No. 852,259. PATENTED APR. 30, 1907.

H. B. COPELAND.

MOLD FOR PLASTIC MATERIAL.

APPLICATION FILED APR. 20, 1906.

FIG. 1.

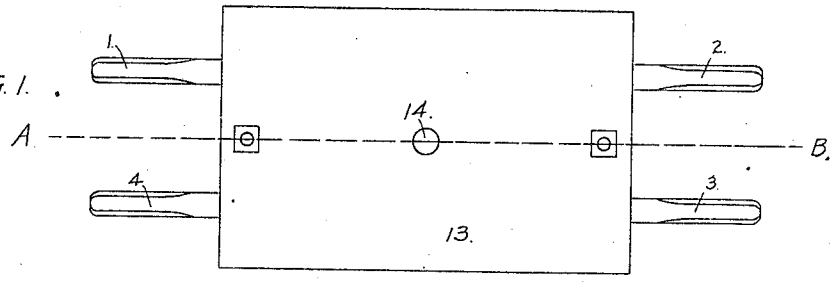


FIG. 2.

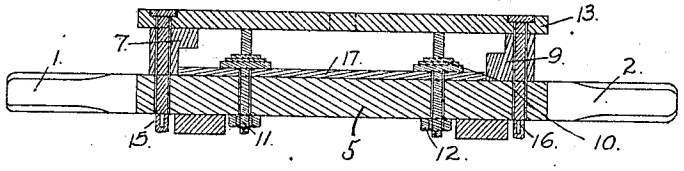


FIG. 3.

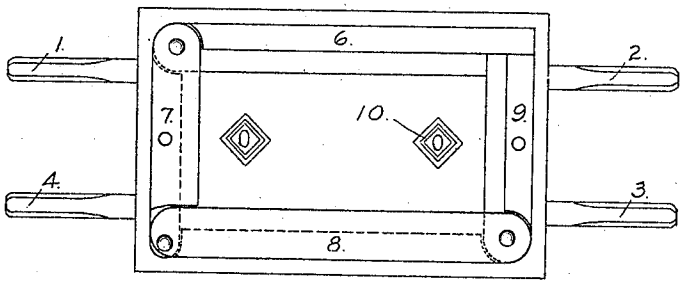
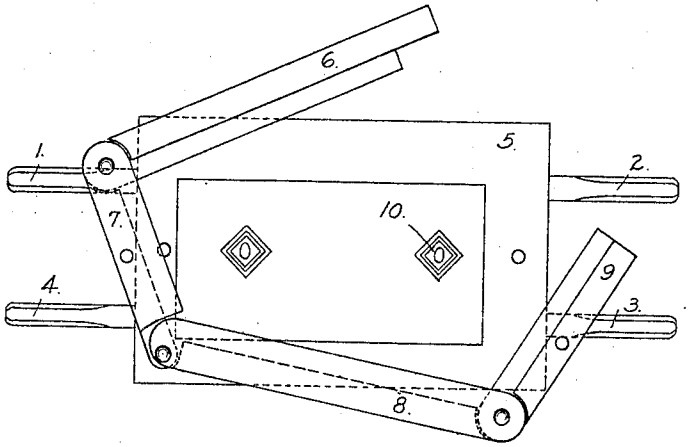


FIG. 4.



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MOLD FOR PLASTIC MATERIAL.

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To all whom it may concern:

Be it known that I, HUGH BLACK COPELAND, a citizen of the United States, residing in the city and county of Denver, State of Colorado, have invented certain new and useful Improvements in Molds for Plastic Material; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention pertains to molds for plastic material, and has for its object to provide a mold that will produce slabs with interlocking adjacent edges, with openings passing therethrough, and exterior recesses formed therein, surrounding the openings in the slabs with concealing devices for the recesses.

A further object is to provide a mold which may be quickly separated from the slab, so that the direction of movement of all of the moving pieces is away from the edge of the slab, thereby preserving the tender edges of the slab from breakage.

A further object is to provide a mold which when assembled for receiving the plastic material will be strong and rigid, and easily handled, but which can be instantly unlocked, and carried out of the way, leaving the formed slab free to be carried away for setting and drying.

In the drawings accompanying this application, Figure 1 is a plan view of the mold. Fig. 2 is a cross-section of the mold upon a plane indicated by the dotted line A. B. in Fig. 1. Fig. 3 is a plan view of the mold with the top removed. Fig. 4 is a view of the same parts, but showing the side pieces partly removed.

The mold consists of a base plate (5) of any suitable material to which are attached projecting handles, (1, 2, 3 and 4), and the design plate (17) which is firmly secured to the base plate and bears the reverse of the design that is to be cast. The sides and ends of the mold are composed of reciprocal pieces, which produce on the slab when cast a joint by which the upper edge of the lower slab interlocks with the lower edge of the slab resting upon the lower slab, and all the slabs in turn interlock with all the slabs coming in contact with them. These sides and ends are placed upon the base support, (5) and fastened in place. A design board (17) is placed inside of the rectangle formed by the sides and ends. This board is fastened in place by the bolts (11) and (12), and carries the reverse of the design, to be molded. The bolts (11 and 12) hold the design plate in its proper place, and also extend upward through the molded slab, and touch the top plate. Around these bolts and adjacent to the design plate are ornamental blocks (10). Thus when the mold is removed, holes are left in the slab by means of which the slab is bolted or fastened to the wall. The openings left by the ornamental block surrounding the bolt are filled by a similar block of the plastic material, and thus the fastenings are concealed after the slab is in place on the wall. The top plate is supplied with a hole (14) by means of which a liquid material may be poured into this mold. The fastening pins (15 and 16) used to hold the parts together, have removable pins to make the joints firmly secure, and at the same time, easily separable. And the forms may be varied to suit the ornamentation by changing the design plate. The side forming pieces 6 and 8 are pivotally attached to the end forming pieces 7 and 9, whose cross section is designated L shaped.

The method of procedure in molding the slab is as follows:—1. The base plate (5) to which the handles are attached, is first laid on any horizontal surface. 2. The design plate (17), forming the front surface of the molded slab and coming in direct contact with the material, is next placed upon the base plate (5). 3. Around the design plate (17) is now placed the rectangular frame (6, 7, 8, 9), which form the sides and ends of the slab. 4. Within this frame and upon the design plate (17), is now placed the material to be molded, which is thoroughly tamped to the desired consistency, and the material smoothed and leveled off with a trowel or other instrument to the top of the inclosing frame. 5. The top plate is now placed upon the top of the frame, and securely fastened to the base plate by bolts, or if the material to be molded is in liquid form it may be poured through hole 14 of the top plate and when set or hardened the entire mold is then overturned, thus bringing the base plate to the top and the top plate to the bottom. 6. In this position the different parts are removed in the following order: (*a*) The base plate; (*b*) the design plate; (*c*) the frame forming the sides and ends of the mold. The slab now rests on the top plate, and may be placed

where desirable for hardening. When the material within the mold is ready to be set aside for hardening, the side pieces constituting the frame of the mold, are removed along a plane horizontal to the molded slab, thus leaving the latter free to be placed in a desirable position for drying or hardening. The removal of this frame is accomplished by means of a pivoted joint which, acting in conjunction with the other hinged corners, allows perfect freedom of action, and insures clean cut corners, which would almost be impossible, were the said frame rigid in one or more of its parts. The sides and ends of this frame are so formed as to leave L shaped depressions on the sides and ends of the molded slab for the purpose of securing an interlocked joint between the slabs when placed in position on a wall or other plane surface, thus insuring a substantial arrangement and the impossibility of any slab becoming disconnected from the others. And after the mold is removed, these ellipsoidal bolts (11 and 12) leave elongated and oval holes in the molded slab, through which bolts are passed to fasten the slab securely to the wall or other plane surface.

Having thus described my invention, what I claim is:

1. In combination with a mold comprising a base plate (5) with handles attached, two reciprocal pivoted end forming pieces (7 and 9) whose cross-section views are L shaped, substantially as shown, two reciprocal pivoted rigid side pieces (6 and 8), whose cross-section views are L shaped, a top plate (13) bolted to the base plate, and a plurality of ornamental ellipsoidal bolts (11 and 12) having enlarged recessed heads, connecting the top and design plates, a removable design plate bearing the reverse of the design to be cast and adapted to be temporarily attached to the base plate.

2. In combination with a mold for plastic material a plurality of ellipsoidal bolts, having enlarged, ornamented, recessed heads.

3. In combination with a mold for plastic material two reciprocal pivoted side pieces and two reciprocal pivoted end pieces, whose cross section views are L shaped.

4. In combination with a mold for plastic material and comprising a base plate (5), with handles attached, a design plate (17) bearing the reverse of the design to be molded, a top plate (13) attached to the base plate, and a plurality of ornamental ellipsoidal bolts (11 and 12) having enlarged recessed heads adjacent to the design plate connecting the top and the design plate; two reciprocal pivoted end forming pieces (7 and 9), whose cross section views are L shaped, substantially as shown, and two reciprocal pivoted side forming pieces (6 and 8) whose cross-section views are L shaped.

5. In combination with a mold for plastic material and comprising a base plate (5) with handles attached, a design plate (17), bearing the reverse of the design to be molded, two reciprocal pivoted end forming pieces (7 and 9), whose cross-section views are L shaped, substantially as shown, two reciprocal pivoted side pieces (6 and 8), whose cross-section views are L shaped; a plurality of ornamental ellipsoidal bolts (11 and 12) having enlarged recessed heads adapted to leave their impress on the molded slab when removed said bolts, connecting the top and design plate.

6. A mold for plastic material, comprising a base plate (5) with handles attached, a design plate (17), bearing the reverse of the design to be molded, two reciprocal pivoted end forming pieces (7 and 9), whose cross-section views are L shaped, substantially as shown, two reciprocal pivoted side pieces (6 and 8), whose cross-section views are L shaped, a top plate (13), bolted to the base plate (5), and a plurality of ornamental ellipsoidal (11 and 12) having enlarged recessed heads, bolts connecting the top and design plate.

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