J. P. TAYLOR.

Improvement in Baling-Presses.

No. 131,232. Patented Sep. 10, 1872.

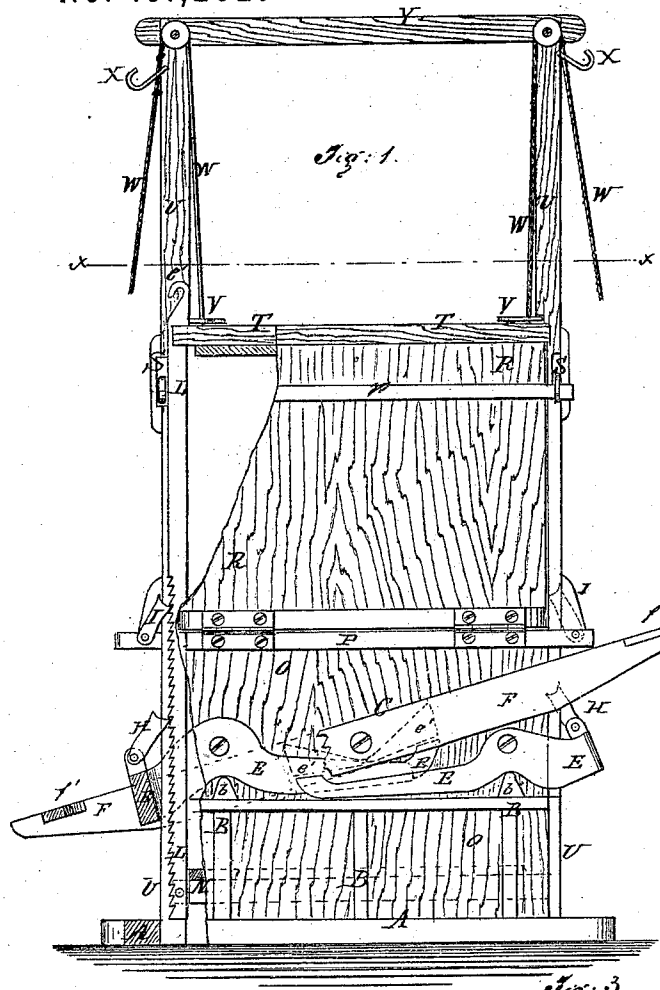

Fig. 1.

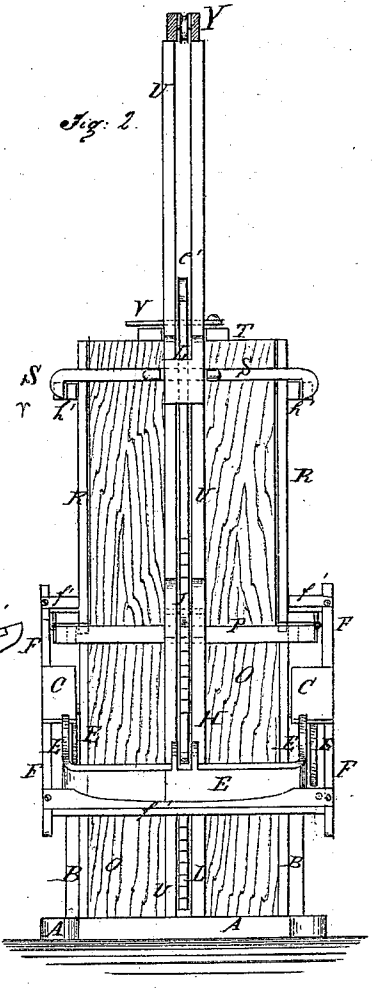

Fig. 2.

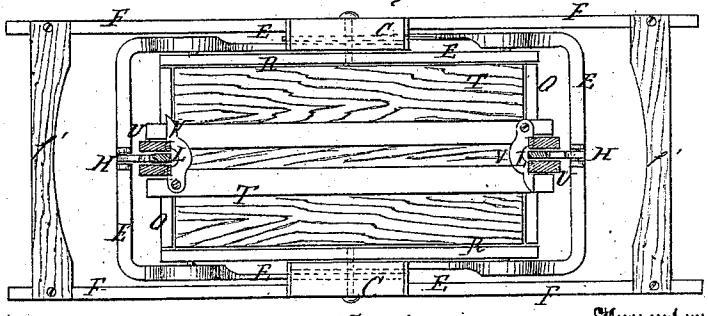

Fig. 3.

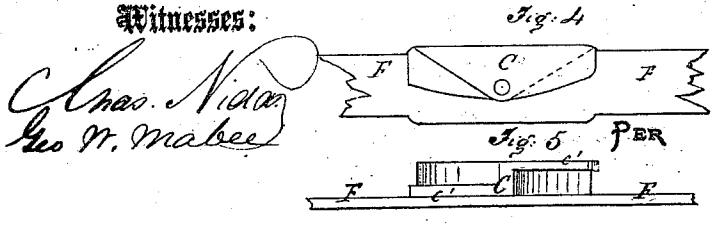

Fig. 4.

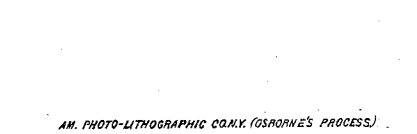

Fig. 5.

Witnesses:

Chas. Nida

Geo. W. Mabee

Inventor:

J. P. Taylor

Per

Attorneys.

UNITED STATES PATENT OFFICE.

JOSEPH P. TAYLOR, OF HUDSON CITY, NEW JERSEY.

IMPROVEMENT IN BALING-PRESSES.

Specification forming part of Letters Patent No. **131,232**, dated September 10, 1872.

Specification describing a new and useful Improvement in Baling-Press, invented by JOSEPH P. TAYLOR, of Hudson City, in the county of Hudson and State of New Jersey.

Figure 1 is a side view of my improved press, parts being broken away to show the construction. Fig. 2 is an end view of the same. Fig. 3 is a top view of the same, partly in section, through the line *x x*, Fig. 1. Fig. 4 is a detail side view of the pivoted yoke or cam to which the operating levers are attached. Fig. 5 is a view of the under side of the same.

Similar letters of reference indicate corresponding parts.

My invention has for its object to improve the construction of the baling-press described in Letters Patent No. 70,649, granted to Joseph P. Taylor and Jackson R. Baker, November 5, 1867, so as to make it more convenient in use and more effective in operation; and it consists in the construction and combination and arrangement of various parts of the press, as hereinafter more fully described.

A is the foundation frame of the press, to the side parts of which upon the outer sides of the baling-box, are attached the side frames B. C are yokes, which are pivoted to the outer sides of the baling-box or to supports connected with the side frames B. Upon the opposite or diagonal corners of the under side of the yokes C are formed projections or cams *c'*, having smooth inclined faces against which the ends of the levers E rest. To the outer sides of the yokes C are attached the levers F, the outer ends of which, at each end of the press, are connected by a cross-bar, *f'*, which serve as handles in operating the press. The levers E are made in substantially the shape shown in Figs. 1, 2, and 3—that is to say, they are bent into U-shape—to pass around the ends of the baling-box, and their ends or long arms project along the sides of said baling-box, overlapping each other, as shown in Figs. 1, 2, and 3. The ends of the levers E project upward so that they may pass beneath the yokes C, and operate upon the cams or projections *c'* furthest from the pivoting-points of said levers E, as shown in Fig. 1. The levers E are pivoted to the sides of the baling-box near its ends, or to supports attached to the frames B, or to fulcrums *b'* attached to or formed upon said frames B. To the center of the middle parts of the levers E that cross the ends of the baling-box, are pivoted the lifting-pawls H, which are so formed and pivoted that their own weight will hold them forward against the teeth of the rack-bars upon which they operate. I are the holding-pawls, which are pivoted to the end posts of the press or to the baling-box frame, and which are so formed and pivoted that their own weight may hold them forward against the teeth of the rack-bars to hold the said rack-bars in place while the lifting-pawls H are moved down to take another hold. L are the rack-bars, upon the outer sides of the lower parts of which are formed the teeth to receive the engaging ends of the pawls H I, as shown in Figs. 1, 2, and 3. The lower ends of the rack-bars L are pivoted to the ends of the follower N, so that the said rack-bars may retain their vertical positions, however much the follower N may incline as its ends are alternately raised by the action of the levers and pawls. The rack-bars L move up and down in slots in the end posts U of the press. The upper surface of the follower N is grooved for convenience in passing the bands around the bales when sufficiently compressed, and it moves up and down through the vertical baling-box O, which is surrounded by a strong frame-work, P. The edges of the follower N may be furnished with friction-wheels or rollers to diminish the friction as the said follower moves up through the closed baling-box O. R are the doors, which form the sides of the upper part of the box O, and which are hinged at their lower edges to the frame P. The lower edges of the doors R project a little below the bars to which the hinges are attached, as shown in Fig. 2, said projecting edges entering recesses formed for their reception at the inner edges of the frame P to relieve the hinges from the strain. The upper parts of the doors R are secured in place by the bars S, which extend entirely across the ends of the baling-box O, and which have hooks or catches formed upon their ends to hook or catch upon the ends of the bars *r'*, which extend longitudinally across the upper parts of the said doors. By this construction the hook or catch-bars S and the bars *r'* form a band or frame surrounding the baling-box,

and which receives and sustains the side pressure in compressing the bale. The bars S pass through slots or keepers formed in or attached to the slotted end posts U, and are kept from longitudinal movement by projections or stops formed upon or attached to their outer sides. T is the cover of the baling-box O, and which slides up and down upon the end posts U. The cover T is made heavy so that as it is allowed to drop it may force the material placed in the box O downward, packing it more closely into said box. The lower surface of the cover T is grooved for convenience in applying the bands by which the bale is secured, and the said cover is held down and secured in place by the lock-bars V, which are pivoted at one end to the side part of the ends of the cover, so that they may be swung into grooves in the inner sides of the end posts U. The middle parts of the pivoted lock-bars V are notched or curved so as not to interfere with the movements of the rack-bars L. W are cords, the ends of which are attached to the end parts of the cover T, and pass over pulleys pivoted to the upper ends of the end posts U. To the cords W are attached hooks X, which, when the cover T is raised, may be hooked into hooks or eyes *l'* formed upon the upper ends of the rack-bars L to hold the said cover securely while the baling-box O is being filled. The lower ends of the end posts U are securely attached to the end parts of the foundation plate or frame A. By this construction the base frame or plate A, end posts U, and cover T form a band or frame passing vertically around the press and sustaining the strain of the pressure. The upper ends of the end posts U are connected by a bar, Y, which sustains them against the lateral pressure. By this arrangement the operating parts of the press are all located upon the outside of the baling-box O, so as to allow the baling-box to be close down to the foundation frame A, enabling the press to be made much lower and making it much more convenient than the old press.

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

1. The arrangement of the levers F *f'*, yoke C *c'*, levers E, lifting-pawls H, holding-pawls I, and toothed racks L with respect to each other and the base-frame A, side frames B, follower N, slotted end posts U, and baling-box O, substantially as herein shown and described, and for the purpose set forth.

2. The combination of the hooks X and hooks or eyes *l'* formed upon the upper ends of the rack-bars L with the cords W, cover T, slotted end posts U and rack-bars L, substantially as herein shown and described, and for the purposes set forth.

3. The pivoted lock-bars V, notched or curved upon their outer sides or edges, in combination with the cover T, notched or grooved end posts U and toothed rack-bars L, substantially as herein shown and described, and for the purpose set forth.

JOSEPH P. TAYLOR.

Witnesses:
THOMAS ALDRIDGE,
JOS. H. ALDRIDGE.