No. 809,251. PATENTED JAN. 2, 1906.

F. B. DYSART.

CEMENT TILE MACHINE.

APPLICATION FILED AUG. 18, 1905.

Fig. 1.

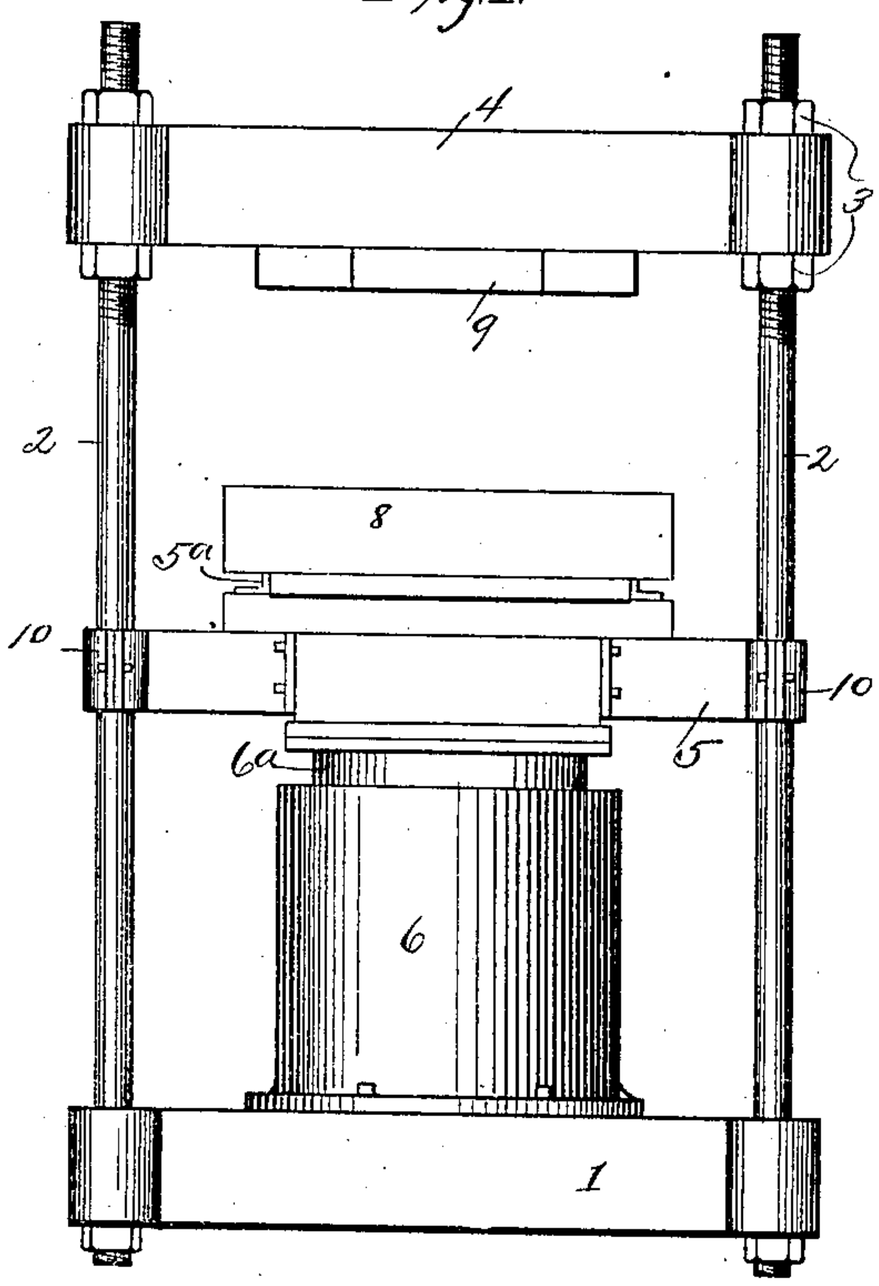


Fig. 3.

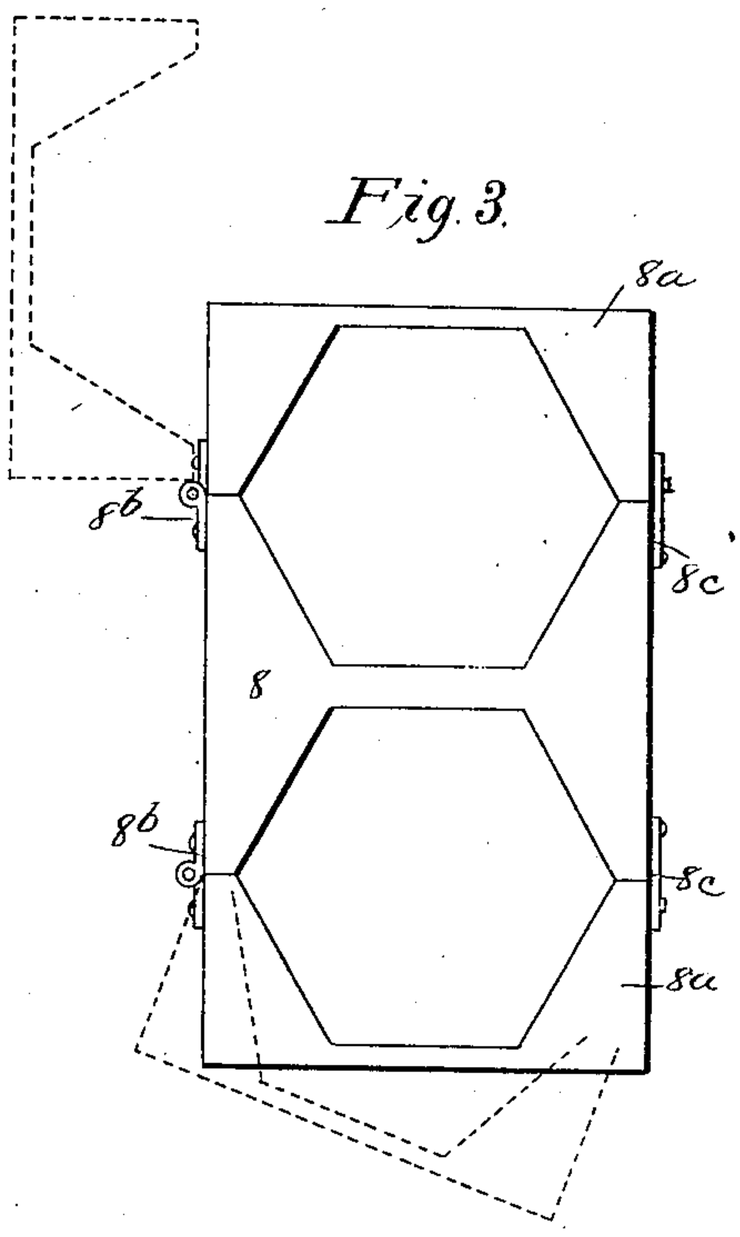
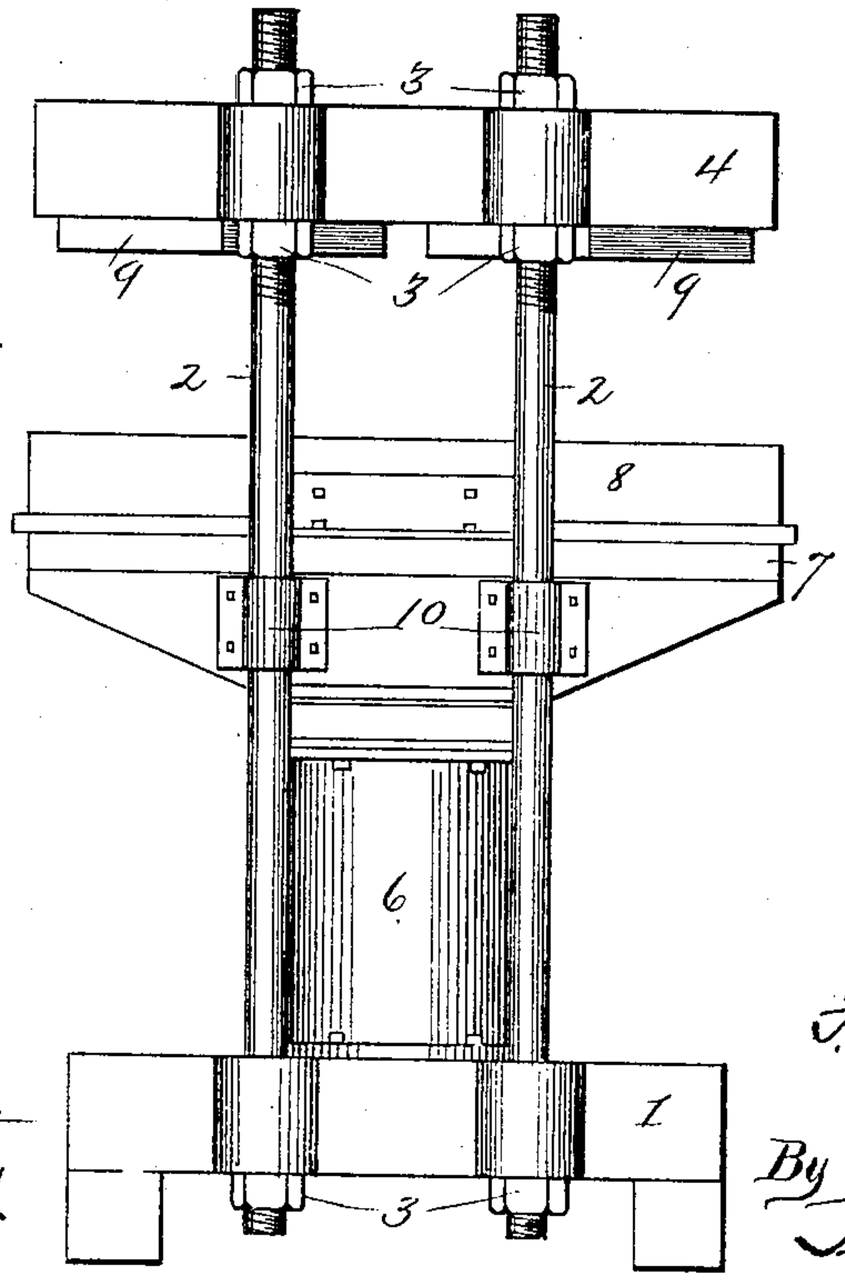


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

FRED B. DYSART, OF SUPERIOR, NEBRASKA, ASSIGNOR OF TWO-THIRDS TO C. E. ADAMS AND A. C. FELT, OF SUPERIOR, NEBRASKA.

CEMENT-TILE MACHINE.

No. 809,251. Specification of Letters Patent. Patented Jan. 2, 1906.

Application filed August 18, 1905. Serial No. 274,736.

To all whom it may concern:

Be it known that I, FRED B. DYSART, a citizen of the United States, residing at Superior, in the county of Nuckolls and State of Nebraska, have invented certain new and useful Improvements in Cement-Tile Machines, of which the following is a specification.

This invention relates to improvements in machines for molding flat tile-blocks or similar structures from cement or other material in plastic condition.

The especial object of my improvements is to produce a machine of this class of simple, strong, and durable construction, easy to operate, and from which the blocks or tiles formed can be quickly removed.

In the accompanying drawings I have shown my machine adapted to be operated by a pneumatic or hydraulic press; but such operating mechanism forms no part of my invention, as any other suitable means may be employed for operating the machine.

In the accompanying drawings, which form a part of this application, Figure 1 is a side elevation of my improved machine. Fig. 2 is an end elevation of same, and Fig. 3 is a plan view of the mold-box which is used in connection with my machine.

Referring to the drawings in detail, 1 represents the base of my machine, which is preferably made of cast-iron and formed with suitable offsets bored to receive the lower ends of the vertical rods 2, of which four are employed in my machine. These rods are threaded at their upper and lower ends, and secured on said threaded portions are nuts 3, those at the upper end of the shafts being adapted to effect the vertical adjustment of the top or header plate 4, which is also of cast-iron and formed with suitable offsets through which the shafts 2 pass.

The bed-plate 5 is made of cast-iron and is provided at its corners with boxes 10, which are babbitted to provide slidable bearings on the shafts 2. The bed-plate is supported on the upper end of the vertical plunger 6^a, which is slidably mounted in the cylinder 6 and is adapted to be raised by any suitable fluid, as steam, air, or water, introduced through the pipe 6^b, and is lowered by gravity upon the withdrawal of such fluid.

The mold-box 8 is formed with a central portion and two end portions 8^a 8^a, which are connected with the central portion by hinges 8^b and a catch 8^c, as shown in Fig. 3. The mold-box is open at the top and bottom, and its central portion is secured to the bed-plate 5 by angle-irons 5^a, a space being allowed between the bottom of the mold-box and the top of the bed-plate to permit the introduction and withdrawal of wood pallets, which slide between said bed-plate and mold-box. The dies or face-plates 9 are suitably secured to the under side of the header 4 and may be plain on their lower surface, as shown, or have any design desired applied thereto. In this connection I have shown the mold-box with two hexagonal openings, and hence the face-plates would be of corresponding shape and adapted to fit closely to the inner walls of the box.

In a machine built substantially as described, with the mold-box in operative position, upon filling same with cement in plastic condition and applying power to the piston of the cylinder the bed-plate, with its supported mold-box filled with cement, will be raised against the dies or face-plates 9 with such pressure on said cement as may be desired, the pressure being regulated by the stroke of the piston and the relative position of the header to the bed-plate. After the bed-plate has descended to its original position the hinged ends of the molds will be swung outwardly, as indicated in Fig. 3, and the pallets, with the molded cement resting thereupon, removed endwise from the machine.

The face-plates 9 are formed with suitable flanges, through which bolts extend into the header 4, thus providing for the removal of such plates and the substitution of others of different designs or shapes, if desired.

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

In a machine of the class described, a base having vertical shafts secured therein, a header-plate adjustably mounted on the up-

per part of said shafts, and means for locking said header in its adjusted position; a bed-plate slidably mounted on said shafts, a mold-box secured, to said bed-plate with a space between said box and said bed-plate, pallets slidably arranged in the space between the mold-box and the bed-plate, and a mold-box having hinged ends, and means for operating said bed-plate, all substantially as described.

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

FRED B. DYSART.

Witnesses:
WM. B. MOORE,
F. BENJAMIN.