

G. B. BRINK.
UPHOLSTERING MACHINE.
APPLICATION FILED NOV. 20, 1909.

1,042,642.

Patented Oct. 29, 1912.

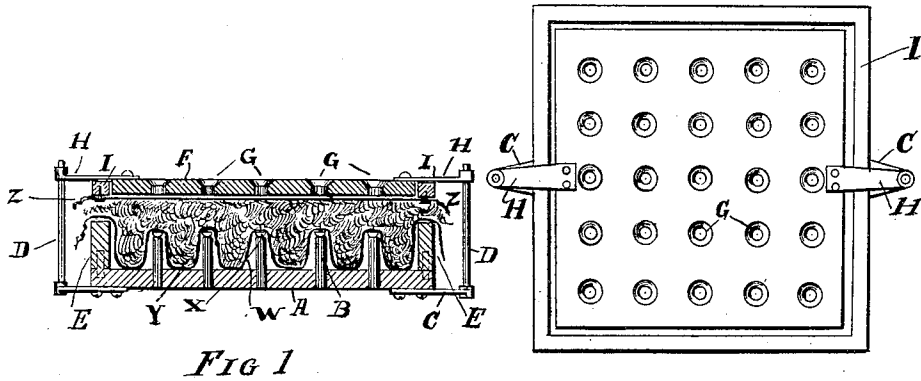


FIG 2

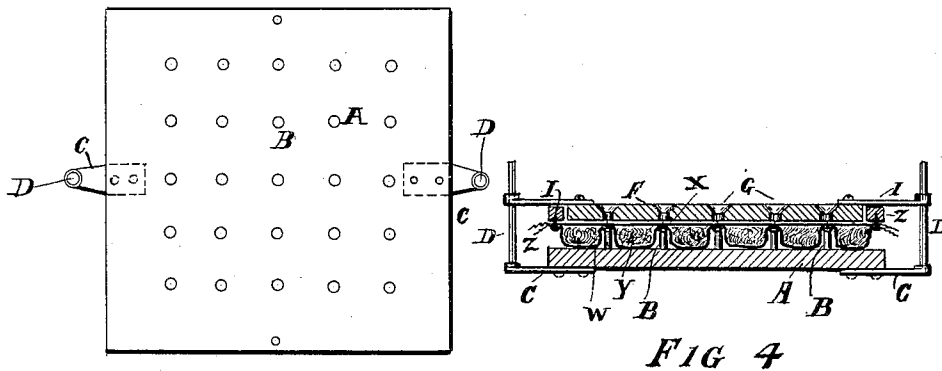


FIG 4

FIG 3



FIG 5

Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE B. BRINK, OF SOUTH LYON, MICHIGAN, ASSIGNOR TO TUFTING MACHINE
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UPHOLSTERING-MACHINE.

1,042,642.

Specification of Letters Patent.

Patented Oct. 29, 1912.

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To all whom it may concern:

Be it known that I, GEORGE B. BRINK, a citizen of the United States, residing at South Lyon, in the county of Oakland and State of Michigan, have invented certain new and useful Improvements in Upholstering-Machines, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to machines for making upholstered or tufted pads or cushions such as are used in upholstering automobile seats, couches, etc., and the special object of the invention is to provide a construction having a temporary frame upon which the canvas or other backing is temporarily secured and held stretched during the compression of the filler or stuffing and which will form a temporary support for the pad or cushion after it has been removed from the upholstering mold or table to hold the cushion parts in shape and in relative position during the work of finishing the edges of the cushion.

Other objects will be apparent from the disclosure.

In the accompanying drawings Figure 1 is a central sectional view of a tufting table or mold equipped with the various features of present invention; Fig. 2 is plan view of Fig. 1, and Figs. 3, 4 and 5 are detail views of various features hereinafter more fully described.

In the drawing the reference letter *a* indicates a tufting table or mold board supported in horizontal position upon a suitable base and provided with a plurality of button holders or tufters *b* adapted to temporarily hold the usual tuft-buttons in any manner now understood in the art, these holders being arranged upon the surface of the board or table in any suitable position according to the pattern of the tufts to be reproduced in the face of the pad or cushion. The table or board is provided on each side with a lateral arm or extension *c* carrying a vertical upright guide pin *d* which projects up above the face of the table or board a distance greater than the thickness of the pad or cushion. By means of the lateral extensions *c* the guide pins are spaced away from the sides of the table or board a sufficient distance to allow the removable rails *e* constituting the sides or box of the mold to be inserted in place upon

the table. The box constituted by the rails *e* may be temporarily held in position upon the table or board by any suitable means and may be of any suitable construction or arrangement adapted to carry out the general functions of a mold box, it being understood that the shape or size of the box may be varied for cushions of various sizes or shapes. A follower or presser board *f* adapted to fit within and filling the area of the mold box is provided with the usual openings *g* for the passage of the prongs of the tufting buttons in the usual manner. The follower is provided with an opposite pair of lateral wings *h* having openings adapted to receive the upright guide pins *d* whereby the follower is guided in its movement to compress the pad or cushion. A removable skeleton frame *i*, of substantially the form of its cushion or box, is provided for the purpose of carrying the canvas or other backing to hold it taut or stretched during the process of making the cushions, and this frame is of substantially the size of the mold box constituted by the removable rails *e* being adapted to take the position of the box in the latter part of the operation of the machine to hold the canvas or backing securely in position and then to form a frame upon which all parts of the cushion are assembled and by which they are held in proper positions and relation and in unitary form for the finishing operations of cementing or gluing the edges of the cover and backing together.

The operation of the machine is substantially as follows; a suitable length of covering material *w* is spread face downwardly on the table or board with the heads of the usual clench buttons *x* seated in the button holders *b* with their prongs extending upwardly through the covering material. The filling or padding material *y* is then put in place over the face of the mold substantially filling the mold box formed by the board and the removable rails or sides *e*. The sides of the mold box are then removed from the position upon the table or board, and the temporary frame *i* is substituted in place of it, the backing *z* of canvas or other suitable material having been temporarily fastened to the frame as by tacks. The follower or presser board is then positioned with its openings in the wings receiving the guide pins *d*, and pressure is applied

by any suitable form of presser to force the follower and backing down into position to compress the filling or padding of the cushion, the follower or presser board forcing the
 5 backing down over the projecting prongs of the buttons which then pass through the openings of the follower where they are clenched over suitable washers in the customary manner. After the covering and
 10 backing have been secured together by the buttons, the presser board is withdrawn and lifted from its position and the cushion assembled upon the temporary frame is lifted from the mold, this frame preserving the
 15 shape and outline of the cushion and the relative positions of its parts while it is passing through the subsequent step of cementing or gluing the edges.

The facing (not shown) is sewed to the
 20 cushion and in order to equally stretch the facing and other material of the cushion after the temporary frame is removed, I provide a bar $\frac{1}{2}$ of substantially the length of the cushion having a hook $\frac{1}{2}$ at each end.

By this means any inequalities in length 25 between the facing and other parts may be equalized and the materials held in proper relation while being sewed together.

I claim:—

In a device of the class described, a mold- 30 board having button-holders and removable rails, a follower having openings corresponding to the button-holders, a removable skeleton frame corresponding to the shape 35 of the pad or cushion and adapted to carry the cushion backing to be inserted between the follower and the cushion filling-material, lateral arms on the board carrying vertical pins located outside the rails, and lateral wings on the follower having openings 40 to receive the pins.

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

GEORGE B. BRINK.

Witnesses:

GEORGE R. HARBAUGH,
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."