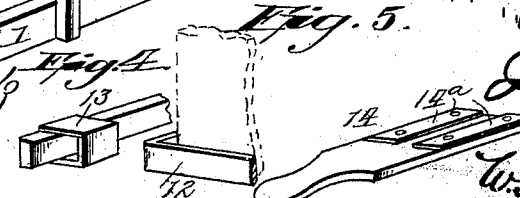
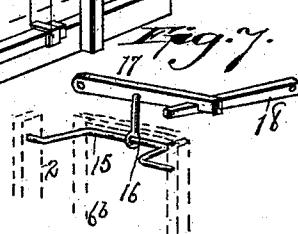
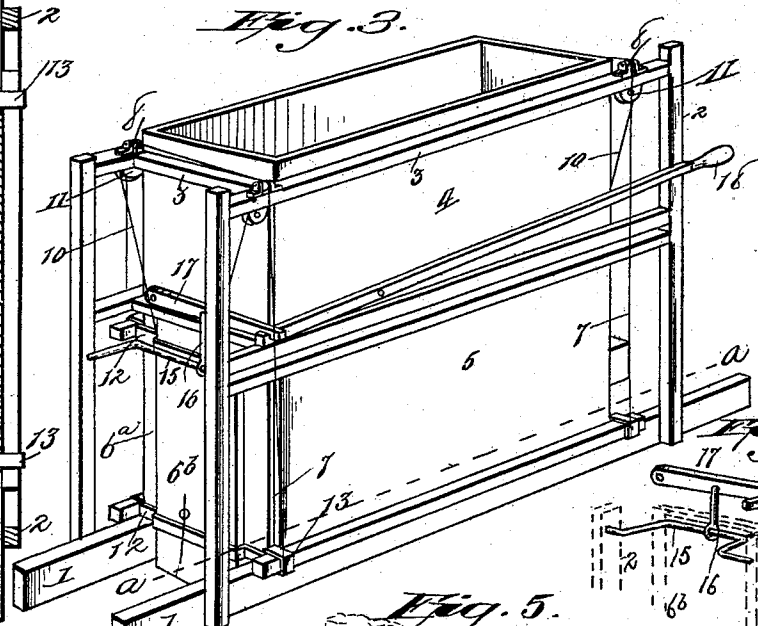
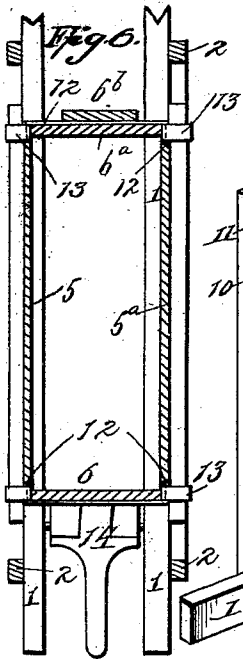
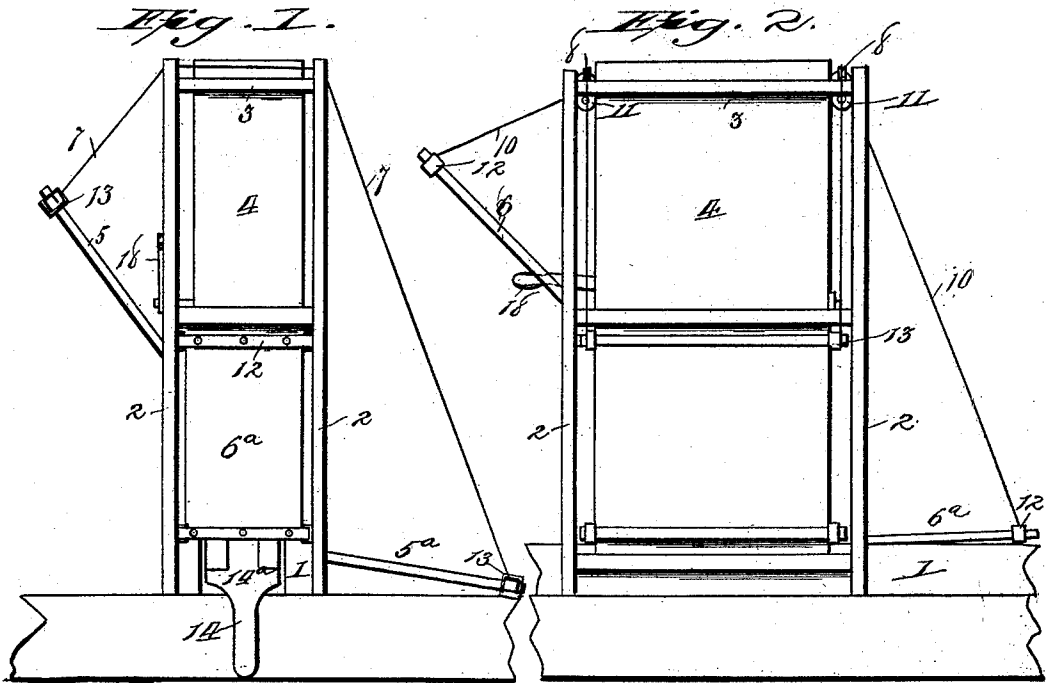


(No Model.)

J. ROWE.
BALING PRESS.

No. 463,076.

Patented Nov. 10, 1891.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOSEPH ROWE, OF WOODS, TEXAS.

BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 463,076, dated November 10, 1891.

Application filed August 25, 1890. Renewed August 21, 1891. Serial No. 403,310. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH ROWE, a citizen of the United States, residing at Woods, in the county of Panola and State of Texas, have invented certain new and useful Improvements in Baling-Presses; and I hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention consists in certain new and useful improvements in baling-presses, which will be hereinafter fully described and claimed.

Referring to the accompanying drawings, Figure 1 is an end view of my new and improved baling-press, showing the side doors open. Fig. 2 is a side view of the same, showing the end doors open. Fig. 3 is a perspective end view of the opposite end to that shown in Fig. 1. Figs. 4 and 5 are detail views, which will be hereinafter described. Fig. 6 is a sectional view taken on line *a a* of Fig. 3. Fig. 7 illustrates in detail the locking-frame 15 and its connections.

The same numerals of reference indicate corresponding parts in all the figures.

Referring to the several parts by their designating-numerals, 1 1 indicate the parallel bottom beams, 2 the uprights, and 3 the cross-pieces of the supporting-frame, within which the press-box is mounted. The upper part 4 of this vertical box is of the usual construction, the lower part of the box being closed by the swinging side doors 5 5^a and end doors 6 6^a. One of the side doors 5 is pivoted or hinged at its upper end, so as to swing up when it is opened, while the opposite side door 5^a is pivoted at its lower end, so as to swing down when opened. The lower end of the side door 5 has secured to it the ends of two ropes 7 7, which pass over grooved pulleys 8 on the top of the supporting-frame and have their other ends secured to the upper end of the opposite side door 5^a. It will be seen that by this construction and arrangement, by taking hold of the upper cross-bar of the side door 5^a and pulling downward, this door will swing down, and at the same time, through the connecting-ropes 7 7, the

lower end of the opposite door 5 will be raised. In like manner the door can be easily closed by pulling down on the raised end of the door 5, thus raising the opposite door 5^a at the same time to its closed position. It will be seen that the opposite doors will thus counterbalance each other as they swing up and down, causing these heavy doors of the press to move very easily, so that a child can open and close them with very little effort.

6 6^a indicate the pivoted end doors of my press, the door 6 being pivoted at its upper end, so as to swing up when it is opened, while the opposite end door 6^a is pivoted by an extension 6^b at its lower end, so as to swing down when opened. The lower end of the door 6 has secured to it one end of a rope 10, which passes up and over grooved pulleys 11 11, and is secured at its other end to the upper end of the opposite end door 6^a. These end doors will thus operate simultaneously in precisely the same manner as the side doors 5 5^a. To the upper and lower ends of both the end doors are secured the transverse metal latch-strips 12, the free ends of which extend out beyond the sides of the doors and then project in at right angles. Upon the projecting ends of the upper and lower cross-bars of the side doors are bolted the metal stirrups 13, which are so arranged that when the side doors have been closed and the end doors are swung shut the ends of the latches 12 will enter the inner part of the stirrups 13, thus locking the side doors firmly in their closed position. The end door 6 is locked in its closed position by a pivoted foot-lever 14, which is pivoted at such a point that the weight of its outer end will keep its inner end normally lifted, so that when the door 6 swings down into its closed position its lower end will slide over the inner end of the lever 14, which then rises and prevents the door from opening until the lever is depressed at its inner end by the operator's foot. The inner end of the foot-lever 14 is re-enforced by the metal strips or shoes 14^a to prevent wear. The opposite end door 6^a is locked by a U-shaped locking-frame 15, which is pivoted at its ends between the uprights 2 and is connected by a link 16 with a short pivoted bar 17. The outer end of this

bar connects with a hand-lever 18, the handle end of which is extended, so that the operator standing with his foot on the locking-lever 14 can operate the locking-frame 15, and thus
5 unlock both end doors at the same time.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of my invention will be readily understood.

10 With the old form of press-doors heretofore used the doors are hinged either both at their lower ends of both at their upper ends, making them heavy and difficult to handle, there being also a danger of their falling with
15 great force and injuring the operator as well as the press. My invention overcomes all these difficulties. The doors, counterbalancing each other, rise and swing easily and smoothly, can be raised and lowered with little
20 effort by even a child, and, owing to the weight of one door counterbalancing that of the opposite door, there is no danger of their falling suddenly or with any force to injure either the operator or the press.

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

1. A vertical baling-press having the doors on its opposite sides hinged, respectively, one
30 at its upper and the other at its lower end, and having their free ends connected by a rope passing over grooved pulleys, so that the weight of one door will counterbalance that of the opposite door with which it is con-

nected and the doors will open and close si- 35
multaneously, substantially as set forth.

2. The combination, in a baling-press, of the opposite side doors, one of which is pivoted at its upper and the other at its lower end, the stirrups 13, secured on the end bars 40 of the said doors, the rope connecting the free ends of said doors, the end doors, one of which is pivoted at its lower end and the other at its upper end, the latches 12, secured to the said end doors, and the rods connecting their 45 free ends, substantially as set forth.

3. The combination, in a baling-press, of the side doors having the end stirrups pivoted one at its upper and the other at its lower end and having their free ends con- 50 nected by a rope passing over grooved pulleys on the press-frame, the end doors having the end latches pivoted one at its lower and the other at its upper end and having their free ends connected by a rope passing over grooved 55 pulleys on the press-frame, the pivoted foot-lever, and the locking device for the opposite end door, consisting of the U-frame 15, the connecting-link 16, the short lever 17, and the extended hand-lever 18, substantially as set 60 forth.

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

JOSEPH ROWE.

Witnesses:

GEO. A. NELSON,
J. W. KNIGHT.