

No. 738,830.

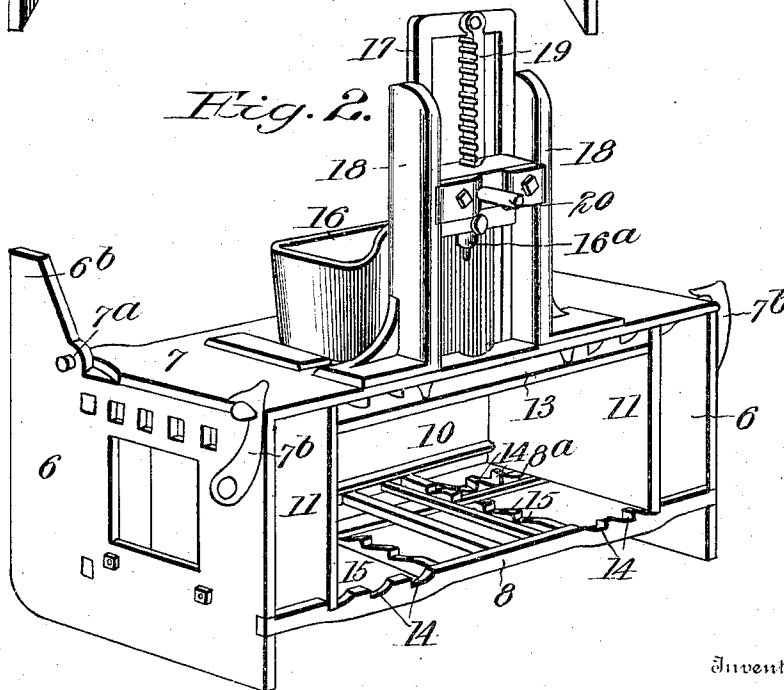
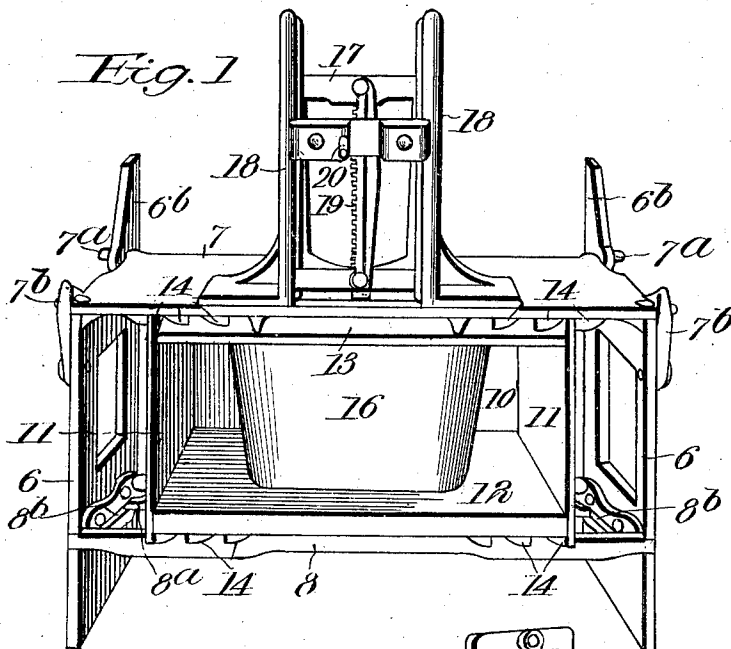
PATENTED SEPT. 15, 1903.

P. B. MILES.
BLOCK MOLD.

APPLICATION FILED MAY 11, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Inventor

Witnesses

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Geo. E. Jew

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Attorneys

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2 SHEETS—SHEET 2.

Fig. 3.

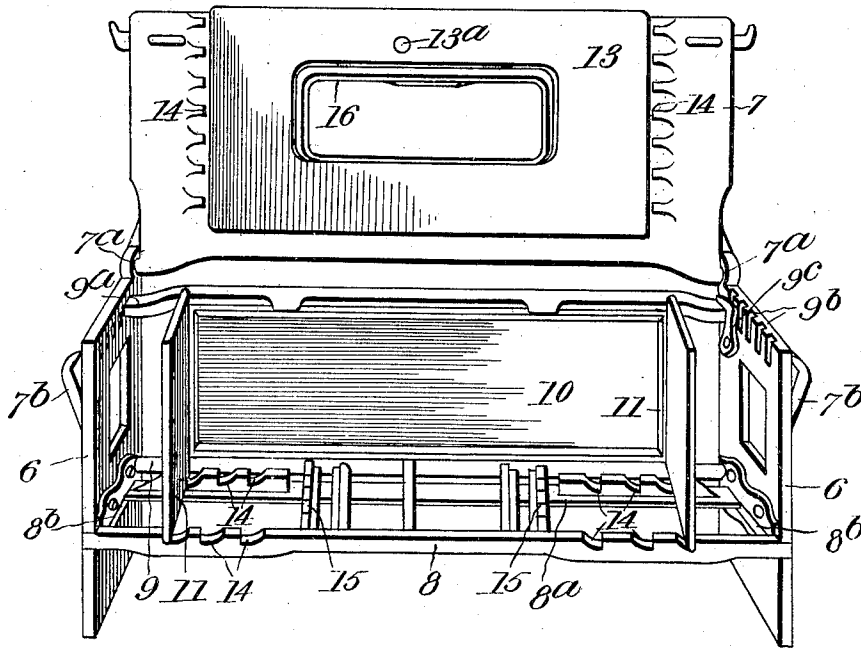
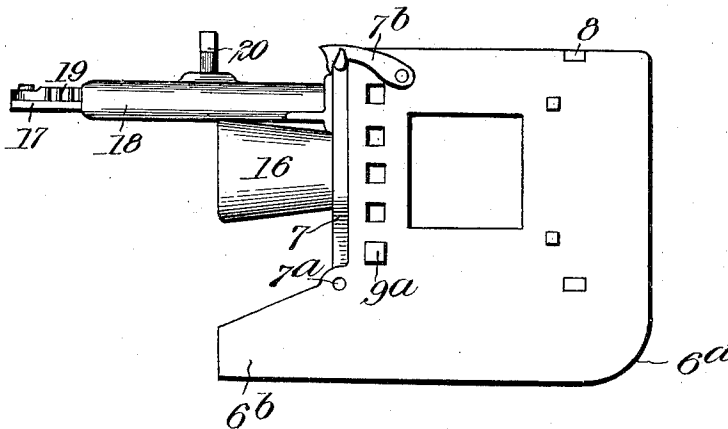


Fig. 4.



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UNITED STATES PATENT OFFICE.

PERRY B. MILES, OF JACKSON, MICHIGAN.

BLOCK-MOLD.

SPECIFICATION forming part of Letters Patent No. 738,830, dated September 15, 1903.

Application filed May 11, 1903. Serial No. 156,619. (No model.)

To all whom it may concern:

Be it known that I, PERRY B. MILES, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in Block-Molds; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates particularly to molds used for molding cement blocks or bricks and to that class thereof having removable and separate walls with means for adjusting the same to produce blocks of various sizes.

The object of the invention is to form an improved mold of the kind stated which shall be convenient for manipulation and have novel and improved means for placing and withdrawing the core ordinarily used to form a central cavity in the blocks.

Further advantages and objects will be apparent from the following description.

In the accompanying drawings, Figure 1 is a perspective view of the mold turned on its side and closed. Fig. 2 is a similar view showing the mold open and with one of the side boards removed. Fig. 3 is a perspective view showing the mold turned on its side as in the other views, but with the core retracted. Fig. 4 is an end elevation of the mold in its normal position ready for filling.

The mold forming the subject of this invention is adapted in operation to be filled in one position and after the block shall have set is turned on the side to permit the convenient withdrawal of the core from the block and of the block from the mold. The block is removed upon one of the boards forming the side of the mold, so that the pattern-plate or bottom of the mold having the design which is to appear on the front of the brick or block remains in place.

Referring specifically to the accompanying drawings, 6 indicates the end frames of the mold, having one lower corner rounded, as at 6^a, to facilitate turning the mold on its side

and the other lower corner extended, as at 6^b, to produce a suitable support and to form a stop for the hinged side 7 of the mold-frame. This side carries the core and the means to insert and withdraw the same, to be hereinafter described. The frame of the mold further comprises side bars 8 and 8^a and bottom bars 9 and 9^a, which extend between the ends 6. The bottom piece of the mold is indicated at 10, the end piece at 11, one side piece at 12, and the opposite side piece at 13. The bars 8^a and 9^a are adjustable, the former in slots 8^b in the end pieces 6 and the latter in a series of openings and notches 9^b, in which it is held by a hook 9^c. The side bars 8 and 8^a and the opposite side 7 are notched, as at 14, permitting an adjustment of the end boards 11 to make the mold longer or shorter. At 15 are notched cross-bars extending between the bars 8 and 9, and the bottom plate 10 rests in these notches and upon the bar 9^a. To vary the depth of the mold, the bottom plate is shifted to different notches in the bars 15, and the bar 9^a is shifted in the notches 9^b accordingly. Obviously the size of the side boards 12 and 13 must be varied according to the size of the mold desired. The side 13 is detachably attached to the hinged side 7 by a bolt 13^a. The side 12 forms the carrying and drying board for the finished block.

The side frame 7 is hinged at 7^a to the end frame 6 to swing open or shut and when closed is held by the hooks 7^b. This frame and also the side plate 13 have openings through which the core 16 works. This core is tapered slightly to permit its easy withdrawal from the finished block. It is inserted and retracted in the mold by means of a frame 17, which slides in guides 18, projecting outwardly from the side 7. The core is attached to the frame by lug and bolt at 16^a, and various cores may be substituted as desired. The frame 17 is reciprocated in the guides by rack 19, attached to the frame, in engagement with a pinion on the shaft 20, to which a hand-crank may be applied.

In operation, the mold being bottom down, as in Fig. 4, the facing material, in case such is used, is first poured in the mold, after which the core is advanced in place and the remain-

der of the concrete poured in and allowed to set, after which the mold is turned on its side, as shown in Figs. 1, 2, and 3, preparatory to removal of the block therefrom. The removal is effected by first withdrawing the core from the mold by means of the rack and pinion and then swinging the side 7 open and back against the stop 6^b, as indicated in Fig. 3. This permits the ends 11 to fall away from the block, which may then be lifted and carried away upon the board 12 to dry. The mold may then be closed and turned back for the next operation.

Tipping or turning the mold on its side permits the block to be readily removed without disturbing the design-board and also permits the vertical removal of the core, which is best, because it avoids the danger of collapse of the block during or after removal from the mold. The mold is adjustable to various sizes, and a convenient and serviceable apparatus is produced by the invention.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a mold, in combination, a tilting frame openable at one side, mold-sections adjustable therein, and a core removable through one of said sections.

2. In a mold, in combination, a tilting frame one side of which is hinged, separable mold-sections in the frame, and a core carried by

the hinged side and removable therethrough from the mold.

3. In a mold, in combination, end frames, a side hinged thereto, bars adjustable between said frames, and mold-sections supported on the bars.

4. In a mold, the combination with mold-sections including a bottom, ends and sides, one of which latter has a core-opening and the other of which is removable to serve as a carrying-board, of a frame supporting said sections and tiltable to turn the mold on its side, and a core carried by the frame, working into and from the mold through said opening.

5. In a mold, the combination with adjustable separable mold-sections, of a frame supporting the same and tiltable to turn the mold on its side.

6. In a mold, the combination with separable mold-sections one of which has a core-opening, of a frame supporting the same and having a hinged side, and a reciprocating core carried by the side and working through said opening.

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

PERRY B. MILES.

Witnesses:

WILLIAM A. COREY,
WILLIAM MILES.