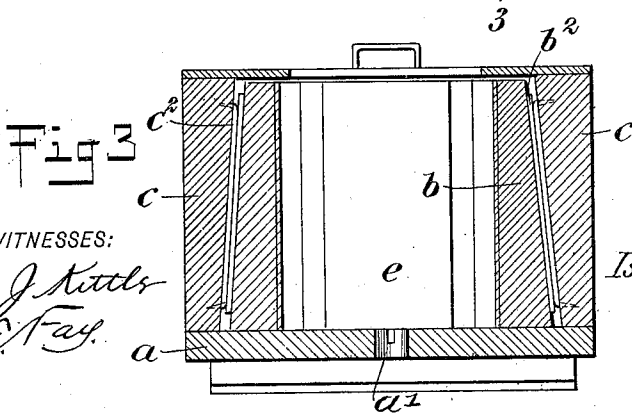
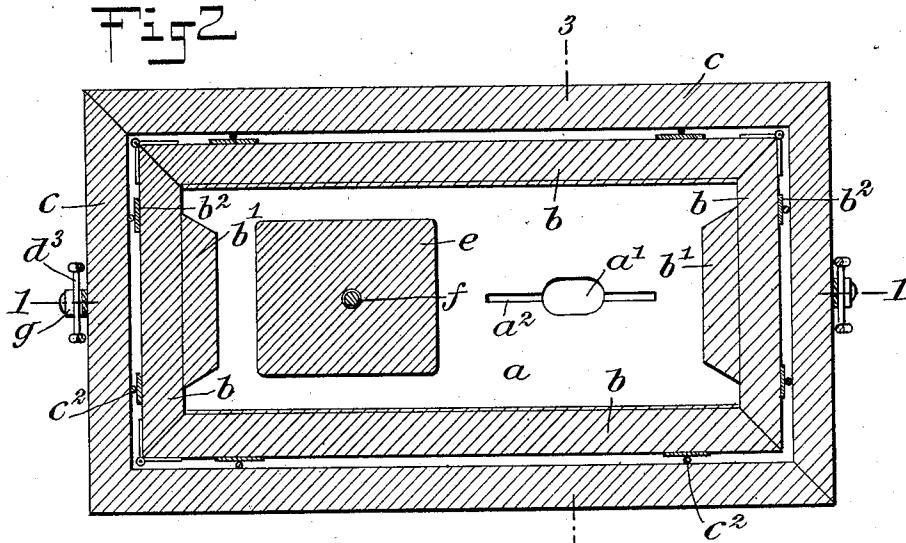
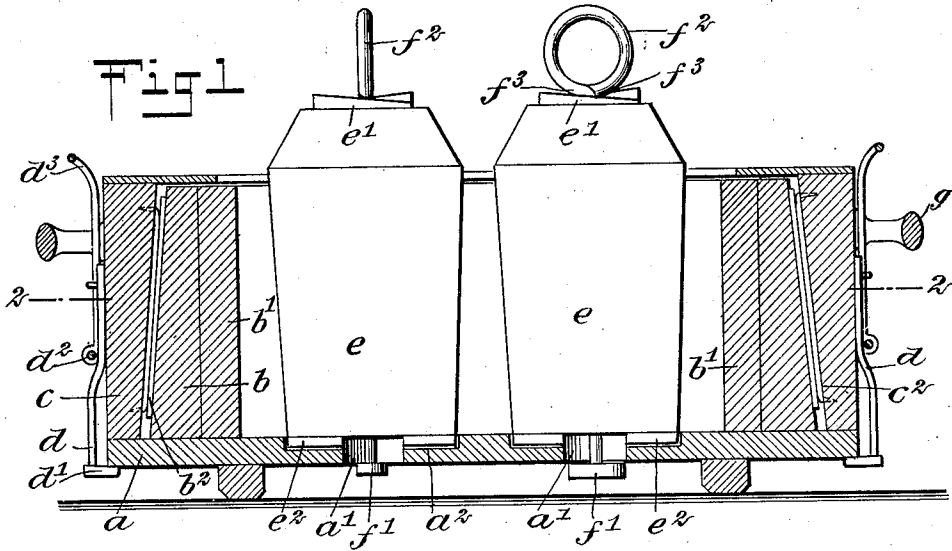


I. ROBBINS.  
MOLD.

APPLICATION FILED JAN. 4, 1906.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

ISSACHAR ROBBINS, OF WILKES-BARRE, PENNSYLVANIA.

## MOLD.

No. 828,140.

Specification of Letters Patent.

Patented Aug. 7, 1906.

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*To all whom it may concern:*

Be it known that I, ISSACHAR ROBBINS, a citizen of the United States, and a resident of Wilkes-Barre, in the county of Luzerne and State of Pennsylvania, have invented a new and Improved Mold, of which the following is a full, clear, and exact description.

My invention relates to a mold which is particularly applicable to the molding of concrete building-blocks and the like.

The principal objects of my invention are to provide a mold of this character of great simplicity and of low cost to manufacture and to operate.

Further objects of the invention will appear below.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal section on the line 1 1 of Fig. 2, showing one form in which my invention may be embodied. Fig. 2 is a sectional view on the line 2 2 of Fig. 1, and Fig. 3 is a sectional view on the line 3 3 of Fig. 2.

The mold proper comprises a base-plate *a*, which for reasons which will appear below I prefer to call a "jarring-plate." On this plate is mounted a frame consisting of any convenient number of sections *b*, of which I have illustrated four. These sections are beveled at their ends, so that they can be hinged together on their outsides and so that they will come together on their inside surfaces to form a rectangle or other shape, which is desired for the production of the particular kind of an article that is to be molded. It is to be noticed that they are to be hinged or pivoted together on three meeting surfaces only, and when they are moved on the pivots inwardly the other edges will come together at one corner to form a complete rectangle or other figure. The inner surfaces of the several sections of this frame are preferably made vertical if the surfaces of the molded article are to be vertical, and one or more of them may be provided with a rock-face, as is well understood in this art. They can also be provided with core members *b'*, projecting inwardly to properly form the ends of the block or the like. The outer surfaces of the sections of this frame are shown

as inclined outwardly at the bottom. It will be seen that this part of the mold can be employed to produce a molded article if means is provided for holding the frame in a fixed position and securing it to the base or jarring plate. This means I have illustrated in the form of an outside frame *c*. This frame is provided with slanting inner surfaces corresponding with the slant of the outer surfaces of the frame *b* and in the present instance is shown as constructed with square corners, whereby when it is forced down over the inner frame it will force the inner frame into a rectangular position and necessitate the location of all the parts thereof in proper relation to each other to produce the proper form of blocks. The frame *c* therefore acts in a double capacity—first, to bring the several sections of the frame *b* into proper position with respect to each other, and, second, to hold them there. It also has a third function, this being assisted by a catch *d*, mounted thereon. This catch comprises a lock *d'*, pivotally mounted on a bolt *d<sup>2</sup>* and having a handle *d<sup>3</sup>*. The purpose of this catch is to enable the operator to secure the frame *c* to the base-plate *a* in an obvious manner.

For the purpose of reducing friction and wear on the sloping surfaces of the frames *b* and *c* I have provided one of them with a series of plates *b<sup>2</sup>* and the other with a series of guides or ways *c<sup>2</sup>*, mounted in such position as to engage and move over the surfaces of the plates *b<sup>2</sup>*. The guides or ways *c<sup>2</sup>* are mounted in position parallel to the direction of motion of the frame *c* when it is moved into operative position.

It will be obvious that this device can be used for solid or hollow articles, and when the latter are to be made cores *e* are employed. These cores may be of any desired shape and character, and each is provided with a rod *f*, passing through it from top to bottom, the rod having a turn-button *f'* on the under side thereof adapted to enter a slot *a'* in the base-plate and to be turned thereon so as to lock the cores in a fixed position. The other end of the rod *f* is provided with a handle *f<sup>2</sup>* for operating it, the under side of the handle presenting a bearing-surface *f<sup>3</sup>*. On the top of the core are placed a pair of plates *e'*, which slant in opposite directions, so as to force the rod upwardly as the handle is turned in one direction and secure the turn-button in the

slot in an obvious manner. I have shown the bottom of each core as being provided with projections  $e^2$  for entering slots  $a^2$  in the base-plate to enable the core to be easily placed in the right position.

In use, the parts being set up in an obvious manner, the operator grasps the handles  $g$  of the outer frame and lifts and drops the whole mold after the molding material is introduced for the purpose of jarring the molded material into a more compact condition, and thus improving the quality of the article molded. For this reason I have termed the base-plate a "jarring-plate," as it has to be made strong enough to stand the particular use to which it is put. It will be clear that the mold is removed from the molded article first by loosening the cores and withdrawing them, then by loosening the catches  $d$  and withdrawing the outer frame upwardly, and then by swinging the several parts of the inner frame outwardly from the article on the base-plate.

Having thus described my invention, I claim—

1. A molding-machine comprising a base having extended ends, a mold-box having hinged side and end walls and resting upon the base, a frame encircling the mold-box and resting upon the base and having handles on the ends thereof, and catches comprising levers pivoted to the ends of the frame and having locks for engaging the extended

ends of the base, said levers having handles extending above the handles of the frame. 35

2. A molding-machine comprising a base having extended ends, a mold-box having hinged side and end walls and resting upon the base, a frame encircling the mold-box and resting on the base, and provided with handles at the ends thereof, catches on the ends of the frame for engaging the extended ends of the base, whereby to lock the frame on the mold-box, and means above the handles for releasing the catches. 40 45

3. A molding-machine, comprising a base having extended ends, a mold-box having hinged side and end walls and resting upon the base, the side and end walls being inclined upwardly and inwardly on their outer faces, a frame encircling the mold-box and resting upon the base, said frame having its inner walls inclined upwardly and inwardly, and provided at its ends with handles, and catches comprising levers pivoted to the ends of the frame and having locks for engaging the extended ends of the base, said levers having handles extending above the handles of the frame. 50 55

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses. 60

ISSACHAR ROBBINS.

Witnesses:

GEO. J. KULP,  
ELIZABETH R. KULP.