

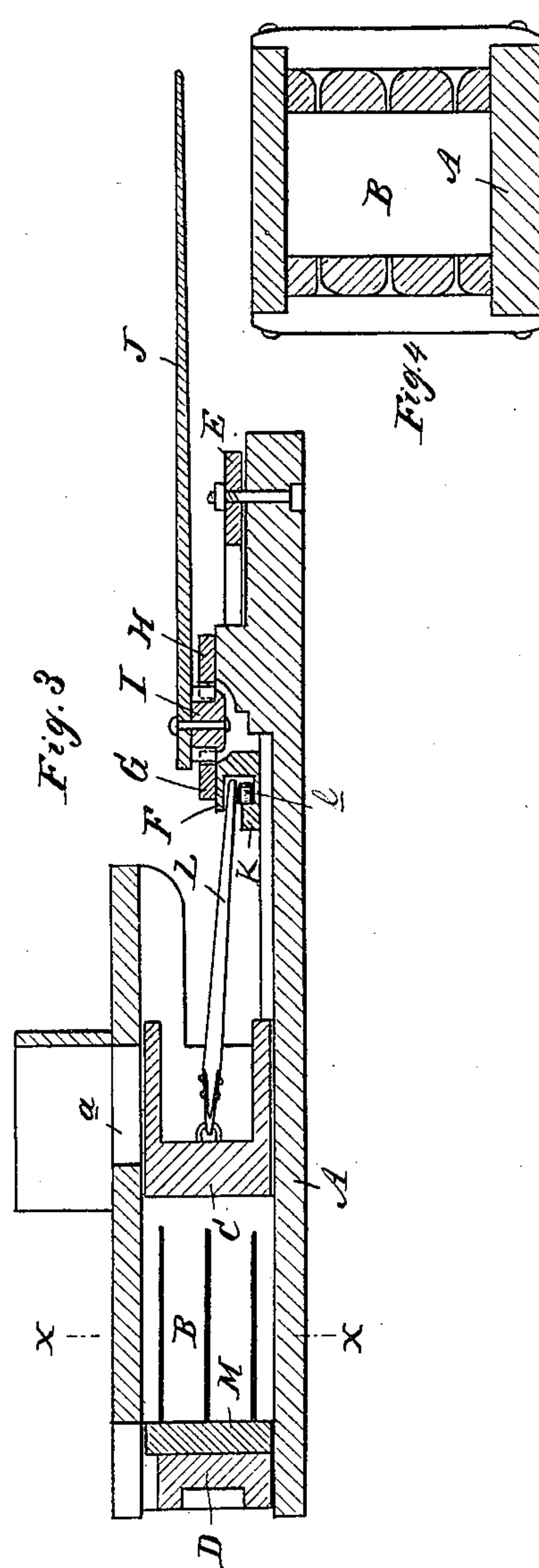
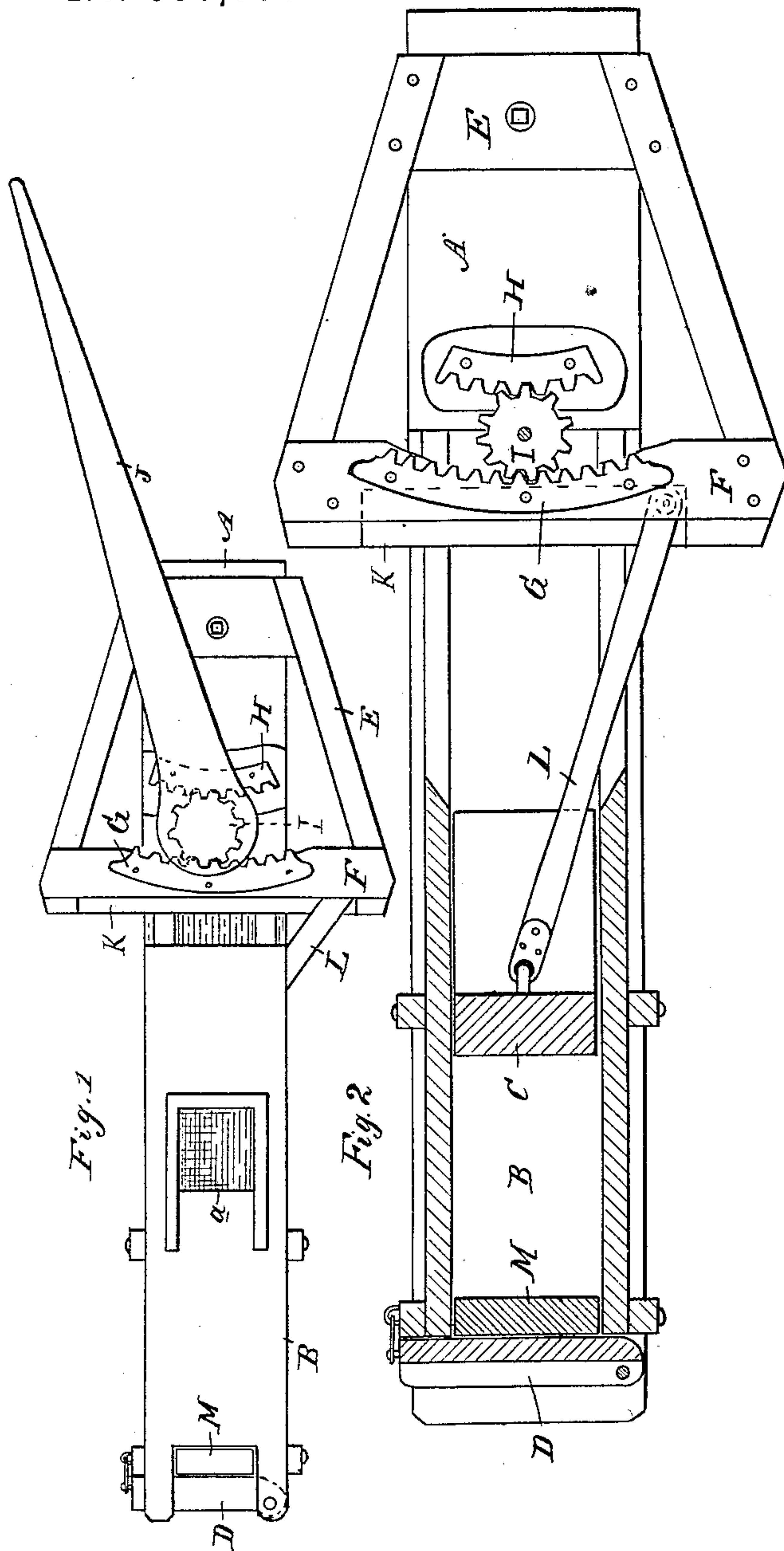
(No Model.)

A. SIMPSON.

HAY PRESS.

No. 350,898.

Patented Oct. 12, 1886.



Attest:
John Schuman.
[Signature]

Inventor:
Abijah Simpson.
by his Atty
Thos. S. Sprague

UNITED STATES PATENT OFFICE.

ABIJAH SIMPSON, OF LENOX, MICHIGAN.

HAY-PRESS.

SPECIFICATION forming part of Letters Patent No. 350,898, dated October 12, 1886.

Application filed May 10, 1886. Serial No. 201,641. (No model.)

To all whom it may concern:

Be it known that I, ABIJAH SIMPSON, of Lenox, in the county of Macomb and State of Michigan, have invented new and useful Improvements in Hay-Presses; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain new and useful improvements in hay-presses; and the invention consists in the peculiar construction and arrangements of parts for operating the plunger, and in the peculiar construction, arrangement, and combination of the various parts, all as more fully hereinafter set forth.

Figure 1 is a top plan of my improved press. Fig. 2 is an enlarged plan of the operating mechanism with the lever removed. Fig. 3 is a vertical central longitudinal section. Fig. 4 is a cross-section on line *x x* of Fig. 3.

In the accompanying drawings, which form a part of this specification, A represents the bottom board, which supports and carries the operating parts.

B is the press box or chamber, which is provided with the follower C, said press-box being provided with the feed-opening *a* in its top and the door D at its discharge end, the sides of the box being slotted for the introduction of the binding-wires, these parts being of any of the known constructions now in use.

To the opposite end of the base A is pivotally secured an oscillating frame, E, the cross-bar F of which has secured to it the rack-bar G, preferably formed upon the segment of a circle.

To the base A is rigidly secured the segmental rack-bar H, both of such rack-bars being designed to engage with the pinion I, secured to the end of the sweep-lever J.

Below the cross-bar F of the frame E is secured a guide-bar, K, between which and the under face of the bar F the head of the connecting-rod L has a free travel, the opposite end of such connecting-rod L being pivotally secured to the plunger C. The head of the rod L carries a roller, *l*, which moves in said guide, as clearly shown in Fig. 3.

In practice, a follower-block, M, is inserted in the press-box, after which hay is fed into this box or baling-chamber in a sufficient and desired quantity, the plunger being retracted and the operating mechanism being in the position shown in Fig. 1. As the lever is moved by hand or power, as in any of ordinary ways, the head of the connecting-rod impinging against the head of the bar K, and the lower end of the under face of the cross-bar F of the frame E, such frame is compelled to move to the opposite side of the machine in a radial line, which compels the connecting-rod to advance the plunger and compress the hay within the baling-chamber until the head of the connecting-rod passes slightly by the longitudinal center of the plunger, at which time the reaction or spring of the compressed hay compels the plunger to fly outwardly, the head of the connecting-rod sliding in the guide-bar K to the opposite corner from which it started of the frame E. Another follower-block is now inserted, the chamber recharged, when a reverse motion of the lever will cause a similar action of the parts in the compressing of the second bale; but the door D is opened and the first bale has in the meantime been wired, so that in compressing the second bale the first bale is forced from the chamber, but it drops out of the way and the door is closed and secured before the follower-block in advance of the second bale reaches the discharge end of the baling-chamber; hence it will be seen that in this construction the only delay in operation necessary is for the time actually employed in feeding the material to be pressed.

What I claim as my invention is—

In a hay-press, the combination of the chamber B, a plunger, C, with the connecting-rod L, oscillating frame E, segmental racks G H, pinion I, lever J, and guide cross-bar K, substantially as described.

ABIJAH ^{his} × SIMPSON.
mark.

Witnesses:

H. S. SPRAGUE,
CHARLES J. HUNT.