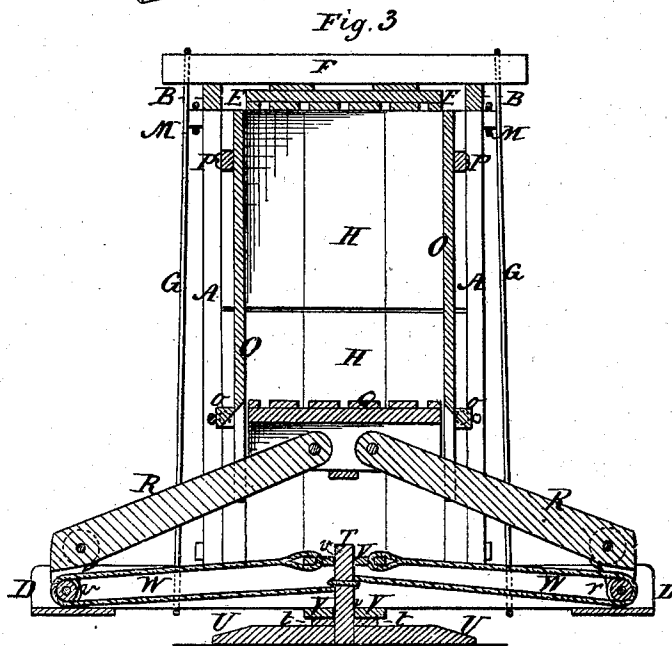
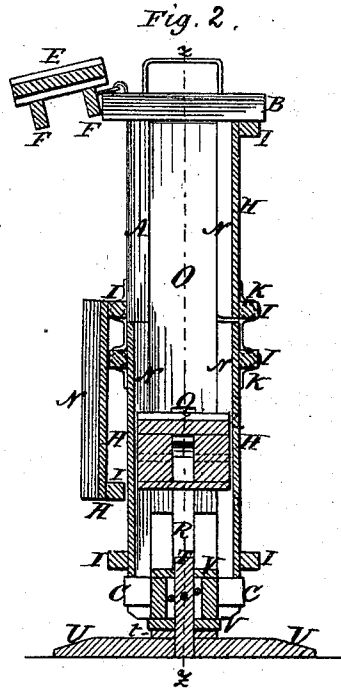
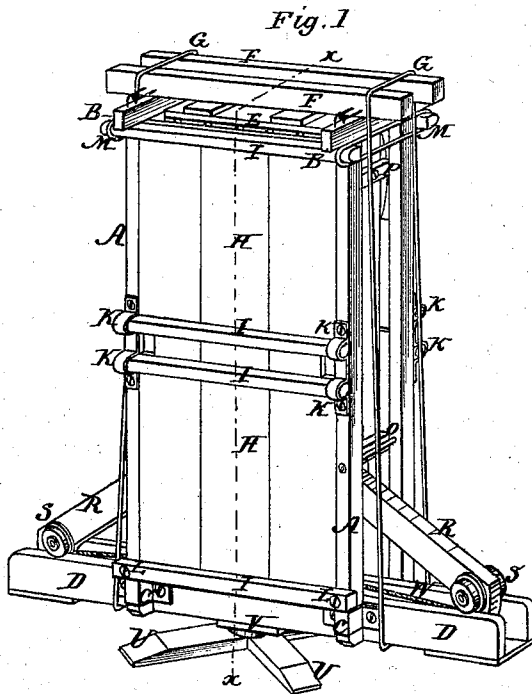


G. W. STEWART.
Hay and Cotton Presses.

No. 138,210.

Patented April 22, 1873.



Witnesses.

Edmund Masson
John R. Young

Inventor.

Geo. W. Stewart, by
Orindle and Co., his Attys

UNITED STATES PATENT OFFICE.

GEORGE W. STEWART, OF ATLANTA, GEORGIA, ASSIGNOR OF THREE-FOURTHS HIS RIGHT TO JESSE A. ANSLEY AND HENRY LEWIS, OF SAME PLACE.

IMPROVEMENT IN HAY AND COTTON PRESSES.

Specification forming part of Letters Patent No. **138,210**, dated April 22, 1873; application filed March 3, 1873.

To all whom it may concern:

Be it known that I, GEORGE W. STEWART, of Atlanta, in the county of Fulton and in the State of Georgia, have invented certain new and useful Improvements in Hay and Cotton Presses; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a perspective view of my improved press as arranged for use. Fig. 2 is a vertical central section of the same on line *xx* of Fig. 1, and Fig. 3 is a like view upon line *zz* of Fig. 2.

Letters of like name and kind refer to like parts in each of the figures.

My invention has for its object an increase in the efficiency and ease of operation of cotton and hay presses; and it consists, principally, in the combination of the pivoted press, the pivotal standard, the platen, and the mechanism employed for raising and lowering the same, substantially as and for the purpose hereinafter specified. It consists, further, in the construction of the frame and the means employed for combining the posts and base, substantially as and for the purpose hereinafter shown and described. It consists, finally, in the device as a whole, when its several parts are constructed and combined in the manner and for the purpose substantially as hereinafter shown and described.

In the annexed drawing, A and A represent four posts secured together in pairs by means of two cross-bars, B, which extend between their upper ends, and at their lower ends fit into suitable sockets C that are attached to or upon the outer faces of two parallel sills, D, which latter are suitably connected together at their ends and form the base of the machine. The upper end of the frame thus constructed is inclosed by means of a cover, E, which is secured to or upon two bars, F, that extend across and are supported by the cross-bars B. One of said bars F is hinged at its outer side and lower edge to or upon the contiguous portions of said cross-bars, so as to permit said cover to be turned upward and outward and

uncover the upper end of the frame. A metal strap or link, G, passing beneath the sills D and over the bars F, holds the cover E in position when closed, and also firmly unites the frame and said base. Horizontally, the frame has about twice and one-half the dimensions in one direction that it has in an opposite direction, and each of its broadest sides is inclosed by means of two panels, H and H', which are constructed of or from vertical boards connected together at their ends by cross-bars I. The cross-bars at the contiguous ends of said panels are rounded upon their projecting ends, and said ends contained within metal straps or boxes K that are secured to or upon the outer faces of the post A, by which arrangement said cross-bars form bearings for and upon which said panels may be turned outward from said posts so as to expose the interior of the frame. The lower panels are secured in place by means of a bolt, L, which passes through each projecting end of the lower cross-bar and through the contiguous portion of the post, while the upper panels are locked in a vertical position by means of two links, M, which pass around and extend between the projecting ends of the upper cross-bars outside of the frame. A cleat, N, having nearly the same dimensions in cross-section as the posts A, and corresponding in length to the like feature of the panels H, is secured to or upon the edge of each, and, when said panels are in place, just fills the space between the same and the inner edge of the contiguous post. The narrow sides of the frame are each inclosed by means of a panel, O, that has a corresponding width, and is pivoted near its lower end between the posts A by means of a cross-bar, P, that extends across and is secured to or upon the outer face of said panel, and is provided upon its ends with journals that fit into corresponding bearings cut within the contiguous faces of said posts and the cleats N of the lower panels. The upper end of each panel O is secured in a vertical position by means of a cross-bar, P, pivoted to or upon its outer face with its projecting ends contained within corresponding recesses cut within the contiguous

portions of the cleats N of the upper panels H. Within the space inclosed by the panels H and O is placed a platen, Q, which loosely fills the same, and is caused to move up or down by means of two bars, R, which are pivoted at their inner ends to or upon the lower side of the same and extending outward in opposite directions are each provided upon their outer ends with two flanged rollers, S, that bear upon and against the upper sides and inner edges of the sills D. By pressing the outer ends of the levers R toward the center, their inner ends and with them the platen will be carried upward.

In order that the levers and platen may be caused to operate when desired the following-described mechanism is employed: A standard, T, is secured in a vertical position within a suitable base, U, and is provided near its lower end with a bearing-collar, *t*, which is circular, and is arranged so as to bring its upper face in a horizontal line or at a right angle to said standard. Upon the upper and lower sides of the sills D at their longitudinal centers are secured two plates, V, within which are provided central openings *v*, which are in a line, vertically, and correspond in size and shape to the like features of the standard T. The press is now placed over the standard T with its weight resting upon and supported by means of the collar U, in which position it may be freely rotated upon and about said standard. A cord, W, is now secured at one end to or upon the upper plate V, and from thence extends outward around a pulley, *r*, that is attached to the lower side and outer end of the lever R; from thence inward through a suitable opening provided in and through the standard T; from thence outward to and around a

second pulley, *r*, which is attached to the opposite lever R; and from thence inward to said plate V to the opposite end of which said cord is now secured. If now the press be rotated upon the standard the cord will be shortened by being wound around the latter, and the free ends of the levers drawn inward, so as to raise the platen. By reversing the motion of the press the platen will be lowered to its normal position once more.

The device thus constructed is simple, cheap, and efficient; is easily taken apart or put together and within a comparatively-small compass; possesses a leverage that fully equals, if not excels, the leverage of any press in use.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

1. The combination of the standard T provided with the bearing-collar *t*, the press-frame shown pivoted upon said standard, the platen Q, the levers R, the rollers S, the pulleys *r*, and the cord W, substantially as and for the purpose specified.

2. The posts A, cross-bars B, and sills D provided with the sockets C, when said parts are constructed and combined substantially as and for the purpose shown and described.

3. The device as a whole, when its several parts are constructed and combined substantially as and for the purpose shown.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of February, 1873.

GEORGE W. STEWART.

Witnesses:

JOHN T. HALL,
J. M. PATTON.