(No Model.)

T. CURRAN.

MOLD FOR MAKING PLASTER SLABS.

No. 442,957. Patented Dec. 16, 1890.

Fig. I.

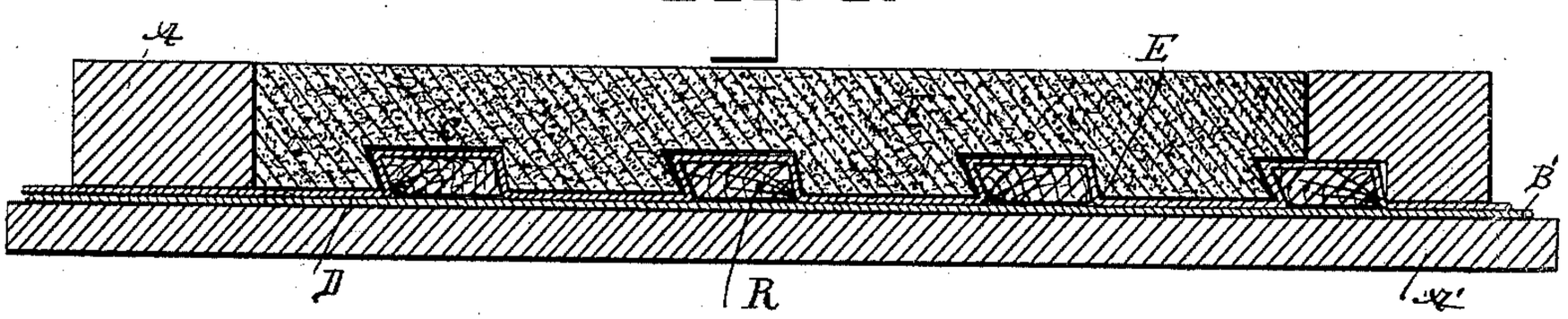


Fig. II.

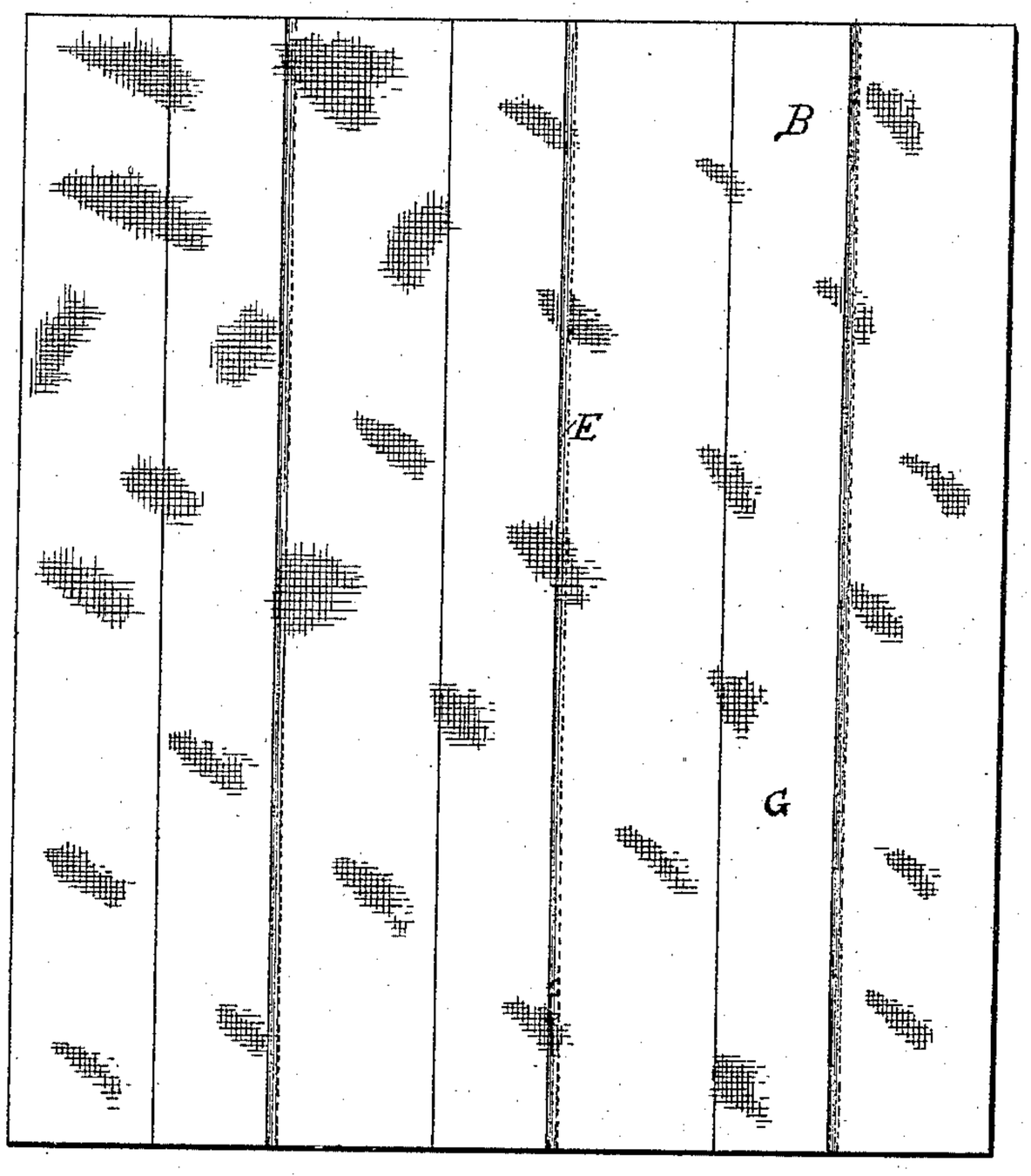


Fig. III.

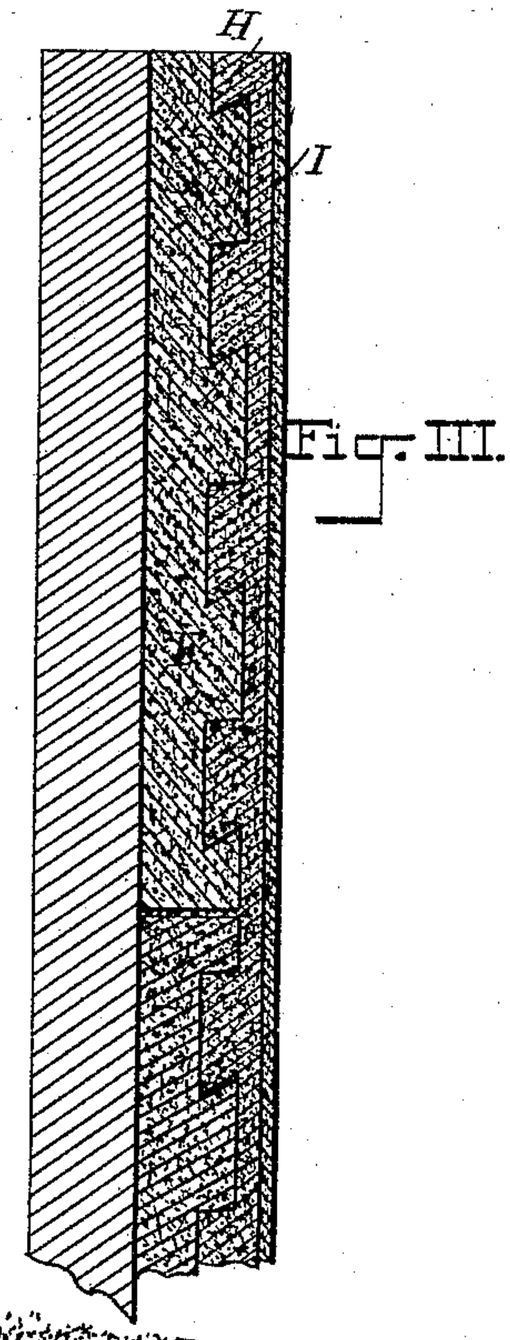


Fig. IV.

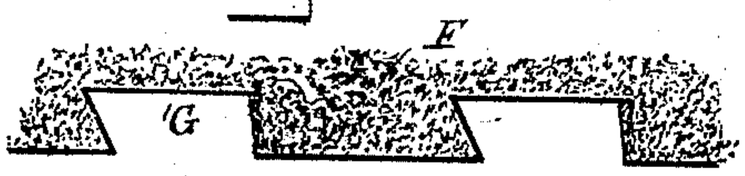


Fig. V.

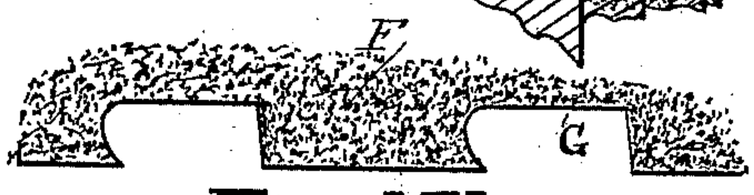


Fig. VI.

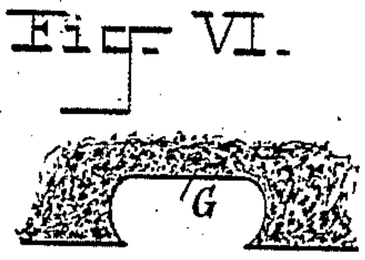


Fig. VII.

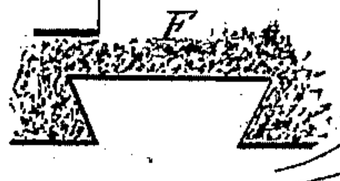
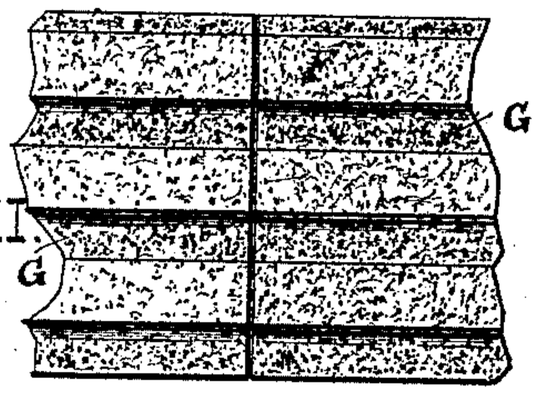


Fig. VIII.



Witnesses

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UNITED STATES PATENT OFFICE.

THOMAS CURRAN, OF NEW YORK, N. Y.

MOLD FOR MAKING PLASTER SLABS.

SPECIFICATION forming part of Letters Patent No. 442,957, dated December 16, 1890.

Application filed March 11, 1890. Serial No. 343,474. (No model.)

To all whom it may concern:

Be it known that I, THOMAS CURRAN, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and Improved Molds for Making Plaster Slabs, of which the following is a specification.

The invention relates generically to a mold for forming plaster slabs or sections of composite material, which are adapted to be attached to the interior walls or ceilings of buildings, and they are so constructed as to be adapted for the reception of further and finishing coats whereby the sectional lines or divisions are entirely obliterated and a strong, durable, and economical result obtained.

In carrying out my above invention I provide a suitable rectangular frame, and in connection therewith I employ a flexible molding piece or sheet having longitudinal wooden or other strips inserted in the face thereof, and so arranged as to protrude in relief above the normal surface of the said flexible molding-sheet, whereby when it is applied to a plastic compound contained within the aforesaid frame the longitudinal strips will embed themselves in the plaster and will form corresponding and complementary openings or grooves therein, which will be utilized for the purposes hereinafter set forth.

Referring to the accompanying drawings, which form a part of this specification, Figure I represents a transverse section of the plaster-containing frame, in which is inserted a body of plaster and a flexible molding-sheet. Fig. II is a face view of the flexible molding-sheet. Fig. III represents a plaster slab completed and after it has been removed from the frame and the molding-sheet has been withdrawn and it has been attached by any suitable means to the wall. The coatings of mortar and hard finish are also shown in this view. Figs. IV, V, VI, and VII are sectional views of various forms of the plaster slab. Fig. VIII shows two slabs side by side, illustrating how they are to be arranged so as to provide for the continuity of the grooves.

In the drawings, A represents a frame, which may be of wood, iron, or other suitable material.

B is a flexible molding-sheet, and it may be formed of cloth or canvas and it is preferably double, as shown, the two parts C D being sewed together at points E, forming thereby raised or hollow portions between the two sheets, into which may be threaded strips of wood R of various shapes and sizes, according to the pattern desired. The face of the flexible sheet is covered with rubber cloth and then properly shellaced, so that the plaster will not stick to it.

At F is shown the slab or section of plaster after it has been formed, G representing the longitudinal openings, grooves, or recesses corresponding with the raised molding-strips on the flexible molding-sheet aforesaid, the cross-section and conformation of said openings, grooves, or recesses depending upon the size and nature of the raised strips or ribs on the flexible molding-sheet.

The method of carrying my invention into effect is as follows: The flexible molding-sheet B is spread with its uneven face upward on a suitable horizontal table or support A′, and the molding-frame A is then placed in position on top of the molding-sheet, so that the sides of the frame will be parallel to and the ends of the frame at right angles with the raised strips or ribs R of the molding-sheet. The plaster is then introduced in the receptacle formed by the walls of the frame and the molding-sheet, and after a sufficient amount has been inserted the plaster is smoothed over on the top of and within the frame and gently pressed, so as to embody the ribs or molding-strips in the body of the plastic material. When the plaster is hardened, the frame and its contents are turned over and one edge B′ of the flexible molding-sheet B is raised, and if the molding strips or pieces are of a nature such as hereinafter described the whole sheet may be removed by simply drawing it in this manner from one side of the frame to the other. After the slab has been subjected to a drying process it is ready for use.

It will be seen in the above drawings that I construct my molding-ribs of various sizes in cross-section, the purpose being to form grooves or longitudinal recesses of various shapes, according to the demand of the trade, some being desirable in heavy work and others in lighter work. For example, the construction shown in Fig. III represents a

plaster slab formed in the manner above described and according to my invention attached to a wall of a room or a building, the grooves or longitudinal receptacles being shown in cross-section. These grooves, it will be seen, are so constructed as to support the ordinary rough brown mortar H, inasmuch as the grooves or longitudinal receptacles will form pockets or supports for the plastic mortar and will serve the same purpose as the open laths heretofore employed, and by this means the said mortar will be fully supported by the plaster slab, as shown. After the rough mortar II has been applied the coating or finish I may be put on.

As above stated, I may vary the form of the grooves or longitudinal receptacles, according to the nature of the work for which the slabs are intended.

In Fig. IV, I show a section of slab having grooves or longitudinal openings, of which one series of sides are dovetailed and the other nearly or approximately at right angles to the face of the slab. I depart slightly from the right angle, so as to make the flexible sheet the more easily removable. In making these slabs and withdrawing the flexible molding-sheet provided with the ribs hereinbefore described the said sheet when raised will come off easily without the separate removal of the ribs. The same may be said of the form of plaster slab shown in Fig. V. Both of these forms of slabs are of value in the construction of walls, as I intend to use them in the manner shown in Fig. III, with the angle of the dovetailed portion pointing downwardly, and it will be seen that two of these grooves taken together form a lock, and that the mortar after being once inserted and thoroughly dried will be as firmly held by means of these grooves and their overhanging corners as in the case of the ordinary wooden lath, and even in some cases much better, as what are known as the keys of the plaster will not in the case of my invention be liable to break off.

In Figs. VI and VII, I show modifications where the dovetail extends to both sides of the groove or longitudinal receptacle, and in manufacturing these forms it is necessary to withdraw the wooden strips or ribs R from the flexible molding-sheet after the slab has been formed and before the said sheet is removed. The ribs or strips of wood R can be withdrawn endwise by drawing them out of the pockets in the molding-sheet, and after they all have been removed the flexible molding-sheet can be drawn off, leaving the slab with the dovetail grooves or openings, as shown in Figs. VI and VII, according to the shape of rib employed.

It will be seen by referring to Fig. III that the slabs or sections are attached to the wall, and that the after coatings of brown mortar and superimposed white hard finish obliterate the dividing-lines.

As will be seen by referring to Fig. VIII, the slabs when arranged end on the grooves G in the said slabs will register with each other, thus establishing their continuity and providing a very enduring support for the superimposed coat of mortar.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. A flexible molding-sheet for making plaster slabs, provided with ribs or raised portions, in combination with an inclosing frame, as and for the purposes set forth.

2. A mold for making grooved plaster slabs, which consists in a frame for containing the plaster, a flexible molding-sheet provided with raised ribs inserted in the face thereof, the said ribs being beveled on their edges so as to produce dovetailed grooves or openings in the plaster slab, as set forth.

3. A mold for making grooved portable plaster slabs, which consists in a frame for containing the plaster and a flexible molding-sheet provided with raised ribs inserted in the face thereof, said ribs being removable, as and for the purposes set forth.

THOMAS CURRAN.

Witnesses:
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