

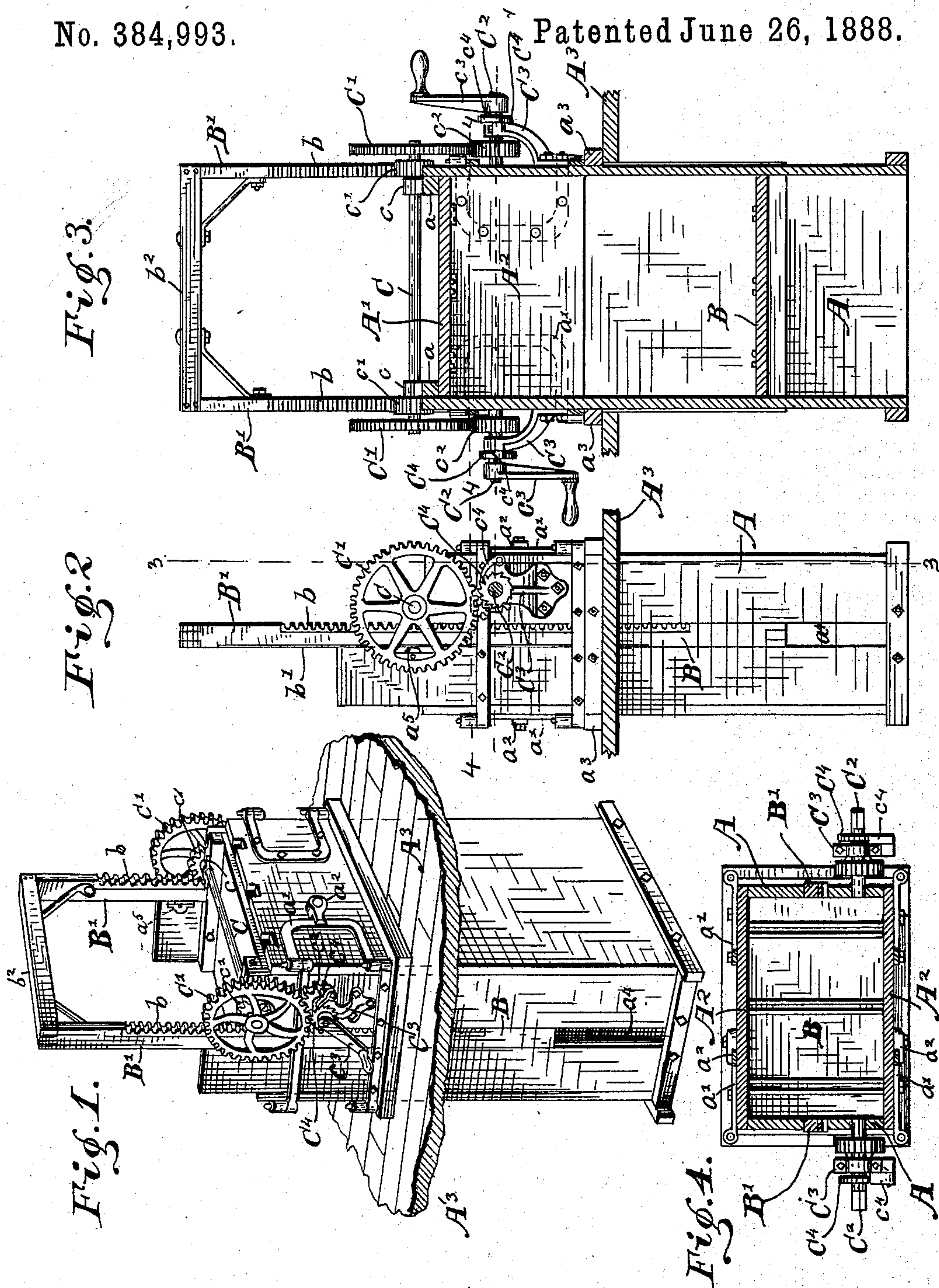
(No Model.)

G. W. L. MEYER & T. J. SUTPHEN.

BALING PRESS.

No. 384,993.

Patented June 26, 1888.



Witnesses,
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UNITED STATES PATENT OFFICE.

GEORGE W. L. MEYER AND THOMAS J. SUTPHEN, OF INDIANAPOLIS,
INDIANA, ASSIGNORS OF ONE-THIRD TO JOHN C. ERTEL, OF SAME
PLACE.

BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 384,993, dated June 26, 1888.

Application filed January 3, 1888. Serial No. 259,691. (No model.)

To all whom it may concern:

Be it known that we, GEORGE W. L. MEYER and THOMAS J. SUTPHEN, citizens of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Baling-Presses, of which the following is a specification.

The object of our said invention is to provide a cheap and efficient hand-press for baling hay, straw, &c., which may be operated very rapidly and conveniently; and it consists, especially, in several improvements in the details of construction whereby this object is more perfectly accomplished, as will be hereinafter more particularly described and claimed.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a perspective view of a baling-press embodying our said invention; Fig. 2, a side elevation of the same; Fig. 3, a vertical section on the dotted line 3 3 in Fig. 2; and Fig. 4, a horizontal section on the dotted line 4 4 in Figs. 2 and 3.

In said drawings, the portions marked A represent the box of the press, B a follower, and C a shaft carrying pinions and gearing for operating the follower.

The box A is of a suitable size for the purpose, and is built in substantially the usual manner, being provided with a top, A', which slides into position under cleats a , secured to the opposite sides of said box at its upper end, and with the doors A² hinged to the upper portion of the box above the floor A³, opposite to each other. Said doors are hinged to open out in a horizontal plane, and devices a' are hinged to each side of the box opposite the hinge of each door and adapted to swing against said door when shut, where they may be secured by buttons a^2 , and the door thus be fastened while the bale is being pressed. Said box A is preferably mounted to extend for a portion of its length below the floor A³, it being supported on the top of said floor by means of bars a^3 , bolted around the same at the position desired, and thus the operator is enabled

to feed the hay into the press without raising it but slightly from the floor, and his work is thus made very easy. In each side of said box is provided a vertical way, a^4 , in which the sliding parts for carrying the follower are mounted.

The follower B is of the usual form, mounted to slide vertically within the box, and is connected at each end to an upright, B'. Said uprights are mounted in the vertical ways a^4 in the sides of the box, so that their inner faces are just flush with the inner surface of said box. On the front side of each of said uprights is provided a rack-bar, b , and on the rear side of each is a metallic bearing-surface, b' , which rests against an anti-friction roller, a^5 , mounted in the rear side of each of the vertical ways a^4 near their tops, as shown. Said uprights are connected at their top by a yoke, b^2 , and are suitably braced to afford the necessary strength to the parts.

The shaft C is mounted in suitable bearings, c , at the top of the box, and is provided with small pinions c' , which mesh with the rack-bars b of the uprights B'. At the outer ends it is provided with larger gear-wheels C', which mesh with pinions c^2 , which are mounted upon short shafts C², journaled in suitable bearings formed in the brackets C³, which are secured to each side of the box and provided with cranks c^3 , by which they are operated.

The operation of our invention is as follows: The follower being in position at the bottom of the box and it being desired to put the machine in operation, the doors are opened, the top A' removed, and the box filled to the bottom of said doors, which are then closed and the box filled to the top. The top A' is then slid into position, and the operator, by means of the cranks c^3 , through the shaft C², pinions c^2 , gear-wheels C', pinions c' , and rack-bar b on the uprights B', forces upward said uprights B', carrying the follower B, and thus compresses the hay or other material being operated upon until it is sufficiently compressed, when said shaft is secured from turning back by means of the ratchet C⁴ and pawl c^4 , as will be readily understood. The button a^2 is then turned to release the fastening device a' , and the doors

are permitted to open, and then the bale is bound in the well-known manner by sliding the wire or other binding material through the grooves formed in the lower side of the top and on the top of the follower in the well-known manner. The bale being tied, it is knocked out, the pressure being first relaxed by the pawl c^4 being disengaged from the ratchet C^1 , the follower permitted to slide back to the bottom of the box, when the operation may be repeated, as will be readily understood.

Having thus fully described our said invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a baling press, of the box A, provided with the vertical ways a^1 in each side, the follower B, mounted on the uprights B' , said uprights B' being mounted in the vertical ways a^1 and provided on their front edges with racks b and yoked together at their top, the shaft C, carrying the small pinions c' , which mesh with each of said racks on the uprights B' and the large gear-wheels C' on its outer ends, and the short crank-shafts C^2 , jour-

naled on the sides of the box and provided with the pinions c^2 , which mesh with said gear-wheels C' of said shaft C, substantially as described, and for the purposes specified.

2. In a baling press, the combination of the box A, the follower B, mounted within said box and supported on uprights B' , said uprights B' mounted in vertical ways in each side of said box and provided with a rack on their front sides, a shaft, C, carrying pinions meshing with said racks, suitable gearing for operating said shaft C, and anti-friction rollers a^3 , mounted behind said uprights opposite the points where the pinions engage with the rack-bars on their front sides, substantially as set forth.

In witness whereof we have hereunto set our hands and seals, at Indianapolis, Indiana, this 24th day of December, A. D. 1887.

GEO. W. L. MEYER. [L. S.]

THOMAS J. SUTPHEN. [L. S.]

Witnesses:

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