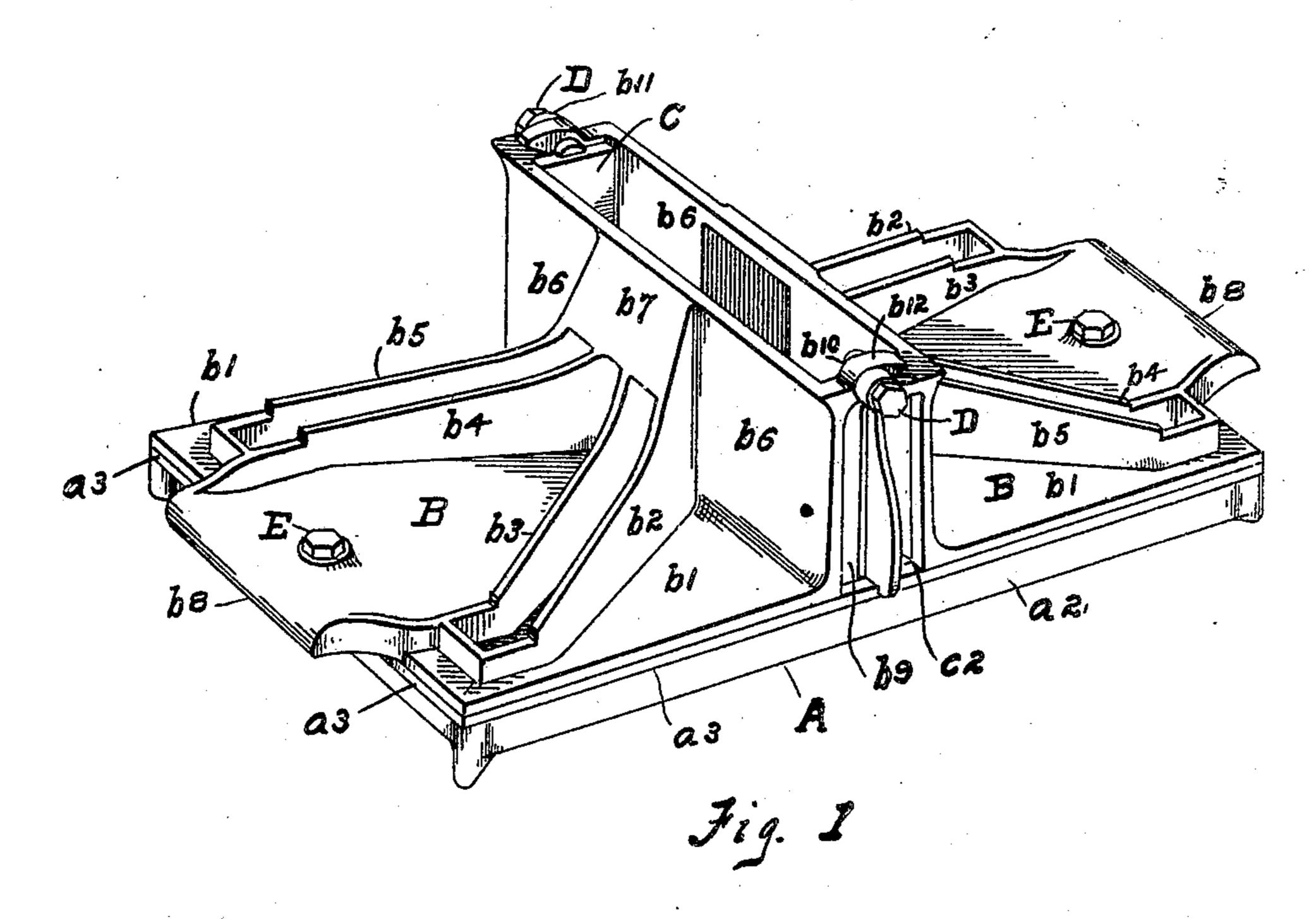
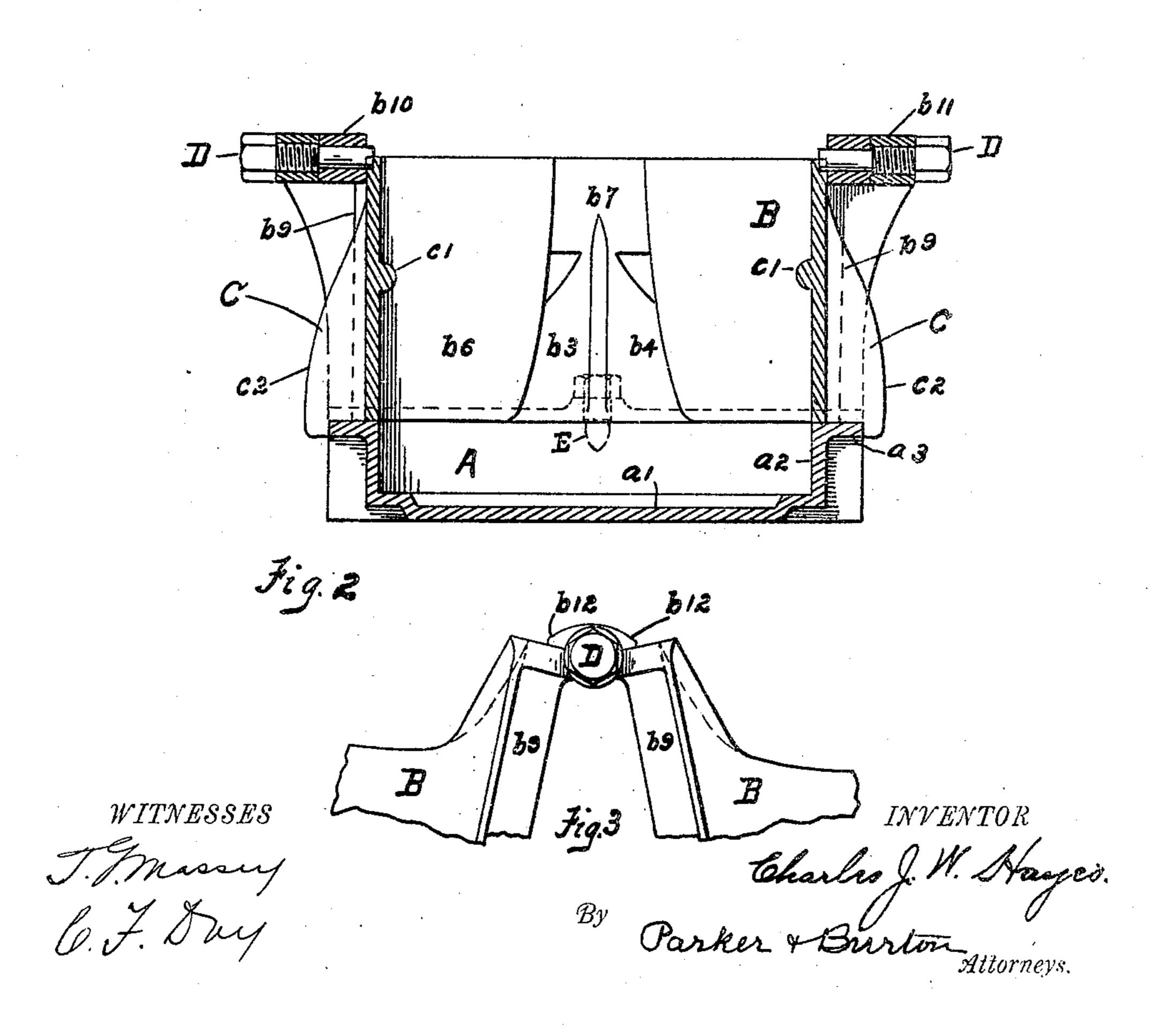
## C. J. W. HAYES. MOLD FOR BUILDING BLOCKS. APPLICATION FILED MAR. 13, 1905.





## UNITED STATES PATENT OFFICE.

CHARLES J. W. HAYES, OF DETROIT, MICHIGAN.

## MOLD FOR BUILDING-BLOCKS.

No. 804,122.

Specification of Letters Patent.

Patented Nov. 7, 1905.

Application filed March 13, 1905. Serial No. 249,699.

To all whom it may concern:

Be it known that I, Charles J. W. Hayes, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Molds for Building-Blocks; and I 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to molds for building-blocks; and its object is an improved mold for making ribbed blocks by the so-called "face down" method—i. e., the tamping of the material to be molded directly against that part of the mold which forms the face of the block.

While the mold here shown and described is designed particularly for making the block which is the subject of my pending application for Patent Serial No. 228,717, the invention may be readily adapted to the making of other ribbed and similar blocks, and this application is intended to cover such adaptations.

In the drawings, Figure 1 is a perspective of the assembled mold. Fig. 2 is a cross-section at the middle of the mold. Fig. 3 is a detail of the hinge connection between the two rib-forming parts of the mold.

In this mold the principal parts are a receptacle in the form of a flanged edge shallow pan or tray for molding the face and tabular part of the block. Two forms open through from top to bottom, hinged together and arranged to fit on top of the tray for molding the ribs of the block, and two plates fitting between the hinged forms for molding the ends of the main or mid-rib of the block and its bonding grooves.

The tray A is made with a bottom a' of such contour as is desired for the face of the block and with sides a' of a height equal to the desired thickness of the tabular part of the block and with a flange a' extending all around the edge and strengthened by ribs at the four corners. The flange of the tray serves as a seat for the forms B, which are brought to correct position on the tray by means of dowel-end screws E, entering holes in the flange of the tray. The forms B are duplicate and each has a horizontal plate part b',

from which rises parallel walls  $b^2$  and  $b^3$ ,  $b^4$  and b, radiating in diminishing height from the 55 middle of wall  $b^6$  toward the corners of the plate when the parallel walls join in a square corner and connect by a rib to the hand-grip  $b^8$ . Wall  $b^6$  has at each end a vertical rib  $b^9$ , and at the top extending from these ribs 60 knuckles  $b^{10}$  and  $b^{11}$ , so positioned that when the forms B are in line opposed these knuckles come end to end and with journal end capscrews D make joints that hold the forms B together. On knuckle  $b^{10}$  is a lug  $b^{12}$ , which 65 strikes the top of rib  $b^9$  when the forms are swung apart a certain distance and prevents them swinging farther. At each end of the space inclosed by the opposing walls  $b^6$  and the ribs b<sup>9</sup> is fitted a vertical plate C, having 7° a horizontal rib c' and a vertical rib  $c^z$ , which hooks over the flange of the tray A, upon which it rests. It is held from outward movement by abutting against the ribs  $b^9$ . At its top edge is a depression to receive the journal end of 75 cap-screw D. The apertures bounded by the walls  $b^2$  and  $b^3$ ,  $b^4$  and  $b^5$ , and the opposing walls b<sup>6</sup> and plates C join together beneath the connection  $b^7$  and are open through into the tray below.

In operation the tray is first rammed full of the material to be molded and "struck off" across the top. The forms B are then placed on top of the tray and the plates C put in position. The apertures in the forms are then 85 rammed full, the material joining that in the tray below and the surplus material struck off across the top edges. The forms are now seized by the handles and gently lifted, swinging by the joints away from the molded ma- 90 terial while supported on the plates C. When the limit of the joint has been reached, the forms are lifted bodily from the block, and the plates C are taken from the sides of the block, which is allowed to remain in the tray 95 until sufficiently set to be removed. If continuous operation is desired, sufficient number of trays should be provided to allow the required time to each tray.

What I claim is—
1. In a mold for building-blocks, the combination of a receptacle for molding a part of

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the block and a cover with flanged apertures for molding the remainder of the block, substantially as described.

2. In a mold for artificial-stone blocks, in

combination with a mold for the face of such block, a plate adapted to fit thereon having walled apertures adapted to receive and mold the material for the back of the block, sub-5 stantially as described.

3. In a mold for ribbed building-blocks, the combination of a tray for molding the tabular part of the block and an apertured ribform fitting thereon for molding the back of the block, substantially as described.

4. In a mold for making ribbed and similar slab building-blocks, the combination of a tray part for molding the slab part of said block and parts hinged together and having flanged apertures adapted to fit over and mold projections on the back of said slab part of block, substantially as described.

5. In a mold for artificial stone, the combination of a tray, a plural-part jointed and apertured form fitting thereon, and means for

supporting said form when the joint is operated, substantially as described.

6. In a mold for building-blocks, in combination with a receptacle for molding a part of the block, jointed forms adapted to engage on 25 said receptacle, and plates fitting between said forms for molding the remainder of said block, substantially as described.

7. In a mold for building-blocks, the combination of a tray for molding therein a part 30 of the block, and walls adapted to engage thereon for molding other parts of said block, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

CHARLES J. W. HAYES.

Witnesses:

MAY E. KOTT, CHARLES F. BURTON.