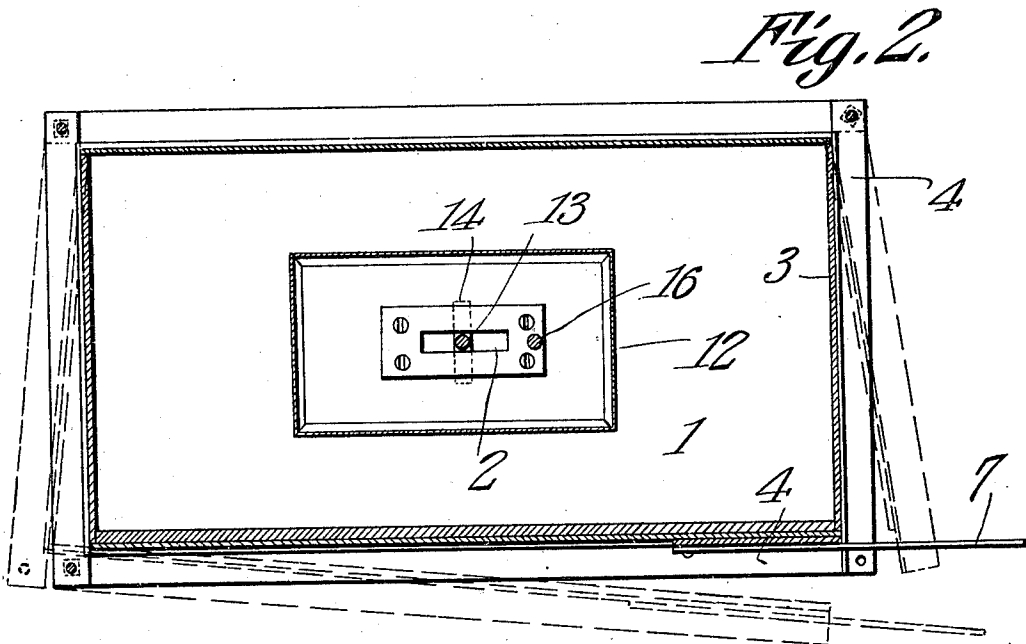
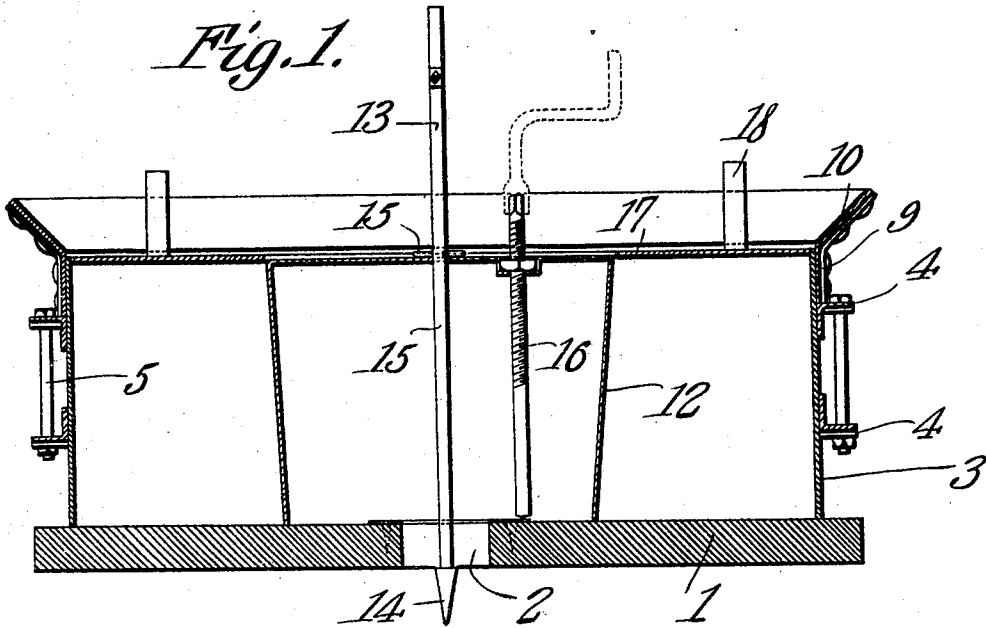


W. T. HARRIS, Sr.  
CONCRETE MOLD.  
APPLICATION FILED AUG. 12, 1909

960,909.

Patented June 7, 1910.

2 SHEETS—SHEET 1.



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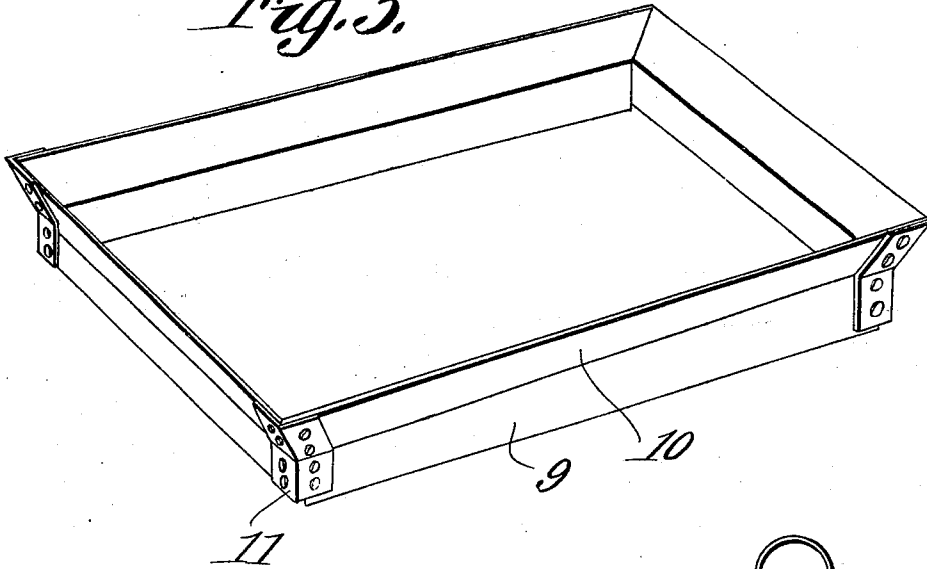
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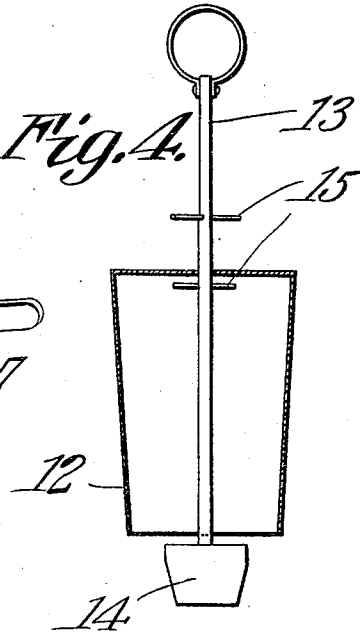
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2 SHEETS—SHEET 2.

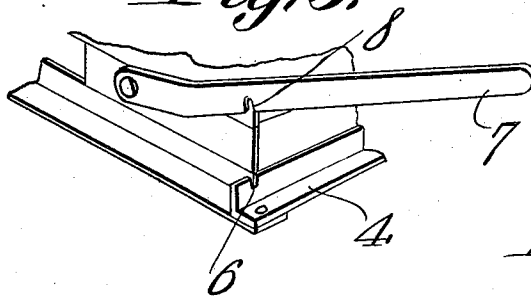
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



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# UNITED STATES PATENT OFFICE.

WILLIAM T. HARRIS, SR., OF HARRODSBURG, KENTUCKY.

## CONCRETE-MOLD.

960,909.

Specification of Letters Patent.

Patented June 7, 1910.

Application filed August 12, 1909. Serial No. 512,557.

*To all whom it may concern:*

Be it known that I, WILLIAM T. HARRIS, Sr., a citizen of the United States, residing at Harrodsburg, in the county of Mercer and State of Kentucky, have invented a new and useful Concrete-Mold, of which the following is a specification.

This invention relates to improvements in molds for forming concrete blocks, posts, piles or other articles and consists in certain novel features of the device illustrated in the accompanying drawings, as will be hereinafter first fully described and then particularly pointed out in the appended claims. In the said drawings, Figure 1 is a vertical longitudinal section of a mold constructed in accordance with my present invention. Fig. 2 is a horizontal section of the same, showing the sides of the mold swung outward to permit the removal of the block in dotted lines. Fig. 3 is a detail perspective view of the hopper. Fig. 4 is a detail vertical section of the core block, and Fig. 5 is a detail perspective view of the latch by which the sides of the mold are locked in position to form a block.

In carrying out my invention I employ a pallet 1 upon which the mold is adapted to rest and which is provided at about its center with a slot 2 to facilitate the fastening of the core in operative position. The sides of the mold 3 may be constructed of wood or metal of other sufficiently strong material and upon the outer faces of the said sides I rigidly secure angle irons 4, the ends of which overlap at the corners of the mold and are provided with registering openings through which suitable fastening bolts 5 are inserted to hingedly secure the sides 3 together. It will be understood that the several sides 3 may be of any desired size and relative proportions determined by the nature of the article to be formed in the mold. One end wall 3 has its angle irons 4 provided with notches 6 in their upper edges just beyond the adjacent side wall and upon the said side wall I pivot latches or locking levers 7 which are provided with notches 8 in their edges adapted to fit over the bottoms of the notches 6 so that the said levers and angle irons with their respective notches will form an interlocking engagement to securely hold the sides of the mold in their proper position when the mold is in use. In order to further hold the sides of the

mold in their proper operative position and to prevent loss of the material while the same is being fed into the mold, I employ a hopper 9 which consists of an open frame having an upper flared portion 10, the sides and ends of the said frame being rigidly secured together by means of corner plates 11 riveted to the meeting ends of the sides of the hopper, as clearly shown in Fig. 3. When the hopper is placed in position upon the mold it will fit snugly against the outer faces of the sides and ends of the mold and its lower edges will rest upon the upper angle iron 4, as clearly shown in Fig. 1.

With the parts thus far described, a solid block may be readily formed by simply pouring the plastic material into the mold and tamping the same, first, of course, inserting a suitable plug within the slot 2 of the pallet, as will be readily understood. After the material has been properly tamped, the mold is removed from around the block, leaving the same on the pallet to dry. In order to form a hollow block I employ a core 12 which may be of any suitable material and may be given any desired form so that the opening provided in the block will have the desired shape. The core is provided with a locking pin 13 which is mounted in the top of the core and extends downward below the same so as to project through the slot 2 in the pallet. The lower end of this locking pin is provided with a head 14 of such a size and shape that it will readily pass through the slot 2 when the pin is turned so as to bring the head into alinement with the said slot and will project across the slot and engage the under side of the pallet when the pin is turned to the position shown in Fig. 1 and in dotted lines in Fig. 2 so that the core will then be firmly held in position in the mold. This locking pin 13 is provided with lateral arms 15 above and below the top of the core so that when the pin is locked in engagement with the pallet the upper arms 15 will bear upon the top of the core and thereby hold the same firmly against the pallet, while, when the locking pin has been turned so as to bring the head 14 into alinement with the slot 2, the lower arms 15 may be brought against the top of the core so as to lift the same from its position within the mold. In order to remove the core from the molded block without breaking the block, a screw 16 is mounted in the top of the core

and adapted to bear against the upper side of the pallet, as clearly shown in Fig. 1. By rotating the said screw, the core will be caused to move upward from the pallet so that it will not be necessary to knock or jar the core in order to release it from the concrete and, consequently, cracking or breaking of the block will be avoided. Cracking of the molded block may be further avoided by the use of the cover or plate 17 which is provided with a handle 18 at each end and is adapted to rest on the molded block around the core so that a smooth surface will be given the upper side of the molded block and by exerting a slight pressure upon the said cover through the handles 18 the set of the concrete will be maintained when the core is moved therefrom.

In using my improved mold the mold is set up with the core therein and the concrete is then poured into the mold around the core in the usual manner. After the material has sufficiently set, the screw 16 is rotated so as to press against the pallet and thereby start the core upward so as to loosen the same from the molded block, it being understood that the locking pin 13 is first turned so as to bring the head 14 into alinement with the slot in the pallet so that when the core is loosened from the block and starts to move upward, the locking pin will not check such movement. After the core has been loosened from the block, the locking pin can be raised so as to quickly lift the core from its working position.

The device is extremely simple in its construction and its advantages are thought to be obvious.

Any concrete article, from a small brick to a large pile, may be made in a mold constructed in accordance with my invention, the proportions of which may be varied at will to correspond to the article to be formed.

Having thus described my invention, what I claim is:—

1. The combination of a pallet having a slot, a mold resting on the pallet, a core within the mold covering the slot in the pallet, and a locking pin mounted in the top of the core and provided at its lower end with a head adapted to pass through the slot in the pallet and engage the under side of the pallet, the locking pin being provided with laterally extending arms above and below the top of the core, and a screw mounted in the top of the core and having its lower end bearing upon the pallet.

2. A mold for concrete blocks comprising a plurality of walls, angle irons arranged longitudinally upon and secured to all but one of said walls and having the upstanding portions thereof cut away at their ends, the end portions of said angle irons lapping and being pivotally connected, an angle iron secured longitudinally upon the remaining wall and having its upstanding portion cut away at one end and lapping and pivotally connected to the cut away portion of one of the first mentioned angle irons, there being a notch within the upstanding portion of said angle iron adjacent its other end, the upstanding portions of said angle irons constituting means for limiting the swinging movement of the walls toward each other, and a latch pivotally mounted on one of the walls and movable into engagement with the notched angle iron to secure all of said irons in a predetermined relation.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WILLIAM T. HARRIS, SR.

Witnesses:

JNO. BREWER,  
C. D. THAYER.