

(No Model.)

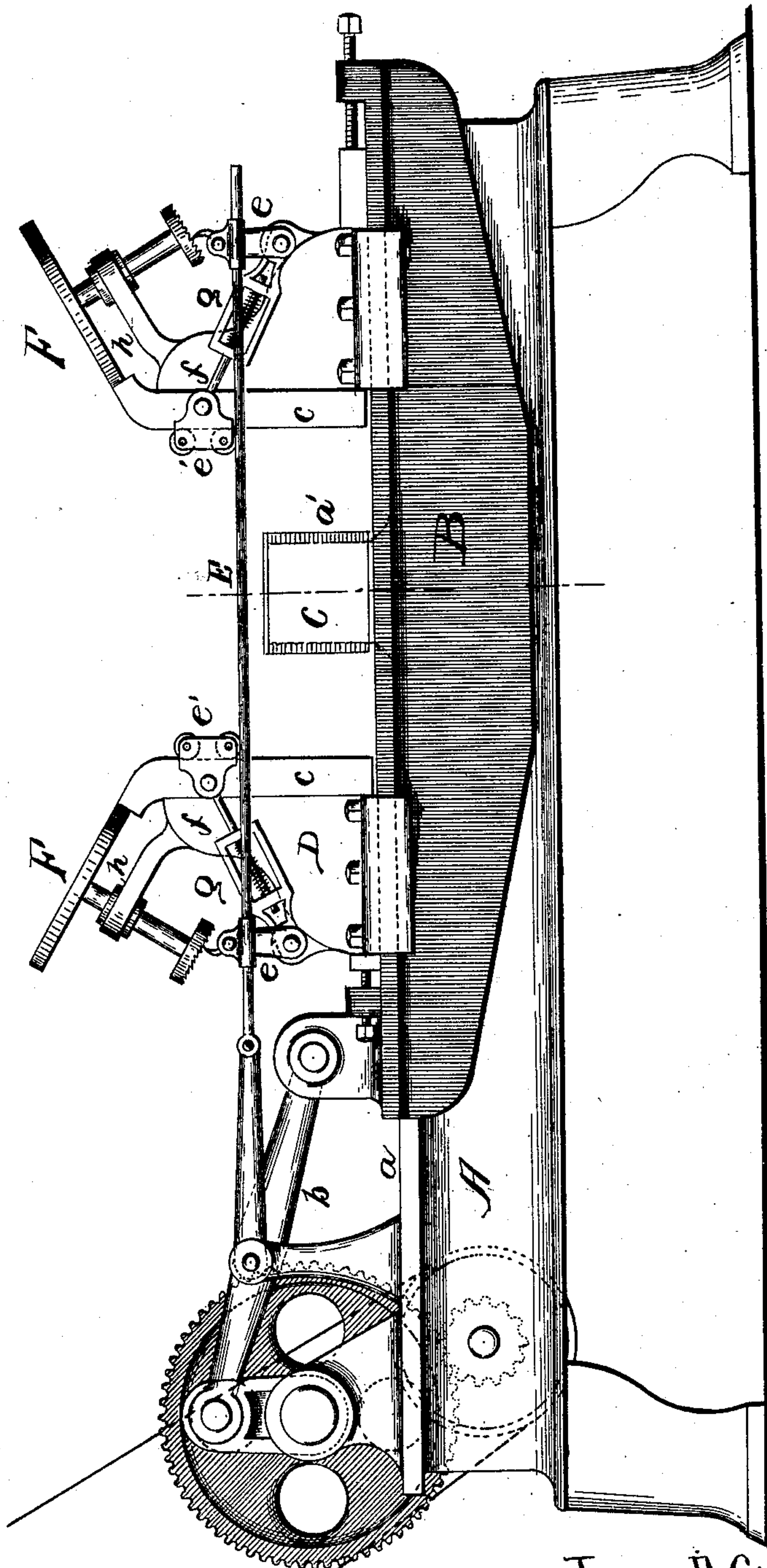
2 Sheets—Sheet 1.

J. F. GILLILAND.
BOX PRINTING MACHINE.

No. 603,685.

Patented May 10, 1898.

Fig. 1.



WITNESSES:

Charles W. Marvin.
Mary A. Franklin.

INVENTOR

James F. Gilliland.
BY

Smith & Arison
ATTORNEYS.

(No Model.)

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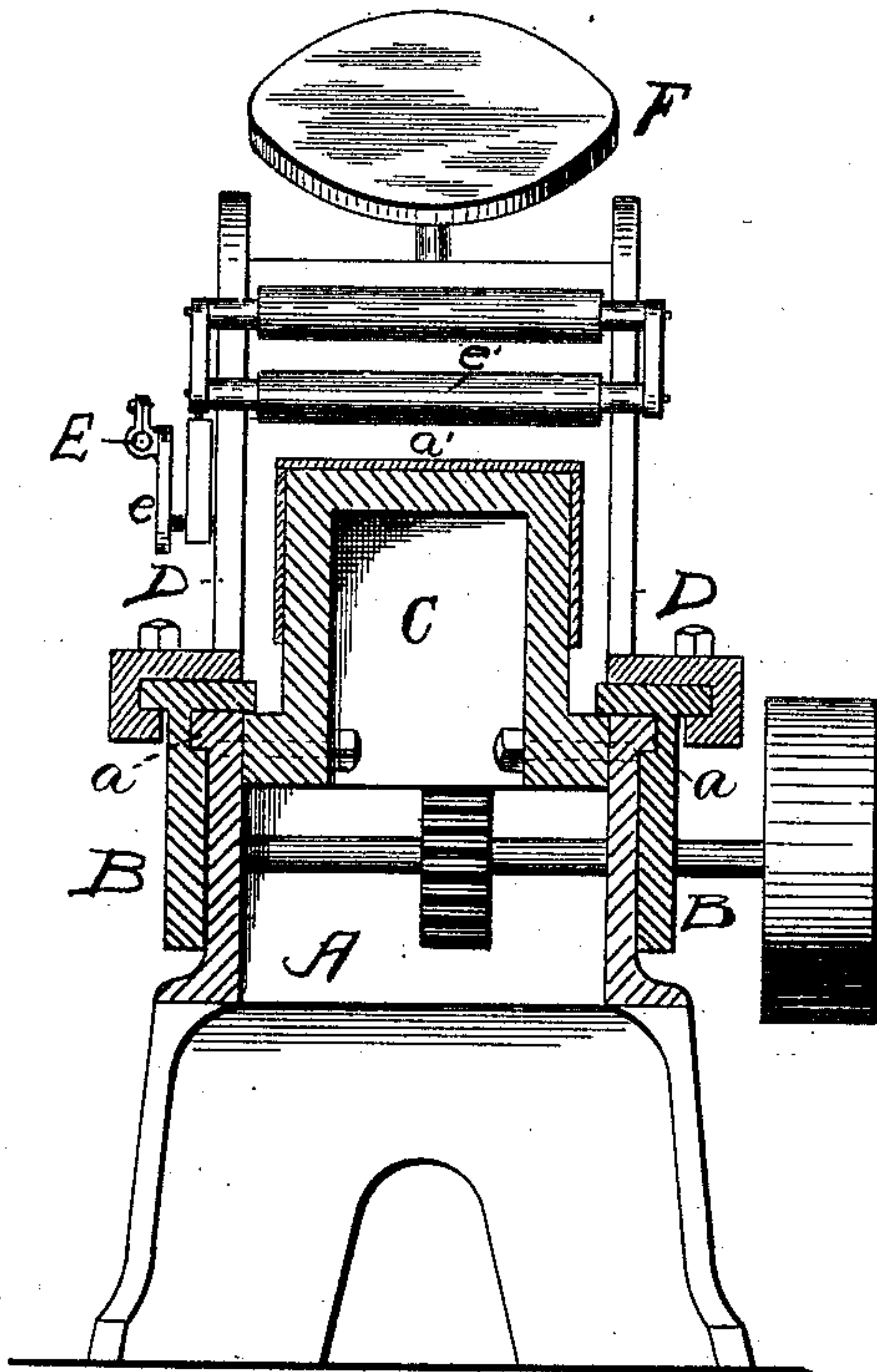


Fig. 2.

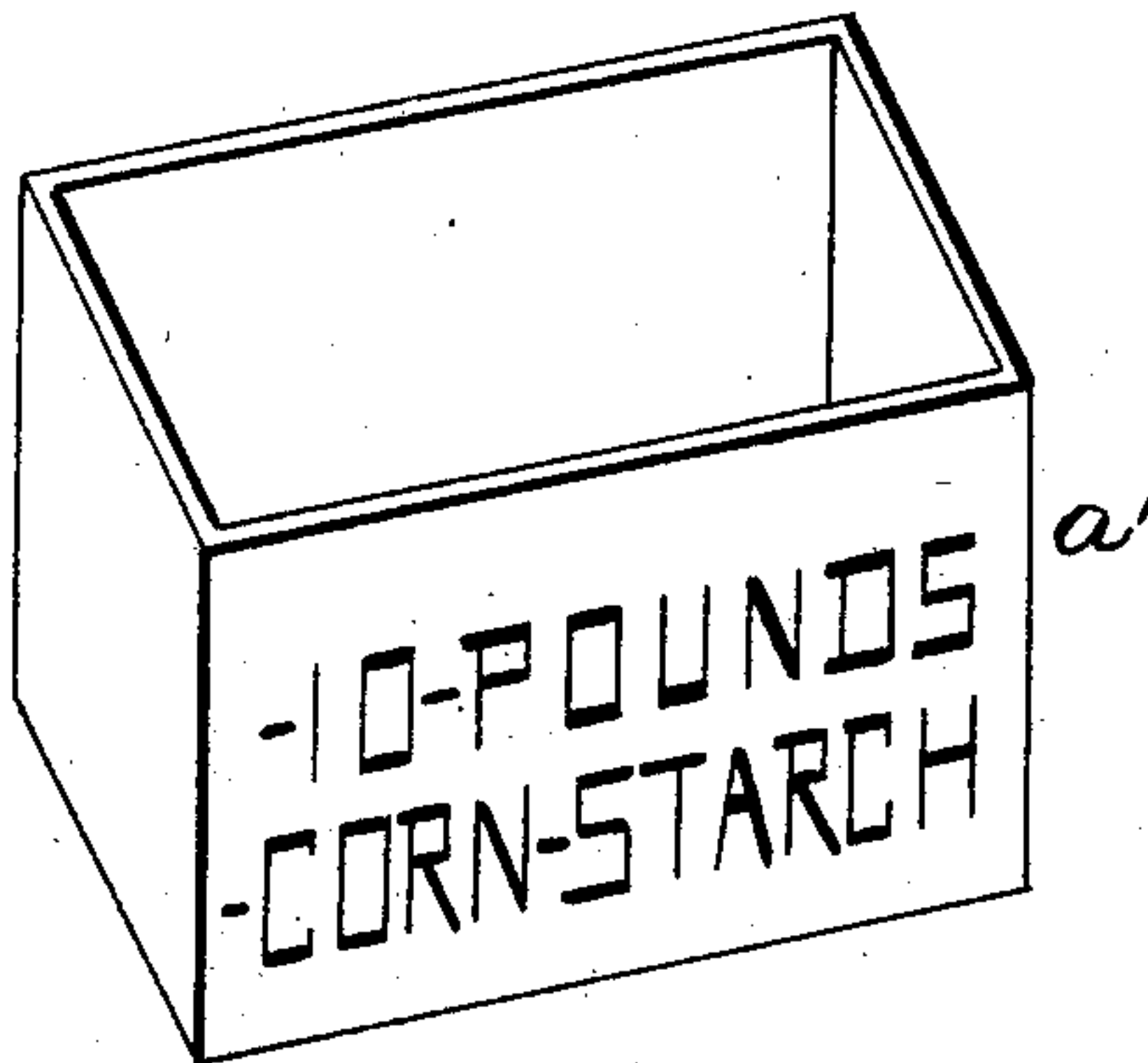


Fig. 3.

WITNESSES:

Charles Marvin.
Mary A. Franklin.

INVENTOR

James F. Gilliland.

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UNITED STATES PATENT OFFICE.

JAMES F. GILLILAND, OF ADRIAN, MICHIGAN, ASSIGNOR TO THE ADRIAN BOX COMPANY, OF SAME PLACE.

BOX-PRINTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 603,685, dated May 10, 1898.

Application filed August 6, 1897. Serial No. 647,307. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. GILLILAND, of Adrian, in the county Lenawee, in the State of Michigan, have invented new and useful
5 Improvements in Box-Printing Machines, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to machines for printing
10 advertising or other matter upon boxes.

My object is to produce a machine by which I may be able to print upon two sides of a box at substantially the same time, although as a matter of fact I first print upon one side
15 and then immediately upon the other without removing or turning the box upon the mandrel by providing means for bringing the printing-plates alternately into engagement with the sides of the box; and to that end my
20 invention consists, first, in providing a stationary mandrel to receive and hold the box in position while being printed; second, in a sliding table upon which are mounted the printing-plates adapted to be forced into en-
25 gagement with the sides of the box, and in the several other new and novel features of construction and operation hereinafter described and which are specifically set forth in the claims hereunto annexed.

30 It is constructed as follows, reference being had to the accompanying drawings, in which—

Figure 1 shows a side view of the machine complete. Fig. 2 is a cross-section on line
35 X X, Fig. 1. Fig. 3 is a view of a box upon which printing has been made.

In the drawings I show two sides of a box which may be printed or decorated by impression without removing the box from the
40 mandrel. Means, as herein described and shown, might be multiplied to print the remaining sides of the box.

A is a base suitably mounted having an outwardly-projecting flange *a* at the top, as
45 shown, and B is a moving or reciprocating table mounted on said base and adapted to be moved to and fro by the connecting-rod *b*,

suitably connected to power in the ordinary way.

Centrally upon the base A, I mount a mandrel C, upon which the box *a'* to be printed
50 is placed.

D are brackets mounted upon the table B, having means for adjusting them to any position desired and also means for securing
55 them to the table B. Upon the inner face of these brackets D are mounted the printing-plates *c*, which are adapted to come into contact with the sides of the box *a'*. Upon the brackets D are hinged arms *e*, having their
60 upper ends secured to the rod E, and *e'* are inking-rollers adapted to traverse the face of the printing-plates *c*, being mounted upon rods *f*, which rods are yieldingly mounted to the brackets *g*, so as to permit of the rods *f*
65 playing to and fro, so as to permit the inking-rollers to pass upon the ink-distributing plate F, the said plate being mounted upon an arm *h*, extending from the brackets D, and suitable means provided for rotating it.
70

My invention is operated as follows: I first place a box *a'* upon the mandrel C. As the printing-plate *c* comes into engagement with the box the inking-rollers move upward upon the plate *c* and finally pass over onto the ink-
75 distributing plate F, and as the printing-plates recede from the box the inking-rollers will pass down over the plate, and while this is being done upon one side the printing-plate upon the opposite side comes up into
80 engagement with the box and prints it.

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

1. In a machine for printing upon boxes, a
85 base having a stationary mandrel mounted thereon, and a sliding table and means for reciprocating said table upon said base, printing-plates mounted upon said table, and adapted to be brought alternately into en-
90 gagement with the sides of the box as set forth.

2. In a machine for printing upon boxes, a base having a stationary mandrel mounted thereon, a sliding table on said base and

means for reciprocating said table, printing-plates mounted on said table and means for adjusting their position, so as to bring them into contact with the face of the box-body,
5 as set forth.

3. In a machine for printing upon boxes, a base suitably mounted and having a stationary mandrel mounted thereon, a reciprocating table mounted on said base, and means
10 for reciprocating the same, printing-plates

mounted on said table, and means for automatically inking said plate with the movement of the table, substantially as described for the purposes set forth.

In witness whereof I have hereunto set my 15 hand this 27th day of July, 1897.

JAMES F. GILLILAND.

In presence of—

GEORGE A. DOUNCE,
HOWARD P. DENISON.