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MACHINE FOR THE MANUFACTURE OF HOLLOW BUILDING-BLOCKS.


To all whom it may concern:

Be it known that I, FRED W. HAGLOCH, a citizen of the United States, residing at Cleveland, county of Cuyahoga, and State of Ohio, have invented a new and useful Machine for the Manufacture of Hollow Building-Blocks, of which the following is a specification.

My invention relates to a new building-block machine consisting of one bottom plate, vertical sliding cores, receding end gates, shifting rear panel, removable front side board or pallet, and feed-table.

One object of my invention is to provide a machine with which various sizes of blocks can be made without change of size of pallets.

Another object is to deliver the block to the front side of the machine, thus avoiding the lifting of the block from the center of the machine, as is done in machines now in use.

A further object is to provide a table from which the material of which the block is to be made is drawn into the mold, thus avoiding the use of a detachable hopper now in use on other machines.

A still further object it to have the machine so self-contained as to enable removing it to any temporary or permanent place of operation without the construction of a foundation or specially built support for the machine, and a still further object is the use of but one bottom plate in making all sizes of blocks, thus avoiding the use of various sizes of bottom plates now in use in other machines. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure I is a vertical or end view of the machine. Fig. II is a horizontal or side view of the machine. Fig. III is a top view of the machine. Fig. IV shows device controlling rear panel.

Similar numerals refer to similar parts throughout the several views.

Referring to the drawings, numeral 1 indicates the end frames supporting the machine, which may be fastened to the floor or skids with bolts through openings 35. Frames 1 are rigidly connected by channel-bars 15.

Numeral 2 indicates lever, which is fastened to shaft 27, to which arms 3 are fastened with screws 36.

Vertical cores 5 are stationed through openings in channel-bars 15, which serve as guides. Said cores 5 are attached to arms 3 by connecting-bars 4, thus forming a knuckle-joint, so that operating-lever 2 moves the cores vertically through openings in channel-bars 15 and bottom plate 41.

Rear panel 37 is supported by horizontal-bars 7 with bolts 9. Bars 7 rest on shaft 25, and shaft 19 passes through slot 45 of said bars, thus allowing a horizontal sliding of said panel 37, which is obtained by levers 6 being attached to shaft 25 with set-screws 38 and pawl 39 being attached to said shaft is inserted in slot 40 of bars 7. Hence a downward motion of lever 6 moves panel 37 from the center of the machine or molding-box, and an upward motion of said lever returns the panel to its former position. Thus rear panel 37 rests on the edge of bottom plate 41 at 46, thus holding said bottom plate firmly in position while mold is closed. Bottom plate 41 is supported on arms 17, which are pivoted on shaft 19, thus allowing the turning of bottom plate 41 when rear panel 37 has been slid from center of machine. This turning is limited by lugs 24, thus allowing a ninety-degree turn. Removable board or pallet rests on plate 41 and is gaged to position by set-screws 18. This gaging is set according to the width of block desired, which enables the making of various-sized blocks, as referred to as an object of the invention. End gates 10 are held in position by levers 11, bearing against sides 8 of said end gates, as shown in Fig. III. Feed-table 22 is supported by brace-rods 21 and top of panel 37.

The machine is first closed, as in Figs. I, II, and III, then filled with such composition as is desired to be molded into building-blocks, which is firmly tamped or pressed into the mold, when same is leveled on top with a trowel or straight-edge. Lever 2 is then lowered, thus lowering the cores from the interior of the block. Levers 11 are then drawn.
toward the rear of the machine, thus releasing end gates 10, which drop to an angle of forty-five degrees and are held at that position by slant 44 on end of hinge resting against slant-frames 1. Lever 6 is then moved downward, thus sliding rear panel 37 from the new-made block. This is followed by drawing handles 20 downward, thus resting the block on the removable board or pallet, with which it is removed from the machine, and another board or pallet inserted and the mold closed, as before, and the operation repeated.

It will be noticed that the bottom board is a permanent part of the machine and not removable, as in other machines now in use.

I am aware that prior to my invention building-block machines have been made with vertical cores and hinged sides. I therefore do not claim such a combination broadly; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. In a block-molding machine, in combination, a tilting bottom plate, cores slidable vertically therethrough, hinged ends, and a pallet adjustably supported between the ends.

2. In a block-molding machine, in combination, a tilting bottom plate, vertically-slidable cores, the hinged ends, and the sliding rear panel.

3. In a block-molding machine, in combination, a tilting bottom plate carrying a removable pallet forming one of the sides of the mold, hinged ends, a receding rear panel, and means to operate said bottom plate and panel.

4. In a block-molding machine, in combination, a bottom plate attached to tilting arms, a removable side pallet, a shifting or sliding rear panel, and feed-table movable therewith, cores slidable vertically through the bottom plate, and receding end gates.

5. The combination in a building-block machine, of vertical sliding cores, a receding rear panel, a tilting bottom plate, and a one-size pallet-board supported thereon for making blocks of various sizes.

6. In a block-molding machine, in combination, a bottom plate pivoted to tilt thereon, ends, a rear panel slidable on the frame and engageable over the rear edge of the bottom plate, to prevent tilt thereof, an adjustable pallet carried on the bottom plate and forming the front side of the mold, and cores slidable vertically through the bottom plate.

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

FRED W. HAGLOCH.

Witnesses:

CHANDER SNOW,
C. I. WEIDENKOFF.