

E. A. & G. H. HERZBERG.
PLASTER BOARD MACHINE.
APPLICATION FILED DEC. 27, 1910.

1,019,250.

Patented Mar. 5, 1912.

2 SHEETS—SHEET 1.

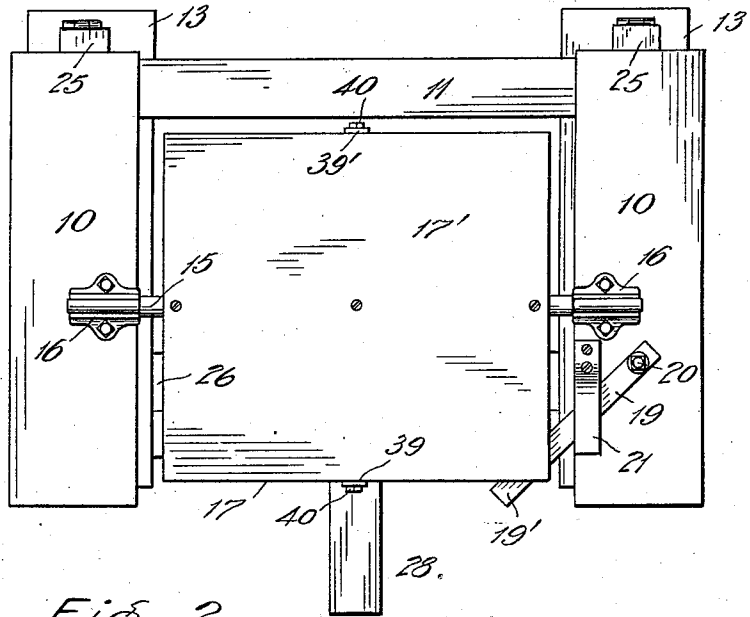


Fig. 2

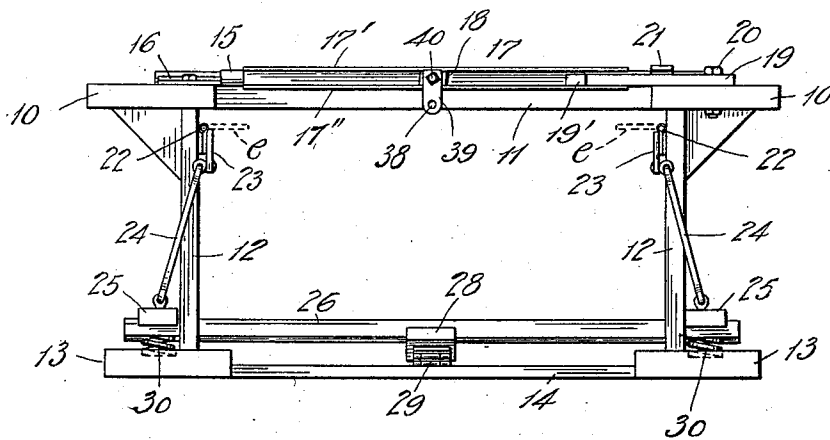


Fig. 1

WITNESSES:

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H. Barnes

INVENTORS:

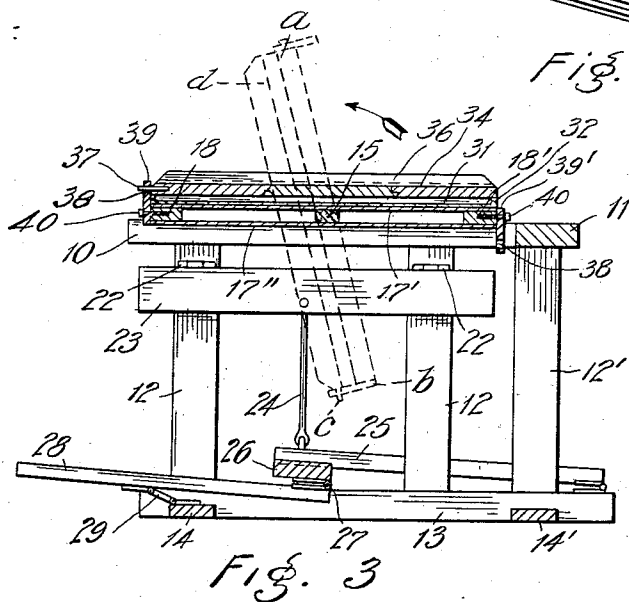
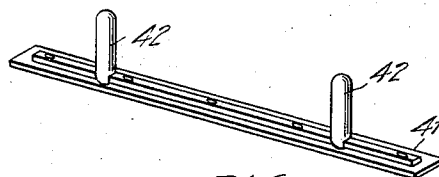
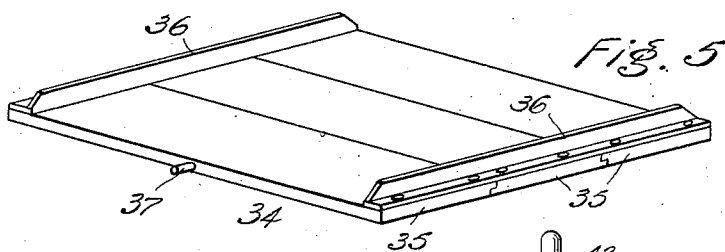
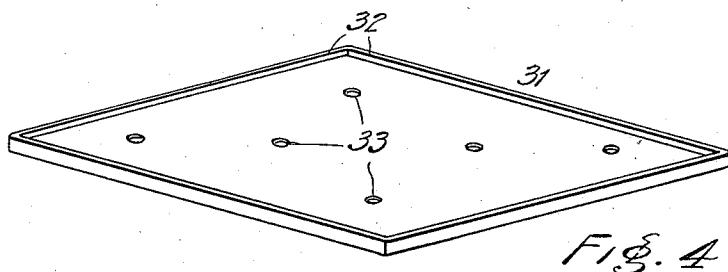
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2 SHEETS—SHEET 2.



WITNESSES:
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UNITED STATES PATENT OFFICE.

ERNEST A. HERZBERG AND GEORGE H. HERZBERG, OF SEATTLE, WASHINGTON.

PLASTER-BOARD MACHINE.

1,019,250.

Specification of Letters Patent.

Patented Mar. 5, 1912.

Application filed December 27, 1910. Serial No. 599,549.

To all whom it may concern:

Be it known that we, ERNEST A. HERZBERG and GEORGE H. HERZBERG, citizens of the United States, residing at Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Plaster-Board Machines, of which the following is a specification.

This invention relates to the manufacture of plaster-boards.

The invention consists in the novel construction, arrangement and combination of parts of the machine as more fully hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a front elevation of a machine embodying our invention; Fig. 2 is a plan view thereof; and Fig. 3 is a longitudinal vertical section of the same, and including co-operating members which are not illustrated in the preceding views. Figs. 4 and 5, respectively, are perspective views of the mold and pallet members; and Fig. 6 is a perspective view of a "darby" which is utilized with the machine.

Referring to said drawings, the numeral 10 designates longitudinally arranged elements of the machine-frame which are disposed in spaced relation and are connected at their rear ends by a transverse element 11. Said frame elements are rigidly connected to and supported by posts, such as 12 and 12', seated upon a floor base comprising longitudinal elements 13 and transverse elements 14 and 14'.

A transverse shaft 15 is supported at its ends in journal bearings 16 respectively secured to the frame elements 10. Carried by this shaft is a frame 17, hereinafter termed the table, which is formed of two rectangular plates 17' and 17'' secured to the shaft upon diametrically opposite sides and having spacing blocks 18 and 18' interposed between the plates at their front and back edges and whereby the table plates are maintained in parallel.

19 is a latch-bar which is pivotally connected from near one of its ends by a pin 20 to the right hand frame element 10, desirably, and is arranged to have its free end 19' swing into the interstice between the plates 17' and 17'' for locking the table in a substantially horizontal position.

21 is a guard secured to the frame for preventing the uplifting of the latch-bar. Secured by hinges 22 to the inner faces of

the posts 12 are longitudinally extending leaves 23 which are respectively connected by links 24 with bars 25 which are hingedly connected from their rear ends to the base elements 13 of the machine frame.

The forward ends of bars 25 are connected by a transverse rail 26 and the latter, in turn, is hingedly connected at 27 with a lever 28 extending forwardly of the machine frame to serve as a pedal within convenient reach of the operator's foot. As illustrated, the pedal is suitably supported, as by a double jointed hinge 29, so as to afford a longitudinal movement to the pedal when effecting the upward tilting of the aforesaid bars 25. Coil springs 30 (Fig. 1) are positioned upon the frame elements 13 to be encountered by the rail 26, desirably, in the downward movements of the same to overcome the jar which would otherwise occur when the pedal 28 is released from the operator's foot.

31 is a pan of rectangular shape which, as best shown in Fig. 4, is provided about its edges with an upwardly extending wall 32 of a height slightly less than the thickness of the plaster boards which are to be molded therein.

Apertures 33 are desirably provided in the pan-bottom or, though less efficiently, a form or bottomless pan may be substituted for that herein illustrated. A plurality of pallets, such as 34, shown in Figs. 3 and 5, of approximately the length and width of the corresponding dimensions of the pan, are desirably formed of a plurality of transversely disposed boards 35 having matched edges and are secured at their ends to superposed angle-bars 36.

Protruding from the front edge of each pallet is a stud 37 which is located to be inserted within a hole 38 of one or the other of the cleat devices 39 and 39' respectively connected by pivotal bolts 40 to the aforementioned blocks 18 and 18'.

In Fig. 6 is shown a plasterer's float tool, or darby, comprising a steel-blade 41 having two handles 42 whereby it is manipulated.

The operation of the invention is as follows: With the table 17 secured in a horizontal position by the latch-bar 19, as represented in Figs. 1 and 2, the pan 31 is first placed upon the table. A sheet of paper, or an equivalent, cut to fit within the bottom of the pan is then inserted within the latter by the operator from his position in

front of the machine. Plaster containing a quantity of fibrous material, such as co-coa-fiber, is then deposited upon the paper within the pan sufficient to fill the pan when spread by the operator with a trowel or the like. A darby such as illustrated is then utilized by the operator to remove any excess of plaster and to smooth the same down to have its upper surface be in a plane which will coincide with the brim of the pan wall 32. A sheet of paper, or an equivalent, is now laid upon the plaster and pressed firmly thereagainst through the medium of a suitable tool, as a trowel or darby, to complete the plaster-board. After the covering paper is properly placed and pressed against the plaster, the operator swings the cleat 39, at the front of the table, from the depending position in which it is represented in Fig. 1 to the position in which it is shown in Fig. 3. A pallet 34 is now placed over the plaster-board to be supported about its edges by the pan-wall 32 and with the pallet-stud 37 inserted through the hole 38 of the previously elevated cleat 39. The latch-bar 19 is then withdrawn from engagement with the table, whereupon the operator turns the table, together with the load, about the axis of shaft 15 and in the performance of which the operator grasps the remote edges of the table and pallet to prevent the separation of the same after they have passed a vertical plane or been rotated into the transitory position indicated by broken lines in Fig. 3. In such an assumed position, it is obvious that the cleat 39 in the *b* position coöperates with the stud in the position indicated by *c* that the separation of the table and pallet indicated in the example by *a* and *d* will be prevented from separation while the two latter are held together at the top by the operator. When the table has been inverted, by a half rotation upon the axis, it is locked by the latch-bar being introduced between the table plates. After the table is thus locked, or during the completion of the turning of the table, the operator with his foot presses against the treadle 28 to cause the bars 25 to be raised through the agency of the rail 26 with the result that the links 24 are affected to cause the leaves 23 to be swung into the positions indicated by broken lines *e* in Fig. 1 to furnish bracket supports, or track-rails, for the angle-bars 36 of the pallet, when the pallet is pulled for-

wardly by the operator to withdraw the stud 37 from the cleat 38 now located at the rear. The operator retains his foot on the pedal to hold the leaves 23 in operative condition until the pallet, pan and the contained plaster-board are withdrawn, by a continued pull, sufficiently to allow the operator to lift them as a single piece, and with the pallet lowermost, from the leaves. In such relative positions, the plaster-board is carried upon the pallet to a stack of previously made plaster-boards for drying and with the angle-bars 36 of the uppermost pallet straddling the plaster-board of and seating upon the pallet next below. After a pallet has been thus laid upon a pile, the pan is removed and returned for use on the plate 17" of the machine table to be employed in the following series of operations.

What we claim, is—

1. In a machine of the class described, a machine frame, an invertible table pivotally supported by the opposite sides of said frame, normally inoperative longitudinal leaves hingedly connected to said two sides of the frame, a pan for said table, a pallet serving as a cover for said pan, devices detachably coupling said pallet with the table, at one side thereof and with the pan therebetween, manually actuated means whereby said leaves may be swung into position to support the pallet after the same has been presented thereto by the inverting of the table.

2. A device of the class described comprising opposite frame members, a rod trunnioned upon the top of said members, a table centrally secured to said rod between said frame members, a pan adapted to rest upon said table, a pallet adapted to rest upon said pan, a cleat secured to the table and projecting above the top of said pan and having a perforation therein, a pin upon one side of said pallet and adapted to engage within the said perforation, normally inoperative longitudinal leaves oppositely hinged to the inner faces of said frame members, and foot operated hingedly connected means whereby said leaves may be swung into a supporting position upon the inverting of the table.

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Witnesses:

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