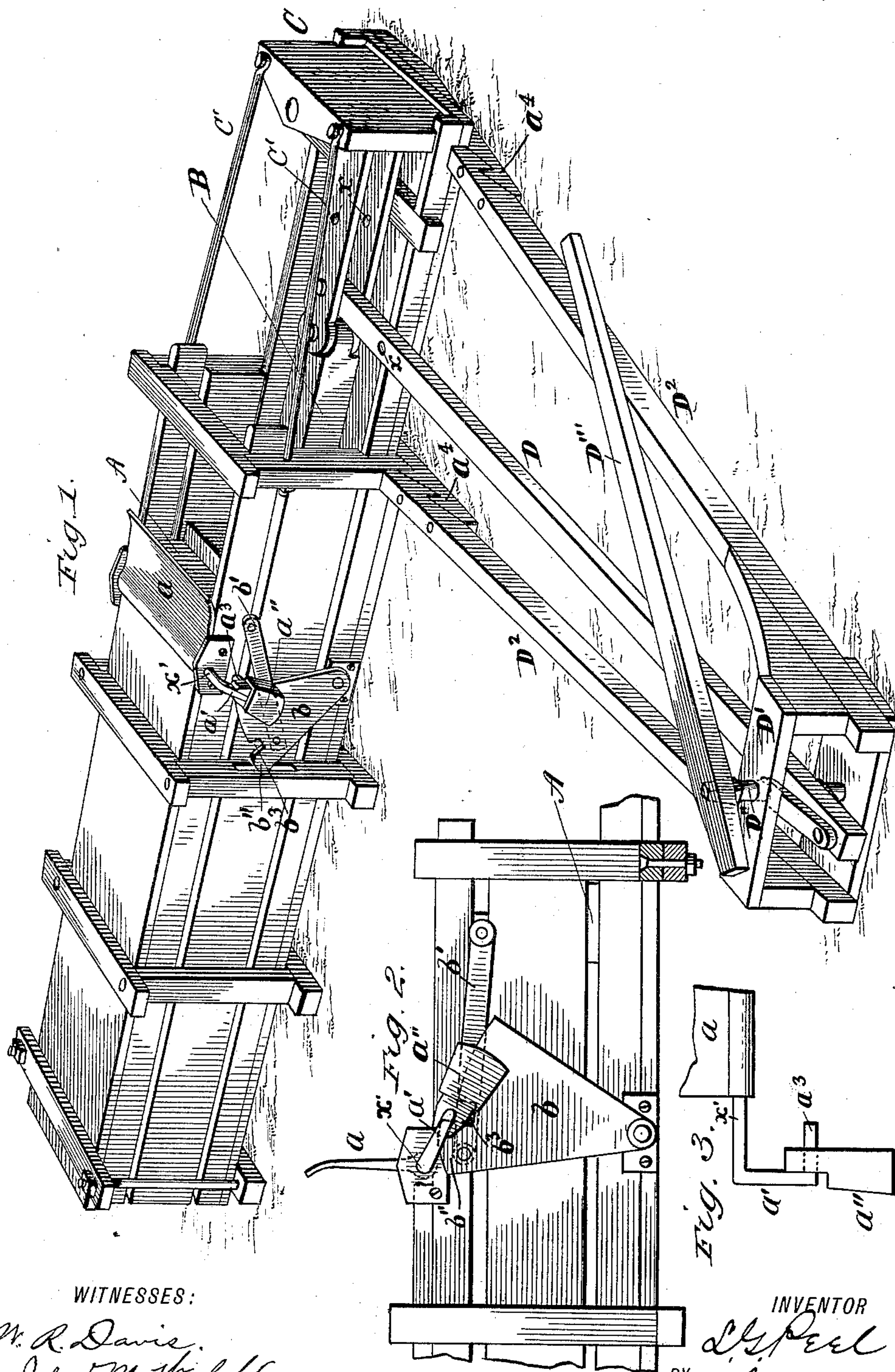


(No Model.)

L. G. PEEL.
HAY PRESS.

No. 466,623.

Patented Jan. 5, 1892.



WITNESSES:

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UNITED STATES PATENT OFFICE.

LAWSON G. PEEL, OF HAZLEHURST, MISSISSIPPI.

HAY-PRESS.

SPECIFICATION forming part of Letters Patent No. 466,623, dated January 5, 1892.

Application filed June 16, 1891. Serial No. 396,497. (No model.)

To all whom it may concern:

Be it known that I, LAWSON G. PEEL, a citizen of the United States, residing at Hazlehurst, in the county of Copiah and State of Mississippi, have invented certain new and useful Improvements in Hay-Presses, of which the following is a specification, reference being had therein to the accompanying drawings.

Figure 1 represents a perspective view of my improved press complete; Fig. 2, a side elevation of a portion of the baling-chamber, showing more clearly the means for packing the hay into the pressing-chamber in front of the follower; and Fig. 3, a detail view showing particularly the weighted arm.

This invention relates to that class of horizontal hay-presses known as "continuous" presses; and it consists in certain novel features of construction and arrangement of parts that will fully hereinafter appear, and be particularly pointed out in the claims appended.

In the drawings, A designates the usual long pressing and baling chamber provided with a suitable feed-opening in the forward end of its upper side. A suitable follower or platen A reciprocates within the pressing-chamber, and is operated by means of a horizontal toggle-lever B, one end of which is connected to the follower and its other end to an abutment or head-block C, mounted upon the end of a continuation of the base or floor of the pressing-chamber, this head-block being further connected to the frame-work of the press by means of brace-rods C'. This toggle is operated by a long pitman D, which is pivoted at its inner end between the two parallel bars that compose the rear arm of the toggle and near the joint thereof, and which is pivotally connected at its outer end to a crank formed on a vertical crank-shaft D'', journaled in a frame D', set off from the side of the machine a suitable distance. This crank-shaft is rotated by means of a horizontal sweep or lever D''', secured to its upper end, this lever being in practice provided with means for connecting a horse to its outer end. The frame D' is rigidly connected to the frame of the press by means of horizontal diverging beams D², the inner ends of which are notched and rigidly bolted to similarly notched extensions a⁴ of the frame-

beams of the press. It will be observed that by this construction each revolution of the sweep will cause the plunger to make one complete stroke, and that the greatest power of the toggle and crank will be obtained just when the maximum force is required—that is, when the plunger is nearing the inner end of its stroke. Should it be desired to obtain two complete operations or strokes of the plunger to each revolution of the horse sweep, this may be done by simply detaching the inner end of the pitman by removing its pivotal pin and connecting it a short distance from its end to a point about midway the length of the outer toggle-arm, an auxiliary set of pin-holes x being formed in the pitman and toggle-arm for the reception of the pivotal pin.

A packing-door a is secured to a transverse shaft x', journaled at the forward edge of the feed-opening, one end of this shaft being extended out beyond its bearing and bent downward, forming an arm a', which carries a depending weight a''. Pivoted to the side of the pressing-chamber near its lower edge is the lower end of a segmental plate b, the upper edge of which is curved and works between the depending weight a'' and the adjacent side of the pressing-chamber. This segment is pivotally connected to the plunger of the press by means of a connecting-rod b', whereby when the plunger is reciprocated the plate will be oscillated in unison therewith. A shoulder or extension b'' is formed on the upper curved edge of the segment near its rear corner, and immediately in front of this shoulder is formed a notch b³. An inwardly-projecting pin or projection a³ is carried by the bent arm a' and adapted to rest normally upon the upper edge of the curved segmental plate and at certain periods of its motion to engage its notch and shoulder, as will presently appear.

It will be observed that the tendency of the weight a'' is to hold the pin a³ down upon the upper edge of the segment, the size of this weight being preferably sufficient to approximately counterbalance the weight of the packing-door. When the plunger is drawn forward ready for an operation, the projection a³ rests upon the upper edge of the extension b'', and the packing-door is thereby

held open. When the proper quantity of hay is thrown into the pressing-chamber in front of the plunger and the latter caused to move into the pressing-chamber, the segment will be moved rearwardly, whereupon the pin a^3 will pass down into the notch b^3 and remain therein until the arm a' has been carried beyond the center and the packing-door has been closed down, when upon the further movement of the segment in a rearward direction the pin will automatically rise out of the notch and ride along on the upper curved edge of the segment. When the action of the plunger is reversed, the pin a^3 will ride along the upper edge of the segment as the latter moves forward until it reaches the notch b^3 , into which it falls and remains until the arm a' is carried forward and the packing-door is partially opened, whereupon it automatically rides upon the extension and completes the opening of the door. It will thus be observed that the hay will be automatically pressed into the pressing-chamber in front of the plunger at each operation of the same, and when the packing-door is closed down it will be impossible for the upward pressure of the confined hay to raise it.

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

1. The combination of a pressing-chamber, a follower fitted thereto, a toggle-lever connected to said follower and to a head-block, a supplemental frame located at one side of

the press, beams notched at their inner ends, said beams connecting the supplemental frame to the press, lateral projections on the side of the press, notched to engage the notches in the connecting-beams, a detachable pitman connected to the toggle, and means for operating it, substantially as described.

2. The combination of a pressing-chamber and plunger working therein, a hinged packing-door arranged across the feed-opening and carrying a depending arm at one end, a pivotal segmental plate provided with a curved and notched upper edge, said upper edge engaging the depending arm of the hinged packing-door, and means for normally keeping said arm in engagement with the curved upper edge of the segmental plate, and a rod connecting the segmental plate to the plunger, substantially as set forth.

3. The combination of a pressing-chamber and plunger working therein, a hinged packing-door arranged across the feed-opening and carrying a bent weighted arm at one end, this arm being provided with an inwardly-projecting pin, a pivotal segmental plate provided with a curved and notched upper edge, and a rod connecting the plate to the plunger, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

LAWSON G. PEEL.

Witnesses:

JNO. B. MAYES,
D. M. MILLER.