No. 774,007. PATENTED NOV. 1, 1904.

J. W. TINSTMAN.

MACHINE FOR MOLDING CONCRETE OR CEMENT BUILDING BLOCKS.

APPLICATION FILED JUNE 15, 1904.

NO MODEL.

FIG. 1.

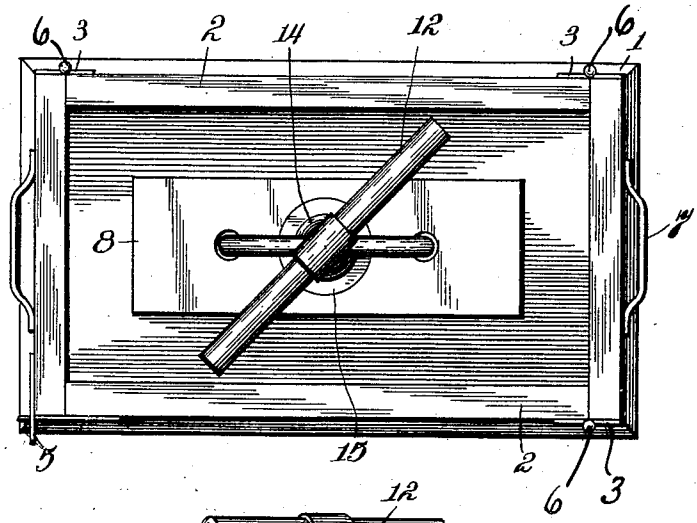



FIG. 4.

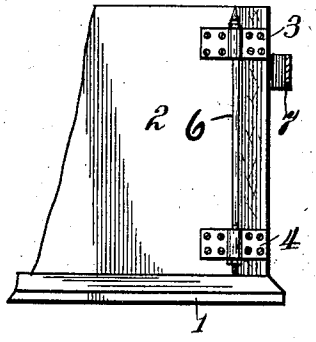



FIG. 2.

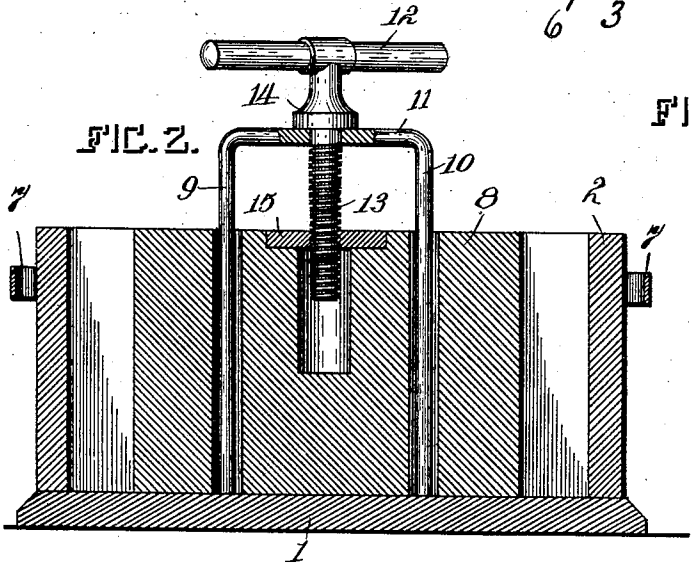



FIG. 5.

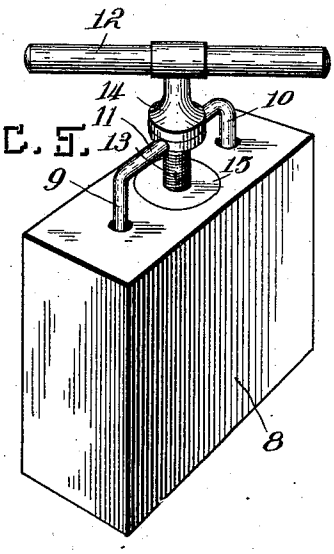
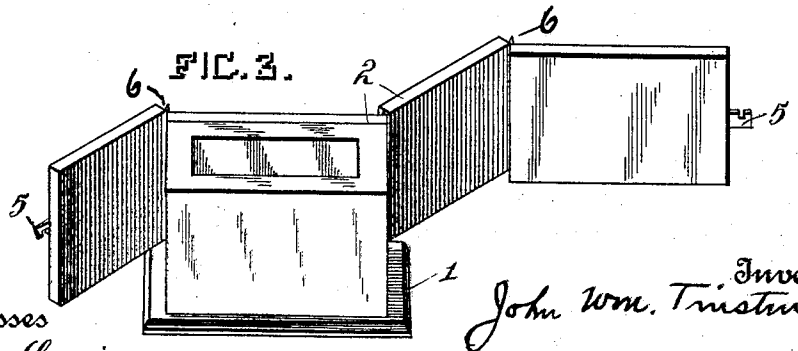



FIG. 3.




Witnesses
Milton Lenoir.
Geo. A. Hamlin

Inventor
John Wm. Tinstman
by Henry N. Copp
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No. 774,007. Patented November 1, 1904.

# UNITED STATES PATENT OFFICE.

JOHN WM. TINSTMAN, OF BUTLER, INDIANA.

## MACHINE FOR MOLDING CONCRETE OR CEMENT BUILDING-BLOCKS.

SPECIFICATION forming part of Letters Patent No. 774,007, dated November 1, 1904.

Application filed June 15, 1904. Serial No. 212,602. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN WM. TINSTMAN, a citizen of the United States, residing at Butler, county of Dekalb, and State of Indiana, have invented certain new and useful Improvements in Machines for Molding Concrete or Cement Building-Blocks, of which the following is a specification.

My invention relates to machines for molding concrete or cement building-blocks.

Machines for accomplishing the molding of concrete or cement building-blocks have heretofore been more or less expensive, large, and of several parts.

The object of the present invention is the provision of an improved, inexpensive, and simple machine for molding cement and concrete building-blocks which can be quickly and easily manipulated and wherein novel provision is made for forming any desired design on the sides of the block being molded.

The invention also contemplates the provision of an improved and simple core which can be quickly and easily removed from the molded block without injuring the block.

The invention carries out its contemplated objects, according to the most perfect embodiment of the device which I have at this time conceived, by the provision of a base on which the building-block is to be molded, a mold-box consisting of an open frame comprising sides and ends suitably hinged together, so that any side or end can be removed and another with a different design substituted, if desired, said frame or box being arranged to be opened out after the block has been molded and having means for holding the frame together when in use, and a core having means for raising the same from the molded block at a plurality of points, so that it is extracted evenly, and thus tearing of the block is obviated.

In the accompanying drawings, Figure 1 is a plan view. Fig. 2 is a longitudinal section. Fig. 3 is a perspective view showing the mold-box opened out. Fig. 4 is a detail of one of the hinges of the mold-box, and Fig. 5 is a detail of the core.

The base 1 may be of any desired shape, and a board may be used and supported on a bench or trestle at a suitable height for convenient operation of the device by the workman.

The mold box or frame 2 is composed of ends and sides connected by two hinges 3 and 4 at each corner, except where the latch or fastening 5 is provided. The hinges 3 and 4 at each corner of the frame 2 have their pivotal parts in vertical alinement, and a removable pintle 6 passes through both upper and lower hinges. This construction gives strength and at the same time permits rapid and easy detachment of the leaves of the hinges, so that any side or end of the frame can be removed and replaced by another when it is desired to substitute a side or end having a different design or configuration, for it will be understood that the sides and ends may or may not be provided with designs or configurations on their inner faces to mold corresponding designs on the faces of the building-block. Suitable handles 7 are provided for the manipulation of the mold-box. It will be seen that by unlatching the fastener 5 the mold-box can be spread open, as shown in Fig. 3, after the block has been molded to thus free the block.

The core 8 can be made hollow or solid, as preferred, and is of suitable size to make the desired opening in the building-block. This core has parallel openings extending therethrough from top to bottom through which loosely pass the legs 9 and 10 of a lifting-frame, said legs being connected by a cross-piece 11.

The numeral 12 designates a turning-handle to which is secured a screw 13, having a shoulder or nut 14, secured rigidly thereon, which bears against the cross-piece 11, while the screw 13 passes loosely through a hole in the cross-piece 11 and is detachably engaged by screw-threads with an internally-threaded nut 15, secured to the core 8. By turning the handle 12 the legs 9 and 10, which bear against the base 1, are made to form a support for the elevation thereon of the core 8, whereby the core is elevated out of the building-block until it is free therefrom, after which it can be lifted out bodily, and it will be understood that the provision of the plurality of support-

ing-legs evenly distributes the pressure, so that there is no tilting of the core when being withdrawn, and hence the building-block is not injured. By turning the handle 12 the screw 13 turns in the screw-plate 15 and the core 8 is drawn up on the legs 9 and 10.

In using the invention the base 1 is suitably supported on a trestle or other support at the proper height. The mold frame or box 2 is then placed on the base and the core 8 is positioned within the mold-box, the parts then having the relation shown in Fig. 1. The cement or concrete is then filled in the mold-box around the core and tamped down and smoothed off on top. The handle 12 is next operated to withdraw the core, after which the latch 5 is released and the frame straightened out, as shown in Fig. 3, and then placed aside, which leaves the completed building-block on the base 1. The base 1, with the building-block thereon, is then removed to some suitable place to harden, and a duplicate base 1 is used to mold another block according to the foregoing operation. When it is desired to make any desired configuration or impression on the side or end of the molded block, the given side or end is removed by taking out the pintles from the hinges and the desired end or side is substituted.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a machine for molding blocks, the combination with a solid base, of a mold box or frame adapted to seat thereon, a core adapted to rest on said base within said frame, and means carried wholly by the core and extending therethrough, said means adapted to engage said base whereby the core is raised therefrom.

2. In a machine for molding blocks, the combination with a solid base, of a mold box or frame adapted to rest thereon, a core adapted to rest on said base within the frame, legs passing through the core adapted to engage the base, and means coöperating with said legs whereby they are forced into engagement with the base to raise the core.

3. In a machine for molding blocks, the combination with a solid base, of a mold box or frame adapted to rest thereon, a core adapted to rest on said base within the frame, legs passing through the core adapted to engage the base, and a screw threaded in the core and coöperating with said legs whereby the core is raised from the base.

4. In a machine for molding blocks, the combination with a solid base, of a mold box or frame adapted to rest on said base, a core having an aperture adapted to rest on said base within the frame, a plurality of legs passing through said core and connected by a cross-piece, a threaded plate secured to the core and covering said aperture, and a hand-screw journaled in the cross-piece and screwing into said plate, whereby the legs are forced into engagement with the base to raise the core.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

JOHN WM. TINSTMAN.

Witnesses:
W. S. MAXWELL,
THOMAS RUDD.