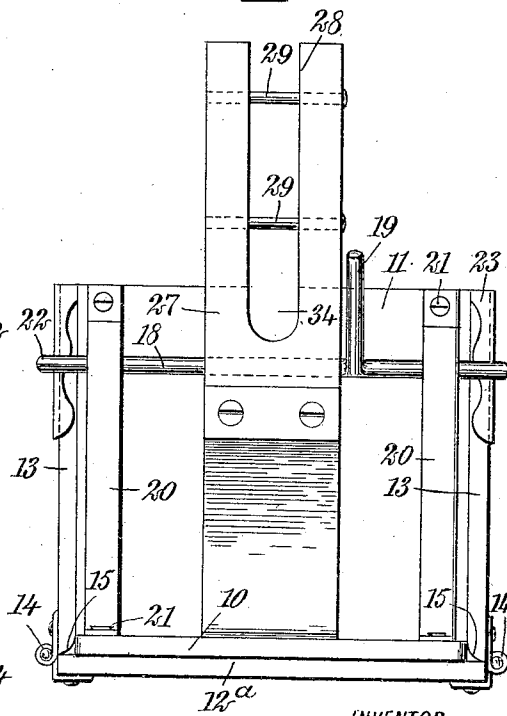
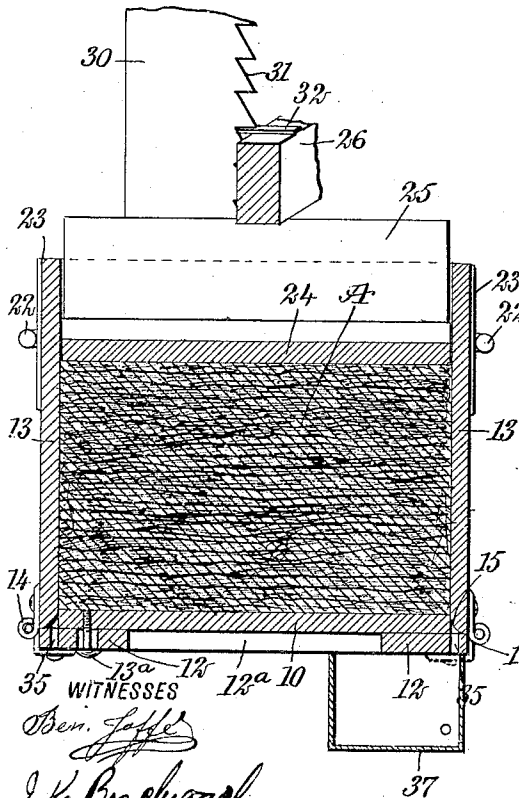
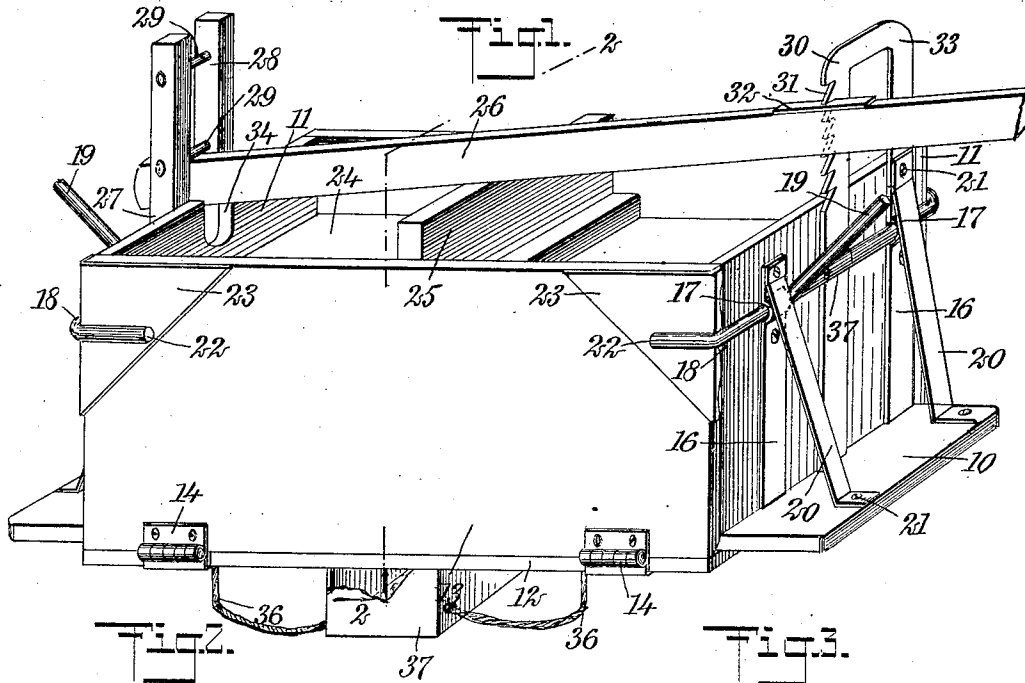


I. W. ROHRER, JR.
BALING PRESS.
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Patented Dec. 28, 1909.



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BALING-PRESS.

944,823.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ISAAC W. ROHRER, JR., a citizen of the United States, and a resident of Lancaster, in the county of Lancaster and State of Pennsylvania, have invented a new and Improved Baling-Press, of which the following is a full, clear, and exact description.

This invention relates to baling presses, and more particularly to a press of this class which has stationary ends, hinged sides, a presser board movable between the ends and between the sides, a presser bar for forcing the presser board downward to compress the material positioned in the press, one of the ends having a bifurcated upright provided with cross bars constituting fulcrums for the presser bar, the other of the ends having a ratchet member for holding the presser bar in a number of positions, the ends being suitably braced and being provided with locking rods for holding the hinged sides in position, the base of the press having guide boards projecting laterally therefrom and serving as supports for the hinged sides. The guide boards have openings therethrough permitting the introduction of twine or the like for binding the bales formed in the press.

The object of the invention is to provide a simple, inexpensive and powerful baling press for tobacco and like material, which can be easily manipulated by one operator, in which the material to be compressed can be rapidly and easily formed into compact bales, which permits twine or the like to be positioned therein to facilitate the binding of the bales, and which has special locking means for holding the folding sides in position.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a perspective view of an embodiment of my invention; Fig. 2 is a transverse section on the line 2—2 of Fig. 1; and Fig. 3 is an end elevation of the press.

Before proceeding to a more detailed explanation of my device, it should be clearly understood that while the same is particularly useful in forming tobacco into compact

bales for storage or shipment, it can also be advantageously employed for other loose material which it is desired to compress into bales or like packages. I prefer to fashion the press from suitable wood, but any other material adapted for the purpose can be equally well employed. The presser bar, by means of which the presser board is forced downward into the box-like body of the press to form the bale, may be of any suitable length, to permit an adequate pressure to be brought to bear upon the board. Needless to say, the presser bar can be operated by hand or in any other suitable manner.

Referring more particularly to the drawings, I provide a base 10, upon which are mounted the end walls 11 of the press. These end walls or ends 11 are disposed inwardly from the extremities of the base 10, which thus project beyond the ends of the press proper, as is shown most clearly in Fig. 1. At the opposite longitudinal edges of the base and at the under side thereof, are secured laterally projecting guide boards 12, which may be adjustably or removably mounted in place. Cross boards 12^a extend transversely of the guide-boards and have the hinged or folding sides 13 of the press body or box secured thereto by means of hinges 14 of any suitable form. Preferably the lower edges 15 of the sides are rounded or cut away. The sides fit against the side edges of the ends 11, and with the same, form a box-like structure which is open at the top and in which the material to be compressed or baled is placed. The boards 12 may be secured in place in any suitable manner, for example, by means of adjustable screws 13^a.

Each of the ends has strengthening members or cleats 16, consisting preferably of strip metal or the like and having rounded, offset parts 17 which movably receive locking rods 18. Each locking rod has a laterally extending arm 19, by means of which it can be manipulated. Inclined braces 20 having laterally disposed extremities are secured to the ends 11 and the projecting extremities of the base 10. The braces are mounted in place by means of screws 21 or the like, and are preferably secured to the cleats 16. The ends 22 of the locking members 18 are laterally disposed, so that in predetermined positions they are arranged at the outside of and adjacent to the sides 13, to hold the latter against the edges of the

ends 11. The sides have face plates 23 preferably of metal, and triangular in form, against which the ends 22 of the locking rods can abut in order to prevent excessive wear of the sides. The plates 22 are preferably arranged at the upper corners of the sides. The presser board 24 is arranged to move between the sides and the ends and fits fairly snugly in the box. It has near the center a transverse, upwardly projecting rib 25 which is engaged by the presser bar 26 as will appear more clearly hereinafter, when the press is in operation. The presser bar is of any suitable length and of any form adapted for the purpose. One of the stationary ends 11 has secured thereto an upright 27, the upper end of which projects above the end and has a bifurcation 28 adapted to receive the fulcrum end of the presser bar. Bolts 29 or like members constituting stops, extend across the opening of the bifurcation 28 and are spaced apart so that the end of the presser bar can be positioned underneath either one of the stops 29. The opposite end 11 has a ratchet member 30 secured thereto in any suitable manner and projecting above the same. The projecting part of the ratchet member at one edge has teeth 31 adapted to engage a laterally extended dog plate 32 carried by the presser bar, so that the latter can be held in a plurality of positions. The member 30 has an offset part 37 receiving the locking member 18, whereby the member 30 constitutes an additional bearing for the locking member. The upper part 33 of the ratchet member is downwardly disposed and secured to the end 11 adjacent to one of the cleats, and the corresponding brace, a screw 21 of the brace serving to hold the part 33 in position. It will be understood that the upper portion of the ratchet member is thus substantially of inverted U-form. This construction is one of strength and lightness.

When the press is in operation, the sides 13 are operatively disposed and held against the ends by means of the locking rods. The material A to be compressed is then introduced into the box-like body of the press and the presser board is positioned on top of the material. The fulcrum end of the presser bar is placed under one of the stops 29 and the bar is then forced downward against the rib 25. This forces the presser board downward and the material under the presser board will be compressed to an extent depending upon the force applied to the bar. The pressure can be exerted in a step-by-step manner owing to the provision of the ratchet member. That is to say, when a certain degree of pressure has been brought to bear upon the bar it can be held in a corresponding position by bringing the dog plate underneath an adjacent tooth of the ratchet member. An increased pressure upon the

presser bar will force the same downward a certain distance, and it can be held at this point by moving the dog plate into engagement with another of the teeth 31. After the material has been compressed to a certain degree, the bar can be removed and placed underneath a lower stop 29, and the operation then continued as before, the lower stop affording a more efficient purchase, and it will be understood, that as the material compresses, the presser board assumes lower positions within the box. The end 11 having the upright 27, has a cut away part or recess 34 which receives the fulcrum end of the presser bar when the latter is in engagement with the lower stop 29. The recess 34 thus permits of a more efficient use of the bar.

The guide boards 12 are provided with openings 35, through which lines 36 of cordage, twine or the like can be introduced. It is of advantage to position the lines in the box before the material is introduced, so that after the bale is formed it is merely necessary to open the sides 13, so that the bale can be tied at once before being removed from the press. If so desired, the base, as well as the sides of the press, can be provided with grooves to receive the twine, so that the latter will not become embedded in the material undergoing compression. I prefer to employ a twine box 37 under the press, in which balls of twine can be positioned, each approximately under one of the openings 35 through the guide boards.

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

1. A baling press, comprising a base, stationary ends mounted upon said base, hinged sides mounted upon said base and adapted to be positioned against said ends, releasable locking members carried by said ends and serving to hold said sides in operative positions, a presser board movably mounted between said sides and said ends, a bifurcated member carried by one of said ends and projecting above the same, said member having a plurality of cross members constituting stops, a removable presser bar adapted to engage said stops, whereby each of said stops is adapted to constitute a fulcrum, and a member carried by the other of said ends and projecting above the same, said member being provided with a plurality of projections with which the presser bar engages.

2. In a baling press, a box open at the top, a press board movably mounted in the box, and provided with a rib at about its center, a member secured to one end of the box and projecting above the top of the same, the projecting portion of said member being provided with a plurality of cross members each forming a fulcrum, a presser bar adapted to removably engage the said cross

members, and a toothed member secured to the other end of the box and projecting above the top of the same and with the teeth of which the presser bar is adapted to engage.

3. In a baling press, a base, stationary ends mounted upon said base, guide boards secured to said base and projecting therefrom, sides hinged upon said guide boards and adapted to be positioned against said ends, and locking members carried by said ends and serving to hold said sides removably in position, said guide boards having openings therethrough whereby tying lines can be positioned within the press from underneath the same.

4. In a baling press, a base, stationary ends mounted upon said base, guide boards secured under said base and projecting beyond the sides thereof, sides hinged upon said guide boards and adapted to be positioned against said ends, locking members carried by said ends and serving to hold said sides removably in position, said guide boards having openings therethrough,

whereby tying lines can be positioned within the press from underneath the same, said sides having the lower inner edges rounded.

5. In a baling press, a press body, a movable presser board in said body, said body having an upright projecting above the same and bifurcated, said body being cut away at a point adjacent to the bifurcation of said upright, said upright having spaced stops extending across the bifurcation thereof, said body further having a ratchet member opposite to said upright, a presser board in the body, and a presser bar adapted to have one end positioned under said stops and to engage with its other end said ratchet member, said presser board having an upwardly extending part adapted to be engaged by said presser bar.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ISAAC W. ROHRER, JR.

Witnesses:

E. E. BACHMAN,
JACOB A. MECK.