

J. OSBORN.
FRUIT BOX PRESS.
APPLICATION FILED JUNE 25, 1909.

958,163.

Patented May 17, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

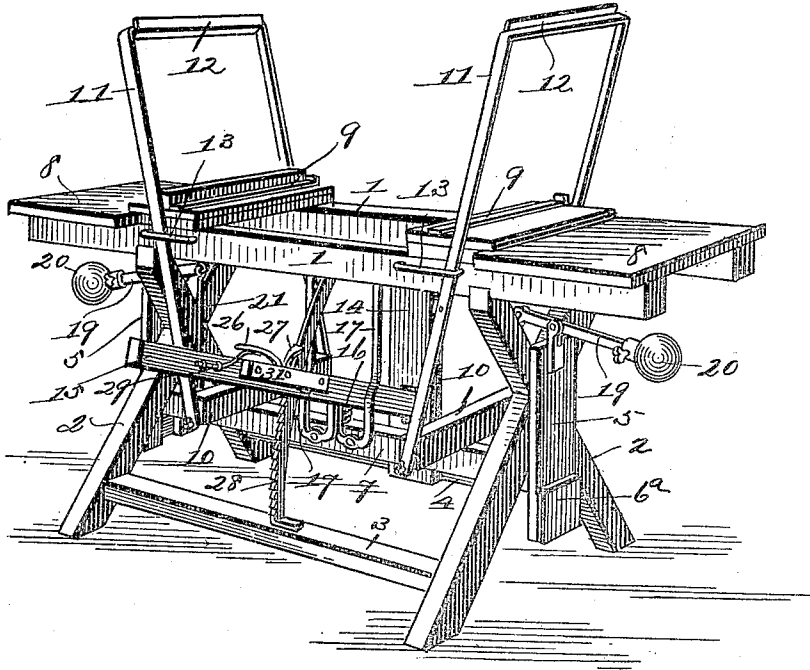
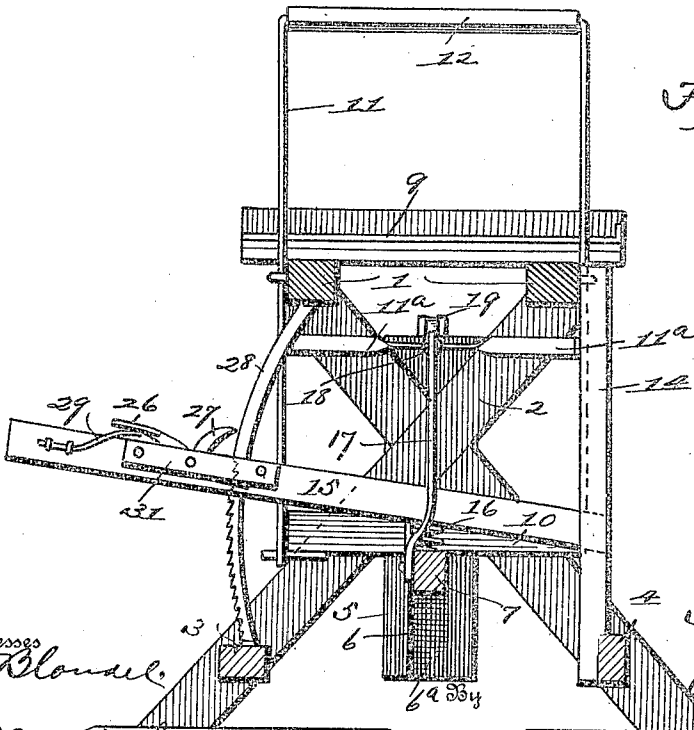


Fig. 2.



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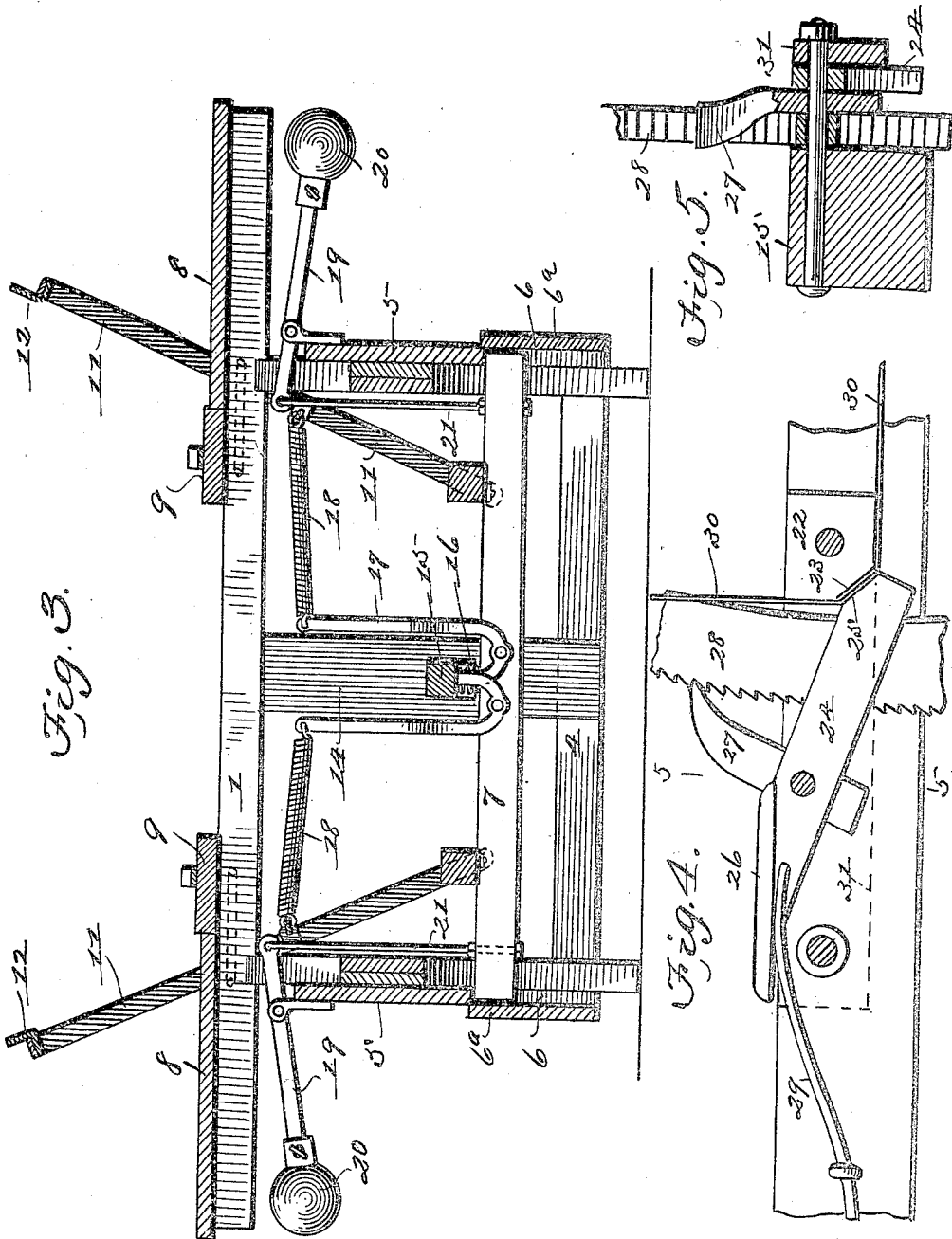
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UNITED STATES PATENT OFFICE.

JOSIAH OSBORN, OF LOS ANGELES, CALIFORNIA.

FRUIT-BOX PRESS.

958,163.

Specification of Letters Patent.

Patented May 17, 1910.

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To all whom it may concern:

Be it known that I, JOSIAH OSBORN, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Improvement in Fruit-Box Presses, of which the following is a specification.

This invention relates to a fruit box press and is designed as an improvement upon the press for which application was made by me September 21, 1905, Serial Number 279,450 and allowed May 12, 1906. These improvements are especially designed for the purpose of employing the device in connection with boxes in which oranges and lemons are shipped as well as boxes for apples.

The invention consists of the novel features hereinafter fully described, pointed out in the claims and shown in the accompanying drawings, in which,

Figure 1 is a perspective view of the press. Fig. 2 is a vertical section through the supporting frame and certain cross bars showing the press mechanism in side elevation. Fig. 3 is a longitudinal vertical section through the press. Fig. 4 is a detail enlarged elevation of a steel tape holding mechanism. Fig. 5 is a section on the line 5-5 of Fig. 4.

The press consists of a horizontal rectangular frame 1, supported by X-shaped legs 2, which carry lower front bars 3, and rear bars 4. Vertical plates 5 are carried by the supporting legs 2, and the lower portions of these plates are slotted as shown at 6, and the slotted portions are covered by blocks 6^a thereby converting the slots 6 into recesses which form guide-ways for a horizontally arranged and vertically movable bar 7.

Upon the frame 1 are placed metal plates 8 which form end platforms and guides or tracks 9, which receive the boxes and which are held in place by the plates 8. By sliding the plates and tracks toward or away from each other boxes of various lengths may be accommodated. The bar 7 carries cross-pieces 10 arranged transversely with respect to the bar and to the frame 1, and bails 11 have their ends pivotally connected to the ends of the cross pieces 10. The bow portions of these bails are provided with flanges 12 adapted to engage the box top. These bails are guided in their swinging movement by guide brackets 13, carried by the sides of the frame 1. A vertical stand-

ard 14 is arranged centrally upon the rear side of the frame and a foot lever 15 is pivotally connected to said standard and the foot lever 15 bears upon a coil spring 16 mounted upon the bar 7, midway the ends of the said bar. Metal bars 17 are curved adjacent their ends and the bow portions of the curves are pivotally connected to the front side of the bar 7 at points adjacent the foot lever 15, the curved end portions of the bars extending upwardly under said lever and in engagement with it.

The upper ends of the bars 17 are connected to coil springs 18 and the opposite ends of these springs are connected respectively to the strips 11^a carried by the bails 11. An arm 19 is pivotally connected to each plate 5 and upon each arm is held an adjustable weight 20 and the inner end of each arm is connected by a link 21 with the bar 7. It will be obvious that the weighted arms 19 will therefore serve to hold the bar 7 in an elevated position and to return it to said position after it has been depressed and I prefer to use weights for this purpose rather than springs on account of the certainty of their action and their durability.

Upon the foot lever 15 is pinned a block 22 which has one corner beveled as shown at 23 and I also pivot upon the foot lever a supplemental lever 24 which has a beveled end portion 25 adapted to engage or coact with the beveled portion 23 of the block 22. A foot treadle 26 is carried by the outer end of a supplemental lever 24 and a dog is also pivotally connected to the foot lever being carried preferably upon the same pivot pin which pivots the supplemental lever 2 and the dog 27 engages a curved rack bar 28 the upper end of which is secured to the frame 1 and the lower end of which is secured to the front bar 3. A spring 29 secured adjacent one end to the lever 15 presses upwardly upon the under side of the treadle 26.

The block 22 and supplemental lever 24 together form a grip in which are held the end portions of a steel tape 30 usually nailed upon lemon boxes, or other shipping vessels. In order that the spring 29 and the tape 30 will not become displaced by lateral movement away from the side of the lever 15, a block 31 is arranged upon the side of the lever as shown in Figs. 1, 2 and 5 and also as shown in dotted lines in Fig. 4, the said block being spaced from the foot lever 15.

In operation the box to which the lever is to be nailed and tape applied is placed upon the track 9 and the foot lever 15 depressed. This forces downwardly the bar 7 and through the action of the rod 17 and springs 18, the bails 11 have their upper ends swung toward each other and in position to engage the box top upon further downward movement of the bar 7, due to the continued pressure upon the foot lever 15. It will be obvious of course that the depression of the foot lever and bar 7 will also produce a vertical movement upon the part of the bails 11 lowering the said bails as they swing inward, the bails swinging inwardly however, sufficiently far to be in vertical alinement with the box top before lowering sufficiently to engage the same. The ends of the tape after the same has been passed around the boxes are inserted between the block 22 and the supplemental lever 24 and are gripped therein through the pressure of the foot upon the treadle 26. The lever 15 is held in depressed position by the dog 27 engaging the ratchet 28, the spring 29 serving to hold the dog in engagement with said ratchet.

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

1. A device of the kind described compris-

ing a frame, adjustable tracks to receive boxes upon said frame, a vertical movable bar arranged below the frame, the pivoted foot lever bearing upon the bar, cross pieces carried by the bar, bails pivoted at their ends to the ends of the cross pieces and having their bow portions flanged, means for lifting the bar after it has been lowered by the depression of the foot lever, means for locking the foot lever in a lowered position, means carried by the bar for swinging the bails inwardly independent of their pivotal connection to the bar, and gripping means carried by the foot lever to engage the ends of the tape.

2. In a device of the kind described, pivoted bails, a depressible foot lever operating said bails, a block carried by the foot lever, a supplemental lever pivoted to the foot lever, the block and supplemental lever co-acting to form a gripping device, a rack bar, a dog pivoted to the lever and engaging said rack bar, and a spring carried by the lever and bearing upon the supplemental lever as and for the purpose set forth.

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Witnesses:

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