

(No Model.)

2 Sheets—Sheet 1.

E. G. TREMAINE.
PACKING OR BOXING MACHINE.

No. 579,688.

Patented Mar. 30, 1897.

Fig. 1,

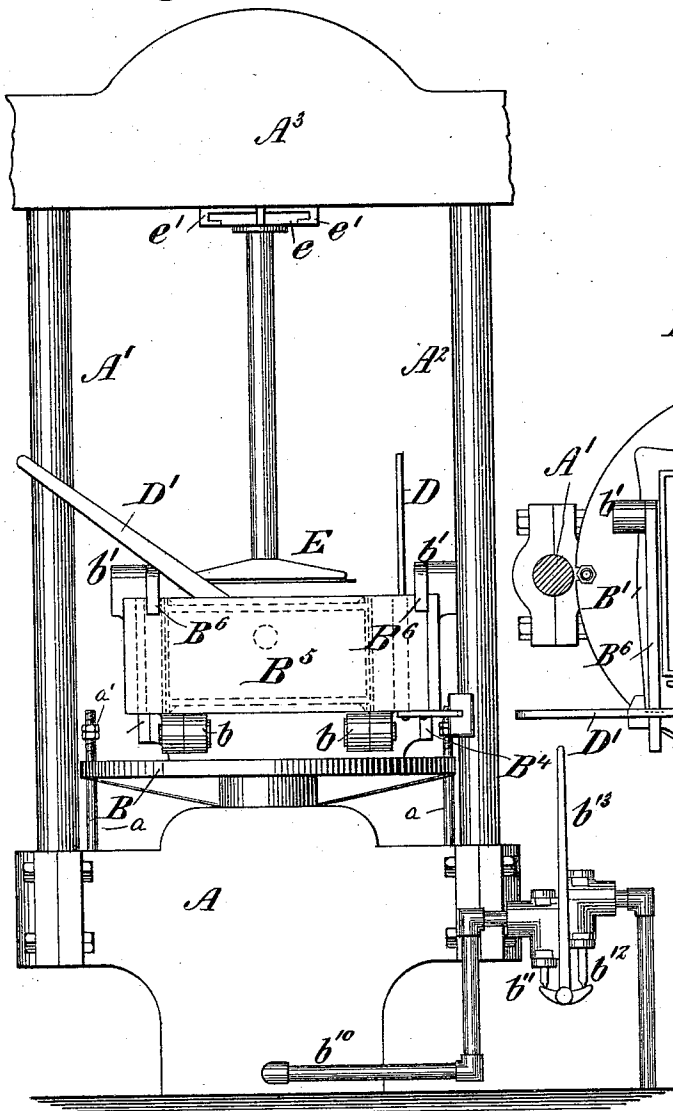
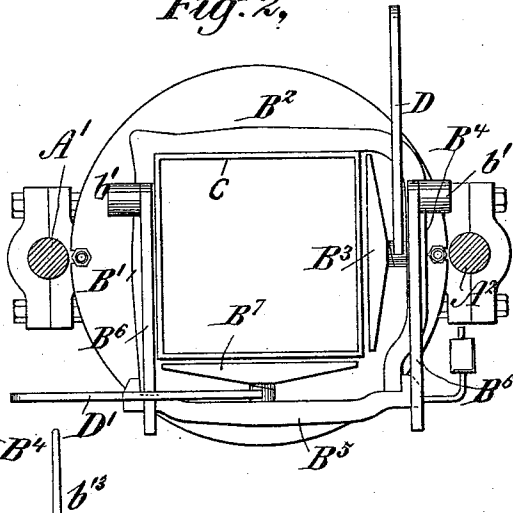


Fig. 2,



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Edward G. Tremaine

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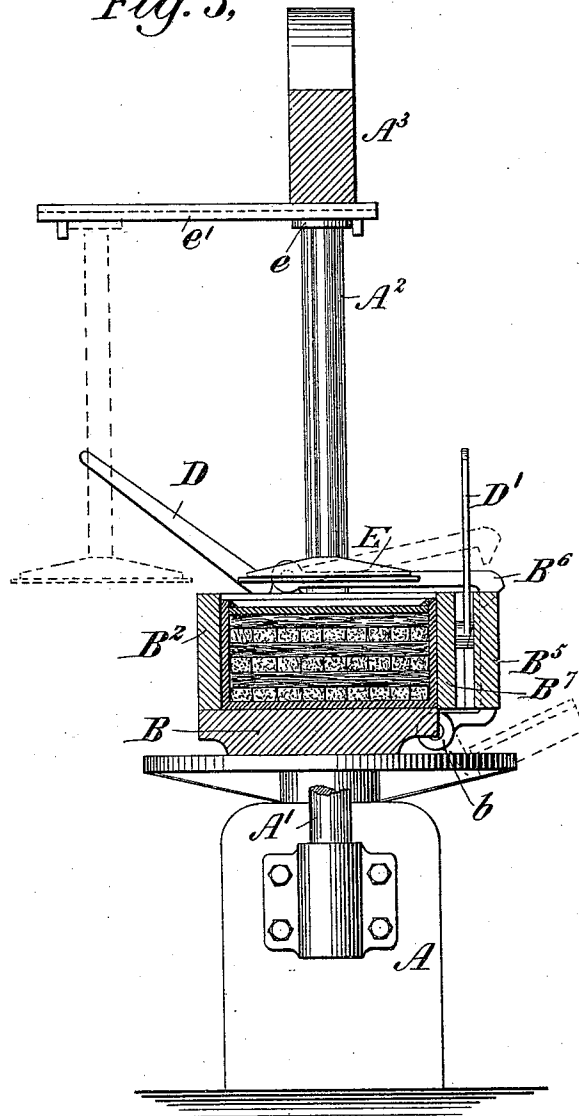
2 Sheets—Sheet 2.

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Fig. 3.



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UNITED STATES PATENT OFFICE.

EDWARD G. TREMAINE, OF BROOKLYN, NEW YORK, ASSIGNOR TO THE
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PACKING OR BOXING MACHINE.

SPECIFICATION forming part of Letters Patent No. 579,688, dated March 30, 1897.

Application filed May 2, 1896. Serial No. 589,995. (No model.)

To all whom it may concern:

Be it known that I, EDWARD G. TREMAINE, of Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Packing or Boxing Machines, of which the following is a specification.

My improvement relates particularly to packing or boxing machines for pressing packages, such, for example, as plugs of tobacco, in boxes and for holding the boxes while the heads are being nailed to them.

I will describe a machine embodying my improvement and then point out the novel features in the claims.

In the accompanying drawings, Figure 1 is a front elevation of a machine embodying my improvement. Fig. 2 is a horizontal section of the same. Fig. 3 is a vertical section.

Similar letters of reference designate corresponding parts in all the figures.

A designates the base or bed of the press. On it is a platen or platform B, and projecting upwardly from this are two walls B' B², extending at right angles to each other and of dimensions for supporting two adjacent sides of a box C, containing packages or plugs of material to be pressed within the box. Opposite the wall B' is a movable side piece B³, which is of dimension to bear against and support the side of the box. It is fastened to a wall B⁴, extending from the platen B, by a shank which has a longitudinal sliding connection with said wall. On this shank is fulcrumed a cam-lever D. This cam-lever has an inclined surface bearing against a corresponding surface on the movable side piece B³, so that by turning the lever into one position this side piece may be left loose and by turning the lever into the reverse position this side piece may be made to clamp the box.

Opposite the wall B² is a movable wall B⁵. It is connected at its lower edge by hinges b to the platen B and fastened at its upper edge by means of hooked arms B⁶, which are pivoted at b' and constructed to extend over the upper edge of the said wall B⁵. Connected with this is a movable side piece B⁷. It has a shank which has a sliding connection with the wall B⁵, and fitted to this shank is a cam-

lever D', having an inclined face acting upon a similarly-inclined face upon the movable side piece B⁷, so that when turned into one position the said movable side piece may be moved away from the box and when moved in the other direction may be made to clamp the box.

The platen B is combined with a hydraulic ram the cylinder of which is formed in the base or bed A, and the pipes and valves b¹⁰ b¹¹ b¹² and operating-levers b¹³ of which are arranged at the front of the base or bed A. Bolts a are affixed to the bed A and pass through the platen B and have nuts a', whereby the movement of the platen is positively limited.

Extending upwardly from the base or bed A are two columns A' A², to the upper ends of which is secured a head A³. Connected with this head is a platen E. As here shown, the stem of the platen is connected with a slide e, fitting in dovetailed slides e', so that the platen may be moved forward over the box C or rearwardly.

Before use the movable wall B⁵ is open and the platen E is moved rearwardly. Then a box is introduced, its cover is inserted, the movable wall B⁵ is closed and fastened, and the cam-levers D D' are operated to cause the movable side pieces B³ B⁷ to clamp the box between them and the walls B' B². The platen E will be moved forwardly over the box and the lever b¹³ operated to cause the ram to raise the platen B and its appurtenances to cause the desired operation of the platen E. Thus the cover of the box will be firmly and properly inserted. After allowing the pressure to remain a sufficient time the lever b¹³ will be manipulated to lower the platen B and its appurtenances, the platen E will be moved rearwardly, cleats or beads of triangular cross-section will be inserted in the box immediately above the cover and nailed there. Afterward the cam-levers DD' will be operated to release the box, the movable wall B⁵ will be lowered, and the box will be taken out.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of a platen having fixed

walls and movable side pieces, and a movable wall to which one of said movable side pieces is connected, substantially as specified.

2. The combination of a platen having fixed walls and movable side pieces, and a movable wall B⁵, and hooked arms for securing said movable wall in position, one of said movable side pieces being attached to said movable wall B⁵, substantially as specified.

3. The combination with a platen having three fixed walls and one movable wall, of two movable side pieces, one connected to one of said fixed walls, and the other to said movable wall, and means for moving said side pieces, substantially as specified.

4. The combination with a platen having three fixed walls and one movable wall, of two movable side pieces, one connected to one of said fixed walls, and the other to said movable wall, and cam-levers interposed between said walls and side pieces for moving the latter, substantially as specified.

5. The combination with a platen having three fixed walls and a movable wall hinged to the platen, and hooks for securing said movable wall, of two movable side pieces, one connected to one of said fixed walls, and the other to said movable wall, and vertically-moving cam-levers interposed between the walls and side pieces for moving the latter, substantially as specified.

6. The combination with a platen having fixed walls, a movable wall, and movable side pieces, of a second platen capable of movement to and from position opposite the first-mentioned platen, and means for moving one of said platens toward and away from the other, substantially as specified.

7. The combination with a platen having fixed walls, a movable wall, and movable side pieces, and means for moving said side pieces, of a second platen arranged above the first-mentioned platen, and capable of lateral adjustment, and a hydraulic ram for moving the first-mentioned platen vertically, substantially as specified.

8. The combination of a platen having fixed walls and movable side pieces, of stops for limiting the movement of said platen, of a second platen arranged above the first-mentioned platen and capable of being adjusted forwardly and backwardly, and a hydraulic ram for moving the first-mentioned platen upwardly and downwardly, substantially as specified.

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

EDWARD G. TREMAINE.

Witnesses:

C. A. LEONARD,
E. W. SOMERS.