No. 837,497. PATENTED DEC. 4, 1906.

J. OSBORN.

FRUIT BOX PRESS.

APPLICATION FILED SEPT. 21, 1906.

Fig. 1.

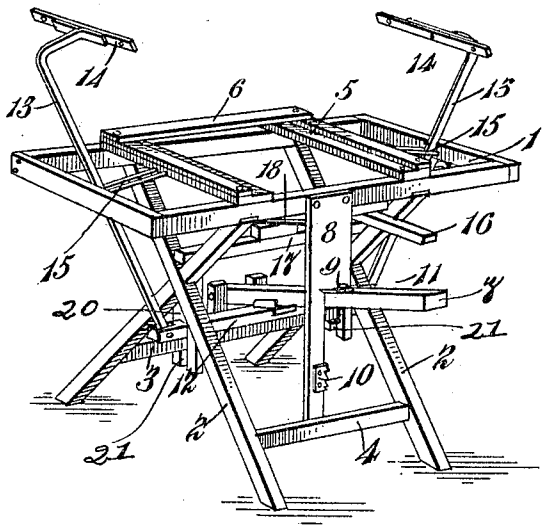


Fig. 2.

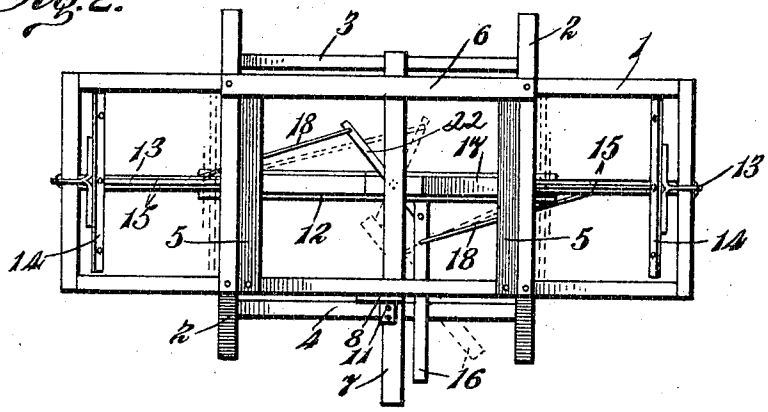
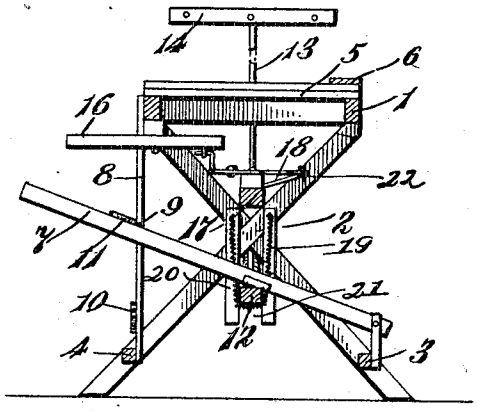


Fig. 3.



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JOSIAH OSBORN, OF MONTROSE, COLORADO.

FRUIT-BOX PRESS.

No. 837,457. Specification of Letters Patent. Patented Dec. 4, 1906.

Application filed September 21, 1905. Serial No. 279,450.

To all whom it may concern:

Be it known that I, JOSIAH OSBORN, a citizen of the United States, residing at Montrose, in the county of Montrose and State of Colorado, 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 designed to hold the lids of the box and then to force the said lids down into position for nailing and hold them until the nailing operation has been completed.

The invention is especially designed to be employed in connection with the boxing of apples, but can be employed in connection with the shipping of other kinds of fruit by simply varying the sizes of the parts to accommodate the changes in the sizes of the boxes.

In boxing apples it is customary to fill the boxes to a height of about two inches above the upper edge of the box. The apples are then covered with a layer of paper and a lid is placed in position over the paper and is forced down and nailed to the box. It has been customary for the men to hold the lid with one hand and to operate a lever with the other hand; and the object of my invention is to allow the free use of both hands for the purpose of holding and nailing the lid in position.

The invention consists of the novel features of construction and combination of parts 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 top plan view. Fig. 3 is a vertical transverse section.

In the drawings, Fig. 1 shows the device in position to receive a box.

In constructing my device I employ a frame 1, supported by cross-legs 2, the said supporting cross-legs being connected by a rear cross-piece 3 and a front cross-piece 4. Upon the frame 1 is arranged a suitable track 5, transverse to the frame and provided at its rear end with a buffer 6. A foot-lever 7 is pivoted at its rear end to a block carried by the cross-piece 3, and a vertically-arranged bar 8 is secured upon the front of the frame and connected at its upper end to the front of the frame 1 and at its lower end to the cross-piece 4. This bar is cut away on one side adjacent its lower portion and forms a guide for the foot-lever 7, and a shoulder 9, formed by cutting away a side of the bar, acts as a stop and limits upward movement of the foot-lever. Below the shoulder a metal rack 10 is secured on the bar, and a metal plate 11 is placed on the foot-lever, the edge of the plate projecting beyond one side of the lever and in position to engage the teeth of the rack 10. The foot-lever has sufficient play to permit the plate 11 being readily disengaged from the rack 10 by pressure of the foot.

A bar 12 is supported adjacent its ends by coil-springs 19, which are passed under the bar 12 and secured at their upper ends to vertically-arranged boards 20. These boards are slotted at their lower ends, as shown at 21, to form guideways for the end portions of the bar 12. The foot-lever 7 rests and works on this bar 12 as a fulcrum-point, both being provided with suitable wear-plates.

Upwardly-extending clamping-levers 13 are pivoted at their lower ends to the end portions of the bar 12. These levers are bent inwardly adjacent their upper ends and the ends split and bent in opposite directions, and to these split ends are riveted straight clamping-bars 14, the said bars extending horizontally at right angles to the levers 13.

As shown in the drawings, the levers 13 pass upwardly within the rectangular frame 1 and work within the said frame from the ends of the frame to the track 5. Each of the levers moves between parallel guide wires or rods 15, which extend from the ends of the frame to the track 5. To move the levers 13 to and away from the track, a lever 16 is pivoted intermediate its end to a block arranged on the under side of the frame 1 at the front and forms a knee-lever projecting in advance of the frame 1. On a central longitudinal cross-piece 17 is pivoted a lever 22, one end of which engages a staple carried by the knee-lever 16. Bars or rods 18 are connected at their outer ends to the levers 13, respectively, and at their inner ends to the lever 22 and on respectively opposite sides of its pivotal point.

In operation the box containing the fruit is placed on the track 5, upon which it slides until stopped by the buffer 6. The layer of paper having been placed in position, the lid is placed down over the paper and the knee-lever 16 actuated, and the levers 13 swing in-

wardly against the track 5 and engage the lid of the box, holding the same in place. The foot-lever 7 is then depressed, forcing the bar 12 downwardly and drawing down the lever 13, and the bars 14 force the box-lid down upon the box, and as the lever 7 is locked by engagement of the plate 11 with the rack 10 the lid is held firmly in place until nailed. The plate 11 is then disengaged from the rack 10 and the parts permitted to resume their normal position under tension of the springs 19.

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 comprising a horizontal vertically-movable bar, a frame adapted to support a box, guides for the bar carried by the frame, coil-springs adapted to lift the bar, levers pivoted at their lower ends to said bar, and having their upper end portions bent inwardly, split and bent in opposite directions and at right angles to the lever, means for swinging the said levers toward and away from the box, and means for depressing the bar against the upward pull of the springs.

2. A device of the kind described comprising a rectangular frame adapted to support a box, a spring-actuated vertically-movable bar, a pivoted foot-lever extending transversely across the bar and adapted to depress the same, upwardly-extending levers pivoted at their lower ends to the bar and adapted to swing toward the longitudinal center of the frame, a knee-lever pivoted intermediate its ends to the frame, a pivoted lever loosely connected at one end to the knee-lever, and links pivoted at their outer ends to the upwardly-extending levers respectively, and at their inner ends to the last-mentioned lever upon opposite sides of its pivotal point.

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