W. B. DUNCAN.

BALING PRESS.

No. 184,514. Patented Nov. 21, 1876.

Fig. 2.

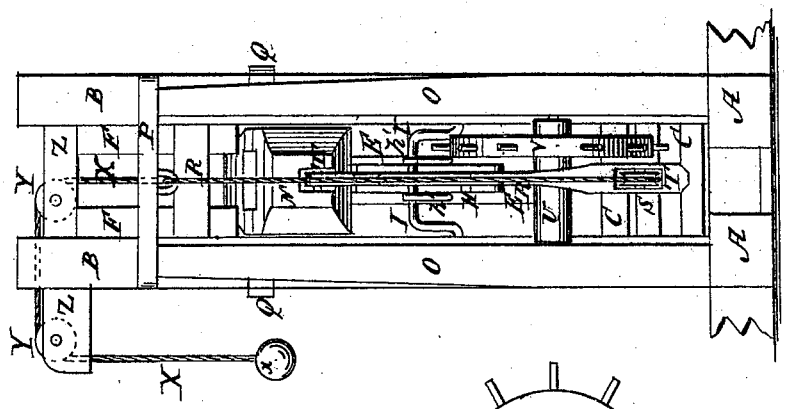
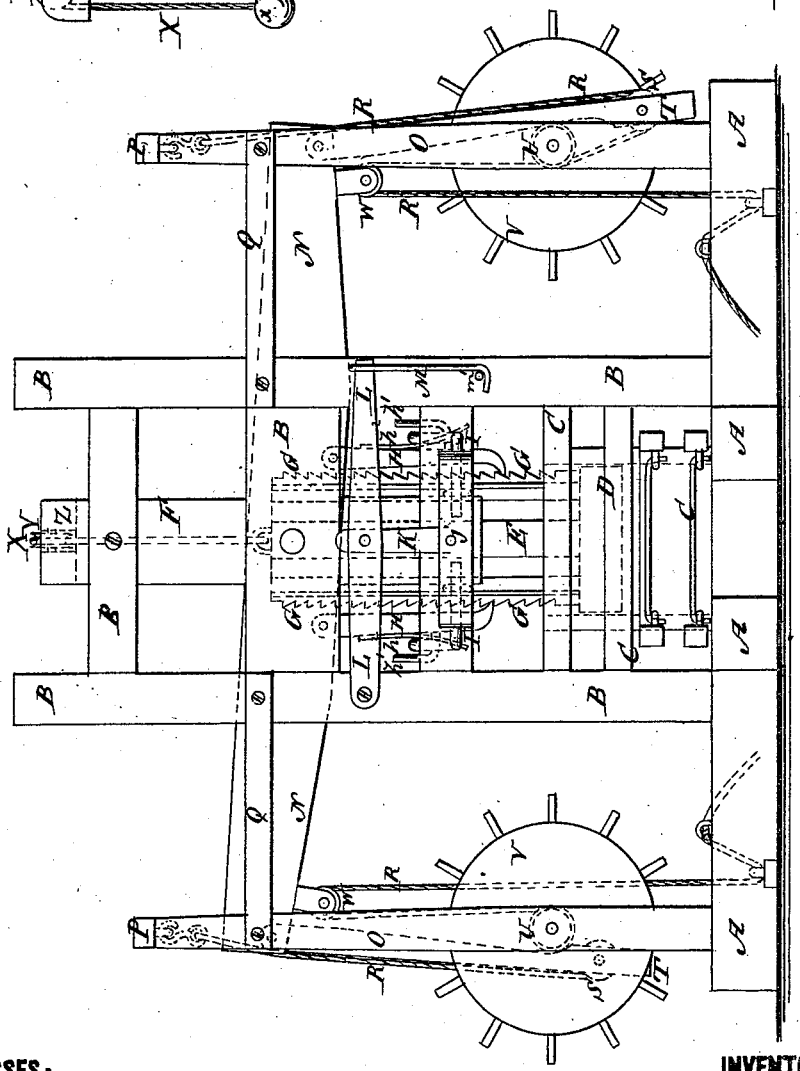


Fig. 1.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM B. DUNCAN, OF HUNTINGDON, TENNESSEE, ASSIGNOR TO HIMSELF AND A. F. ESTES, OF SAME PLACE.

IMPROVEMENT IN BALING-PRESSES.

Specification forming part of Letters Patent No. **184,514**, dated November 21, 1876; application filed September 30, 1876.

To all whom it may concern:

Be it known that I, WILLIAM BLOUNT DUNCAN, of Huntingdon, county of Carroll and State of Tennessee, have invented a new and Improved Baling-Press, of which the following is a specification:

Figure 1 is a side view of my improved baling-press. Fig. 2 is an end view of the same.

The object of this invention is to furnish an improved press for baling cotton, hay, and other articles required to be compressed into bales, which shall be simple in construction, convenient in use, easily operated, and powerful in operation.

The invention consists in the combination of the pawls, springs, hooks, crank-rods, pivoted bars, and lever, with the main lever, the ratchet-bars attached to the shaft of the follower, and with the baling-box frame of the press.

Similar letters of reference indicate corresponding parts.

A represents the base-frame. B is the upright or baling-box frame. C is the baling-box, which is attached to the lower part of the frame B, and the lower part of which is detachable to allow the bale to be removed. D is the follower, which is attached to the lower end of the shaft E, which slides up and down between guide-bars F attached to the upper part of the frame B. To the sides of the shaft E are attached metallic ratchet-bars G, upon the teeth of which the pawls H take hold. Upon the outer sides of the lower or free ends of the pawls H are formed hooks h^1 to receive the cranks of the rods I, so that the pawls H may be withdrawn from the ratchet-bars G by turning the rods I. Upon the ends of the rods I are formed crank-arms, which pass through keepers attached to the inner side of the bar J. The bar J is pivoted at its center to the lower end of the bar K, the upper end of which is pivoted to the lever L. The lever L is pivoted at one end to a post of the frame B, and its other end projects so that it may be conveniently operated. To the free end of the lever L is attached a hook, M, to hook upon pins m^1, or into eyes attached to the frame B, to fasten it in position when adjusted to hold the pawls H in contact with, or away from, the ratchet-bars G. h^2 are small springs attached to the outer sides of the pawls H and pressing against the crank-rods I, to allow said pawls H to yield sufficiently to pass over the teeth of the ratchet-bars G as the said pawls are raised. The pawls H are pivoted to the lever N, which has a hole formed through its center for the passage of the shaft E of the follower D. The lever N may be made of any desired length, and is pivoted, at its center, to the side timbers of the frame B. The ends of the lever N work between two standards, O, attached, at their lower ends, to the ends of the base-frame A, connected at their upper ends by a cross-bar, P, and strengthened in position by the brace-bars Q, the outer ends of which are attached to the said standards, and their inner ends are attached to the posts of the frame B. To the centers of the cross-bars P are attached the ends of the ropes R, which pass around pulleys S pivoted to the lower ends of the hanging arms T. The upper ends of the arms T are pivoted to the ends of the lever N. From the pulleys S the ropes R pass to, and make several turns around, the shafts U, which work in bearings attached to the standards O, and to which are attached large hand or pilot wheels V. From the shafts U the ropes R pass to and around pulleys W pivoted to the lever N near its ends. From the pulleys W the ropes R pass down, and are secured to the base-frame A. If desired, the ropes R may be secured to the ends of the lever N, instead of being passed around the pulleys W, and attached to the base-frame A. By this construction the arms and pulleys T S keep the ropes R taut as the ends of the lever move downward. To the upper end of the shaft E of the follower D is attached the end of a rope, X, which passes over guide-pulleys Y pivoted to a cross-bar, Z, attached to the top of the frame B. The rope X may have a weight, *x*, attached to its free end, to balance or partly balance the follower D, so that when the pawls H have been withdrawn from the ratchet-bars G, the follower D may be readily drawn up out of the way by pulling upon the rope X.

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

The combination of the pawls H, springs h^2, hooks h^1, crank-rods I, bars J K, and lever L, with the lever N, the ratchet-bars G, attached to the shaft E of the follower D, and with the baling-box frame B of the press, substantially as herein shown and described.

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