on its support and carrying said arm D and catch H, substantially as and for the purpose set forth. 75

4. In a paper-box-covering machine, a box-holder, a head, a slapper, and a movable arm carrying said head and slapper, in combination with a weighted cord for holding said head against the holder, and a catch for hold- 80 ing it from the same, substantially as and for the purpose set forth.

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