Feb. 10, 1925. 1,526,118

J. F. CASEY

MOLD

Filed Jan. 31, 1924 2 Sheets-Sheet 1

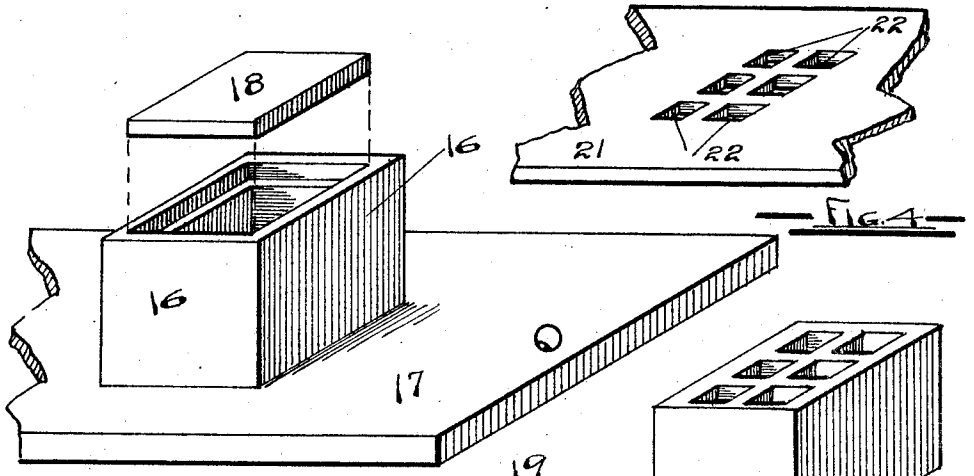


FIG. 1

FIG. 4

FIG. 6

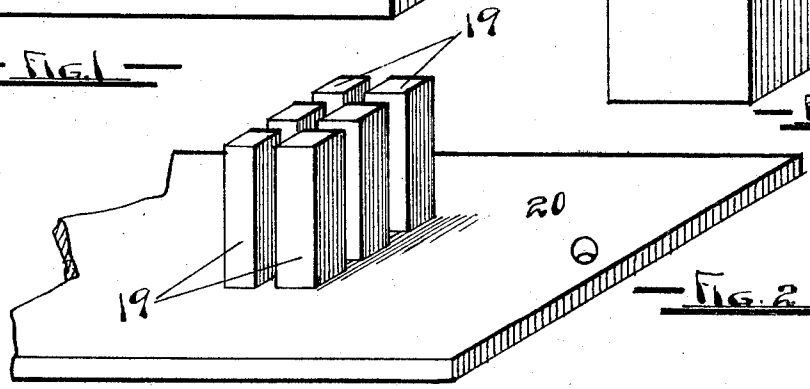


FIG. 2

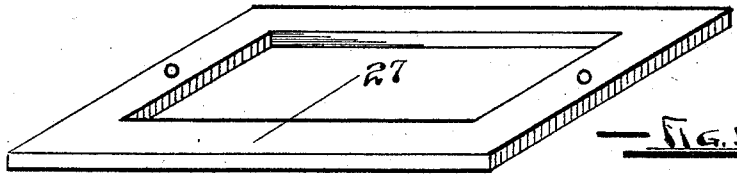


FIG. 5

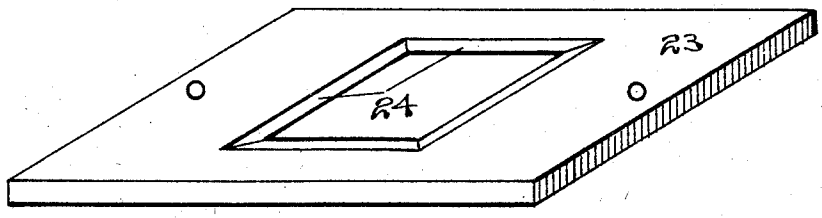


FIG. 3

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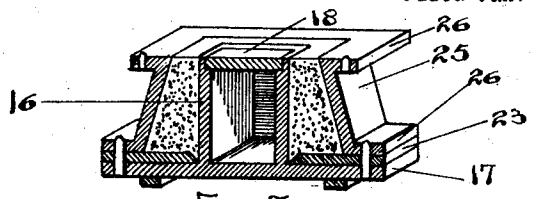


Fig. 7

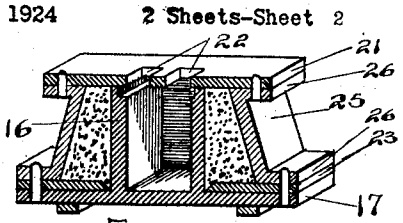


Fig. 8

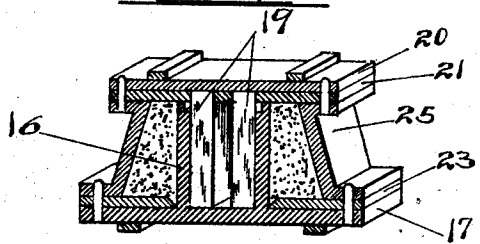


Fig. 9

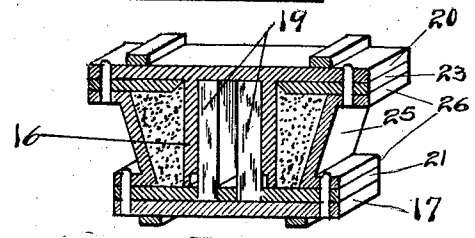


Fig. 10

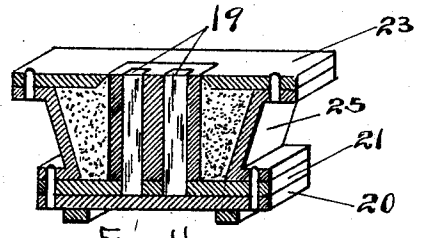


Fig. 11

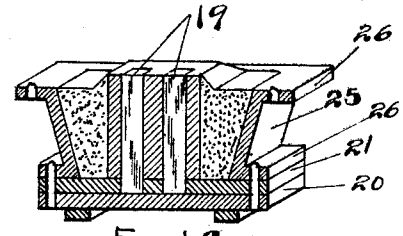


Fig. 12

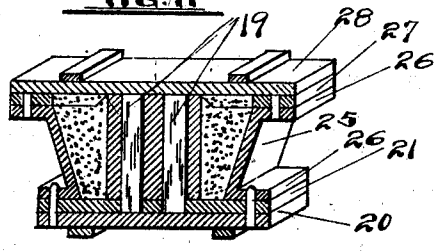


Fig. 13

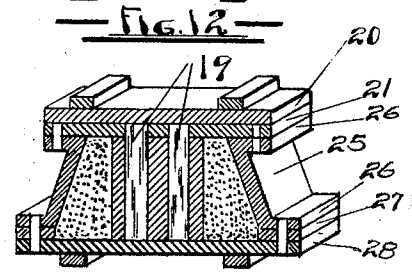


Fig. 14

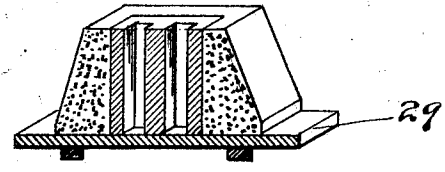


Fig. 15

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Patented Feb. 10, 1925. 1,526,118

UNITED STATES PATENT OFFICE.

JOHN F. CASEY, OF PORTLAND, OREGON.

MOLD.

Application filed January 31, 1924. Serial No. 689,656.

To all whom it may concern:

Be it known that I, JOHN F. CASEY, a citizen of the United States, residing at Portland, county of Multnomah, State of Oregon, have invented certain new and useful Improvements in Molds, of which the following is a specification.

My invention relates to molds in general, and particularly to molds adapted for molding concrete shapes and the like, the object being to provide a device whereby concrete shapes, especially hollow tile, may be produced cheaply.

I accomplish the above object by means of the construction illustrated in the accompanying drawings, which are a part of this application for Letters Patent, like characters indicating like parts throughout the several views thereof, and in which:

Fig. 1 is a perspective view of the pattern and pattern board.

Fig. 2 is a perspective view of the cores and core board.

Fig. 3 is a perspective view of the stripping plate.

Fig. 4 is a fragmentary perspective view of the core guide.

Fig. 5 is a perspective view of the filler frame.

Fig. 6 is a perspective view of the finished product.

Figs. 7 to 15 inclusive are sectional perspective views of the assembled device in various steps of its use.

In general my device consists of a hollow pattern constructed integral with a pattern board; a plurality of cores constructed integral with a core board; a stripping plate; and a flask; these parts being of novel construction, and cooperating to form the complete device.

The pattern is a hollow form corresponding to the form to be molded, and in the case of hollow tile which is illustrated in the drawings, is a hollow rectangular member 16 secured upon a pattern board 17. To prevent sand entering the pattern during the ramming up process I provide a cover 18 for the pattern, said cover fitting into a rabbet in the pattern as shown in Figs. 1 and 7.

The core is a plurality of prismatic forms 19 secured upon a core board 20; the core guide being a board 21 containing a plurality of orifices 22 corresponding in shape, number, and position to the cores 19.

The stripping plate is preferably constructed of metal, and consists of a plate 23 having an orifice therein adapted to exactly fit over the pattern 16, and having beveled edges at said orifice, as shown at 24 in Fig. 3. Said beveled edges coincide with the juncture line of the pattern and the pattern board when the stripping plate is in position, as shown in Figs. 7, 8 and 9.

The flask is a rectangular prismoid having flanges projecting from opposite edges at both top and bottom, the flask being designated by 25 and the flanges by 26 in Figs. 7 to 14 inclusive.

The filler frame is a rectangular frame 27, the orifice in which corresponds to the orifice in the top of the flask 25, and the thickness is the same as the thickness of the stripping plate 23.

The form of the product produced by this equipment is shown in Fig. 6, being a hollow rectangular building tile of the usual construction, but it will be understood that suitable changes may be made in the pattern 16 and the cores 19 for manufacturing various other shapes.

The various members just described are each provided with suitable dowel holes for dowelling them together in their respective positions when in use, as shown in Figs. 7 to 14 inclusive.

In use I place the pattern board upon the floor or bench with the pattern projecting upward therefrom, as shown in Fig. 7, and with the pattern cover 18 in place. The stripping plate 23 is then placed upon the pattern board, and the flask 25 placed thereupon, as shown in Fig. 7. Sand is then rammed into the flask, and slicked off even with the top of the flask, as shown in Fig. 7. The cover 18 is then removed, and the core guide 21 placed in position upon the flask top, as shown in Fig. 8. The cores 19 are then inserted through the orifices 22 in the core guide until the core board 20 lies upon the core guide 21, as shown in Fig. 9, the cores being of sufficient length to contact with the pattern board 17. The mold is then turned over as shown in Fig. 10.

The pattern board and pattern are then withdrawn, and concrete poured into the mold, as shown in Fig. 11, the top of the

molded form being slicked off even with the stripping plate 23. The stripping plate is then removed, leaving the mold as shown in Fig. 12, with the top of the molded product projecting above the top of the flask a distance equal to the thickness of the stripping plate. The filler frame 27 is then placed in position upon the flask, and the space within said frame is filled in with sand, and the mold is covered with a board 28, as shown in Fig. 13.

The mold is then turned over into the position shown in Fig. 14, and the cores 19 and core board 20 removed, as are also the core guide 21, flask 25, and filler frame 27. This leaves the mold in the shape shown in Fig. 15, with the cast form surrounded by the mold sand upon the board 29. It may then be removed from the molding floor to a suitable place for setting and drying.

My invention may be made of any size, and constructed of any material deemed convenient and suitable for a device of this character, and while I have illustrated and described a form of construction and arrangement of parts found desirable in materializing my invention, I wish to include in this application all mechanical equivalents and substitutes that may fairly be considered to come within the scope and purview of my invention as defined in the appended claims.

Having disclosed my invention so that others may be enabled to construct and to use the same, what I claim as new, and desire to secure by Letters Patent is:

1. In a mold: a pattern board; a hollow pattern integral therewith; a cover upon said pattern; a core board; cores integral with said core board; and a core guide adapted to guide said cores into said pattern.

2. In a mold: a hollow pattern; cores adapted to enter said pattern; and a core guide to guide said cores into said pattern.

3. In a mold: a hollow pattern secured upon a pattern board; cores secured upon a core board, and adapted to be inserted into said pattern.

4. In a mold: a pattern board; a hollow pattern secured upon said pattern board; a stripping plate adapted to be placed upon said pattern board and to surround said pattern; a flask adapted to be placed upon said stripping plate; a core board adapted to be placed upon said flask; and cores secured upon said core board and adapted to enter said pattern.

In witness whereof I claim the foregoing as my own I hereunto affix my signature in the presence of two witnesses at Portland, county of Multnomah, State of Oregon, this 26th day of Jan., 1923.

JOHN F. CASEY.

Witnesses:
L. E. BUFTON,
C. F. BLAKE.