

(No Model.)

J. C. McEWEN.
BOX MAKING MACHINE.

No. 478,456.

Patented July 5, 1892.

Fig. 1.

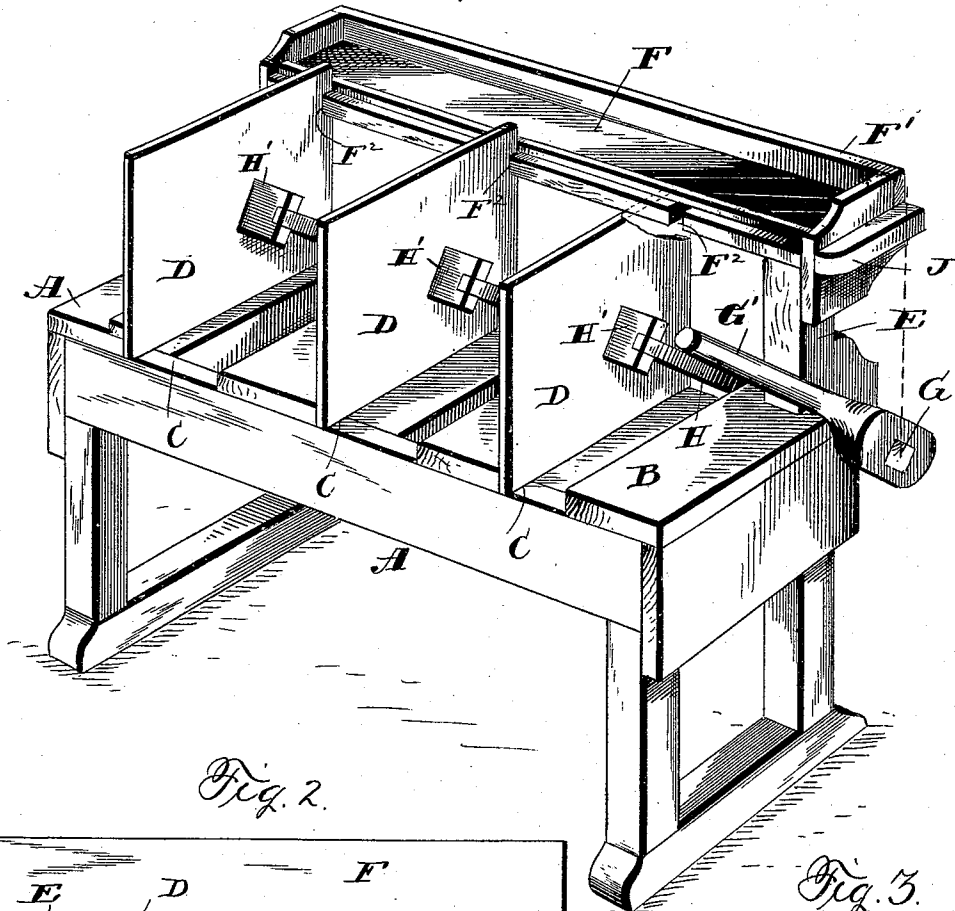


Fig. 2.

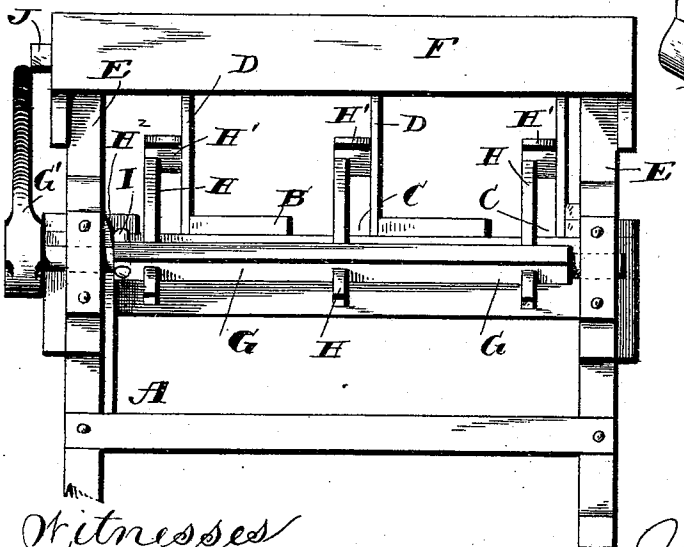
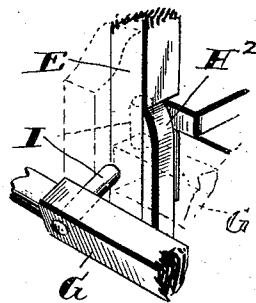


Fig. 3.



Witnesses
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JOSEPH CAMERON McEWEN, OF LOCHLOOSA, FLORIDA.

BOX-MAKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 478,456, dated July 5, 1892.

Application filed November 28, 1891. Serial No. 413,433. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH CAMERON McEWEN, a citizen of the United States, residing at Lochloosa, in the county of Alachua and State of Florida, have invented certain new and useful Improvements in Box-Making Machines; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in machines for use in the manufacture of boxes; and it has for its object to generally improve upon the construction and to render more serviceable and efficient in operation this class of machines.

The invention has for its more immediate object the providing of a machine for holding in proper position the parts of the box during the process of assembling and nailing.

To these ends and to such others as the invention may pertain the same consists in the peculiar construction and in the novel combination, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the accompanying drawings, and then specifically defined in the appended claims.

In the accompanying drawings, which form a part of this specification, and in which like letters of reference indicate the same parts throughout the several views, I have shown a machine embodying my improvements, the particular machine shown being adapted for use in the construction of orange boxes or crates, and in which drawings—

Figure 1 is a perspective view of a box-making machine embodying my improvements. Fig. 2 is a rear view of the same. Fig. 3 is a detail perspective view of the shaft-shifting mechanism.

Reference now being had to the details of the drawings by letter, A designates the frame of the machine, which should be constructed of heavy timbers and should be of convenient height and of a length and width to adapt it to use in the construction of boxes of the

size which it may be proposed to manufacture. The upper face of the table B of the machine is provided with a series of transverse recesses or spaces C to receive the lower edges of the ends or heads D of the box or crate to be constructed. Rising from the table B at its rear edge are the uprights E E, and supported upon these uprights is a shelf F, which is provided with a raised strip F', extending around its outer edges. This shelf is designed as a receptacle for nails, so that the nail-supply may at all times be within convenient reach of the operator.

The front edge of the shelf F is provided with a series of notches F², which serve to receive the edges of the box-heads D and hold the same steadily in place when being nailed, as shown.

G is a rock-shaft, which is journaled within suitable bearings at the rear of the frame A and provided at one of its ends with an operating lever or handle G'. This rock-shaft is provided with a series of arms H H, which are provided at their free ends with presser-blocks H', which when the box-heads are in position in the machine will press against the faces of the heads and hold the same securely in position for nailing, as shown clearly in Fig. 1 of the drawings.

In order to insure a firm pressure of the blocks H' against the box-heads, a pin or lug I is provided upon the rock-shaft at a point near one of its ends, and when the shaft (which is longitudinally movable in its bearings, as shown) is turned so as to cause the blocks H' to contact with the box-heads this lug engages an inclined surface H² upon the frame A and the shaft is thus forced along in a direction which will tend to carry the blocks H' into close contact with the box-heads, as will be readily understood. In order that the pressure-blocks may be automatically thrown out of contact with the box-heads when the lever G' is thrown upward, I provide a block J, which is secured to the end of the upright portion or shelf F. This strip or block is cut away at its forward end, as shown, said cut-away portion forming an inclined surface against which the lever G' contacts when thrown upward. This contact of the lever with the block will have the effect of

throwing the lever outward, carrying with it the shaft G and moving the presser-blocks out of contact with the box-heads.

5 The operation of the machine is simple and will be readily understood. The shaft G is thrown upward and the box or crate heads D are placed in position within the recesses C, with the rear edges inserted within the notches in the shelf F. The operating-handle is then
10 thrown forward, as shown in Fig. 1, and the presser-blocks are forced against the faces of the box-heads, which are thus securely held in position for receiving the slats or sides of the box. When one of the sides of the
15 box has been nailed the lever is raised or thrown back, thus releasing the presser-blocks from engagement with the heads D.

While I have shown a machine adapted for use in the construction of orange-boxes in
20 which three heads are used, it is at once evident that the principle involved is equally well adapted for use in the manufacture of any of the various forms of boxes.

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

1. The combination of the main frame hav-

ing recesses to receive the bottom and rear edges of the box-heads, a rock-shaft journaled to the rear of the frame, the arms H
30 attached to the shaft and carrying presser-heads, as described, and the operating handle or lever for actuating the shaft, substantially as and for the purpose described.

2. The herein-described machine for use
35 in the manufacture of boxes or crates, the same comprising the main frame having recesses to receive the lower edges of the box-heads, the shelf to the rear of the frame and supported upon uprights rising from the frame,
40 the rock-shaft journaled to the rear portion of the frame and longitudinally movable within its bearings, the arms attached to the shaft, the presser-blocks carried by the arms, the lug I upon the shaft and engaging an inclined
45 surface upon the frame, and the lever for actuating the shaft, substantially as and for the purpose described.

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

JOSEPH CAMERON McEWEN.

Witnesses:

H. J. SMITH,

M. R. SMITH.