P. DHÉ.

MOLD.

APPLICATION FILED JULY 6, 1920.

1,404,588. Patented Jan. 24, 1922.

Fig. 1.

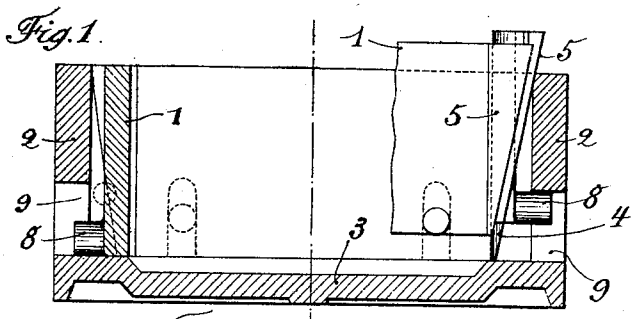


Fig. 2.

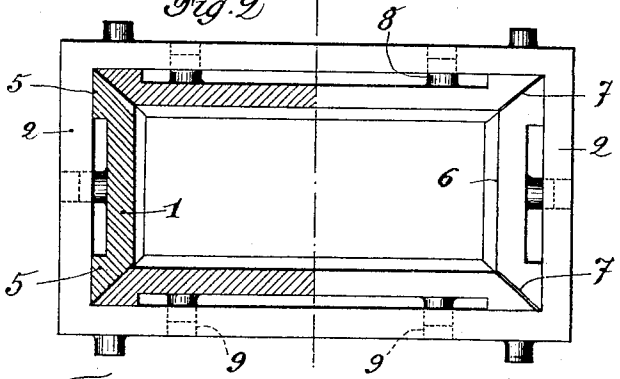


Fig. 3.

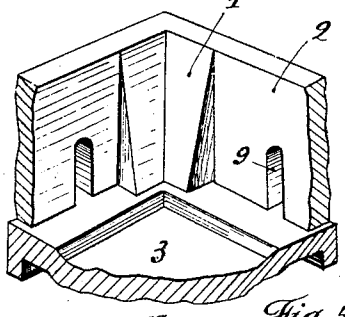


Fig. 4.

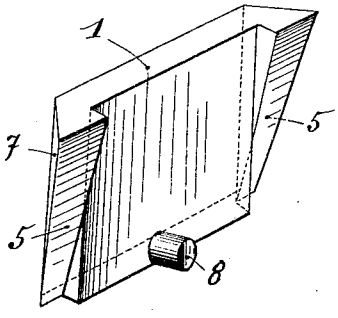
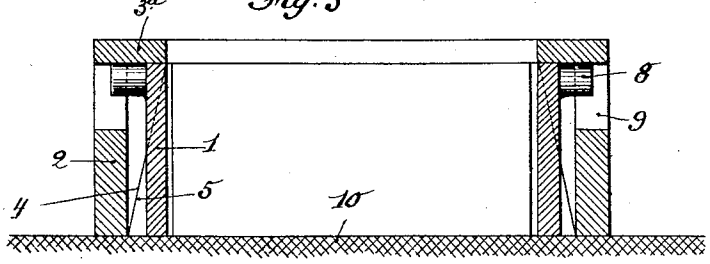


Fig. 5.



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MOLD.

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Application filed July 6, 1920. Serial No. 394,268.

To all whom it may concern:

Be it known that I, PAUL DHÉ, a citizen of the Republic of France, residing at Vitry-sur-Seine, Seine Department, Voie de Seine, France, engineer, have invented certain new and useful Improvements in Molds, (for which I have filed application in France May 17, 1919,) and of which the following is a specification.

This invention relates to improvements in molds with a view of facilitating the removal of the finished product therefrom.

For this purpose the mold contains lateral partitions which are independent of each other and movable within a frame having on the inside a plurality of inclined ramps so disposed that when sliding thereupon in a given direction, the said partitions are brought together and applied against each other by means of their adjacent edges which are of beveled form, but when sliding in the opposite sense, the partitions separate from each other, thus readily releasing the molded object.

The accompanying drawing represents two forms of construction of a mold according to this invention by way of example.

Fig. 1 is a vertical section of the first form of mold, with part of the front partition and the right hand partition shown in elevation and raised up at different levels.

Fig. 2 is a plan view of the mold, partly in horizontal section.

Fig. 3 is a perspective view of a portion of the frame.

Fig. 4 is a perspective view of a partition.

Fig. 5 is a vertical section of the second form of construction of the mold.

In Figs. 1 to 4, the mold is composed of four partitions 1 and a rectangular frame 2 provided with a fixed bottom 3. Within this frame are disposed the ramps 4 having slidable thereupon the ramps 5 provided upon the outer sides of the partitions 1.

Each partition comprises an inner side 6 and two edges 7 situated obliquely with reference to this side. The ramps 4 are located at the corners of the frame and the ramps 5 occupy a corresponding position upon the partitions 1. On its outer side, each partition carries one or more tenons 8 freely slidable in the grooves 9 of the frame.

Upon sliding the partitions downwardly upon the ramps 4, these partitions are thereby caused to approach each other toward the center of the mold in such manner that they come in contact by means of their beveled edges 7.

When in this position, the mold is ready to receive the hot or cold plastic substance. When this has set, the molded object can be readily removed from the mold by overturning the latter in such manner that the partitions 1 shall slide downwardly from the frame, as far as permitted by the tenons 8 and the grooves 9, and the partitions are thus enabled to separate from each other and allow the release of the molded object by its own weight.

The mold represented in Fig. 5 differs from the preceding from the fact that the frame 2 contains, instead of a solid bottom 3, a simple internal edge 3^a at its upper part. The inclination of the ramps 4 and 5 is in the inverse sense from that indicated in Fig. 1. The mold rests upon a fixed surface 10, for instance upon the hearth of a furnace. When the substance has been run into the mold and has become set, all that is required for its removal is to lift up the frame 2, and by reason of the movement of the tenons 8 in the grooves 9, the partitions 1 will move downwardly from the frame and will separate in such manner as to leave the molded object upon the surface 10.

When the mold is replaced upon the said surface, the ramps 4 will drive the partitions 1 inwardly and will bring their beveled edges together.

By the use of the present mold, the object is released therefrom by simply lifting the mold and without overturning the same.

It is of course to be understood that the shape of the mold may be varied, and that its partitions can be in any number and can have various profiles. Their inner side may be provided with fluted portions, engraved designs or any suitable relief parts, on condition that their depth and direction shall not be such as to interfere with the release of the molded object as effected by the movement of the partitions.

Instead of the tenons 8 and grooves 9, any other suitable means can be provided for limiting the movement of the partitions with reference to the frame in the two opposite directions.

Claims:

1. In a mold for hand molding purposes, the combination of a frame, a bottom secured to the said frame and forming therewith a receptacle open on one side, movable walls

disposed within the said frame, and means for guiding the said movable walls.

2. In a mold for hand molding purposes, the combination of a frame, a bottom secured to the said frame, movable walls disposed within the said frame, oblique ramps disposed upon the outer sides of the said movable walls, the said ramps being disposed at the corner of the frame and upon the edges of the movable walls and occupying only a portion of the width of their sides, wide empty spaces being provided between the walls of the said frame and the said movable walls in the intervals between the said ramps.

3. In a mold for hand molding purposes, the combination of a frame, a bottom secured to the said frame, movable walls disposed within the said frame, oblique ramps disposed upon the inner sides of the said frame, oblique ramps disposed upon the outer sides of the said movable walls, vertical grooves formed in the walls of the said frame, tenons disposed upon the said movable walls and slidable in the said grooves for guiding the said movable walls and for limiting the movement thereof.

In testimony, that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

PAUL DHÉ.

Witnesses:

CLEMENT S. EDWARDS,

MAURICE ROUX.