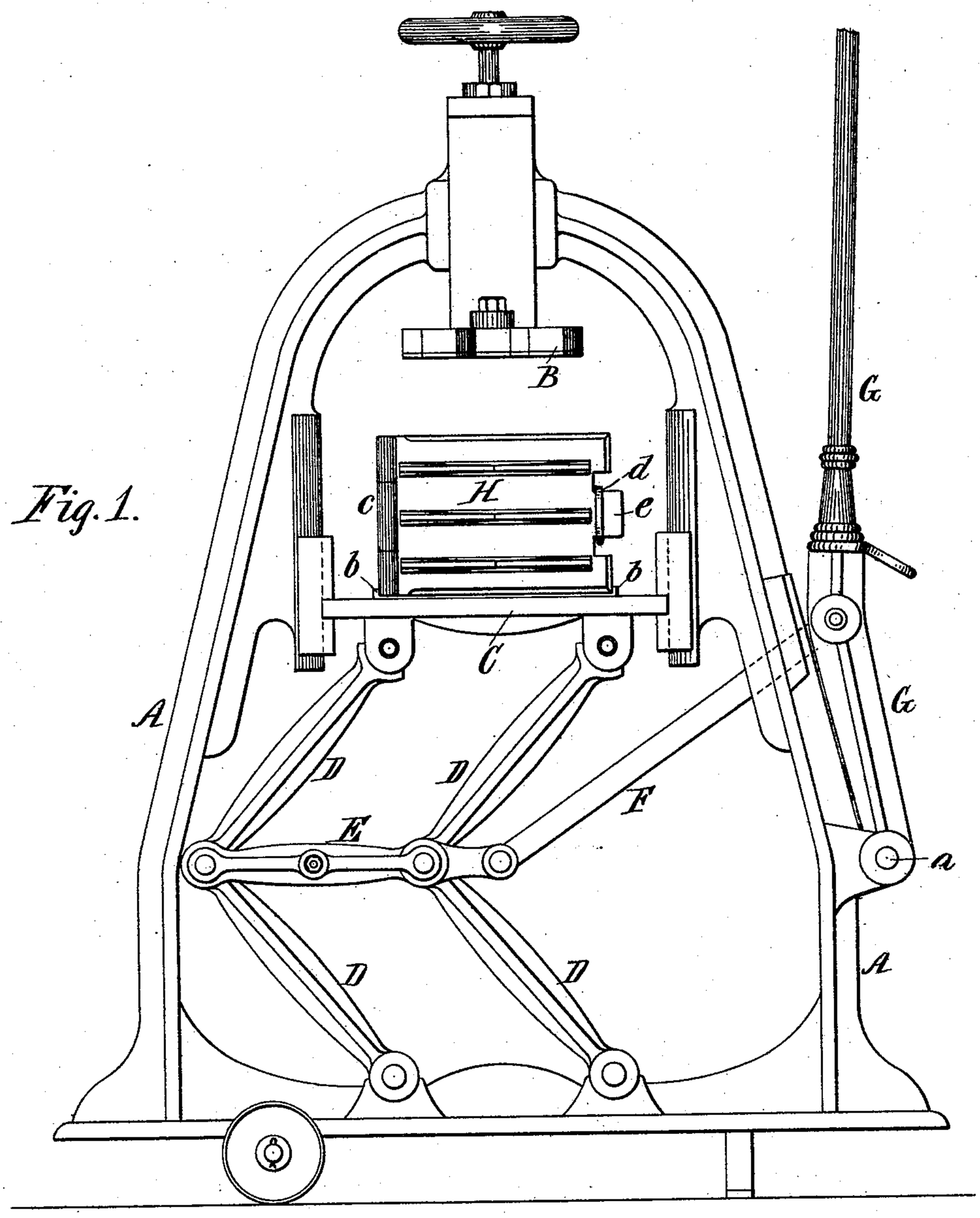
(No Model.) 2 Sheets—Sheet 1.

C. W. RAYMOND.

BRICK MOLD AND PRESS.

No. 455,951. Patented July 14, 1891.

Fig. 1.



Witnesses:
W. C. Jirdinston.
Charles Billon.

Inventor:
Chas. W. Raymond
by Peck & Reeton
his Attorneys.

(No Model.) 2 Sheets—Sheet 2.

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Fig. 2.

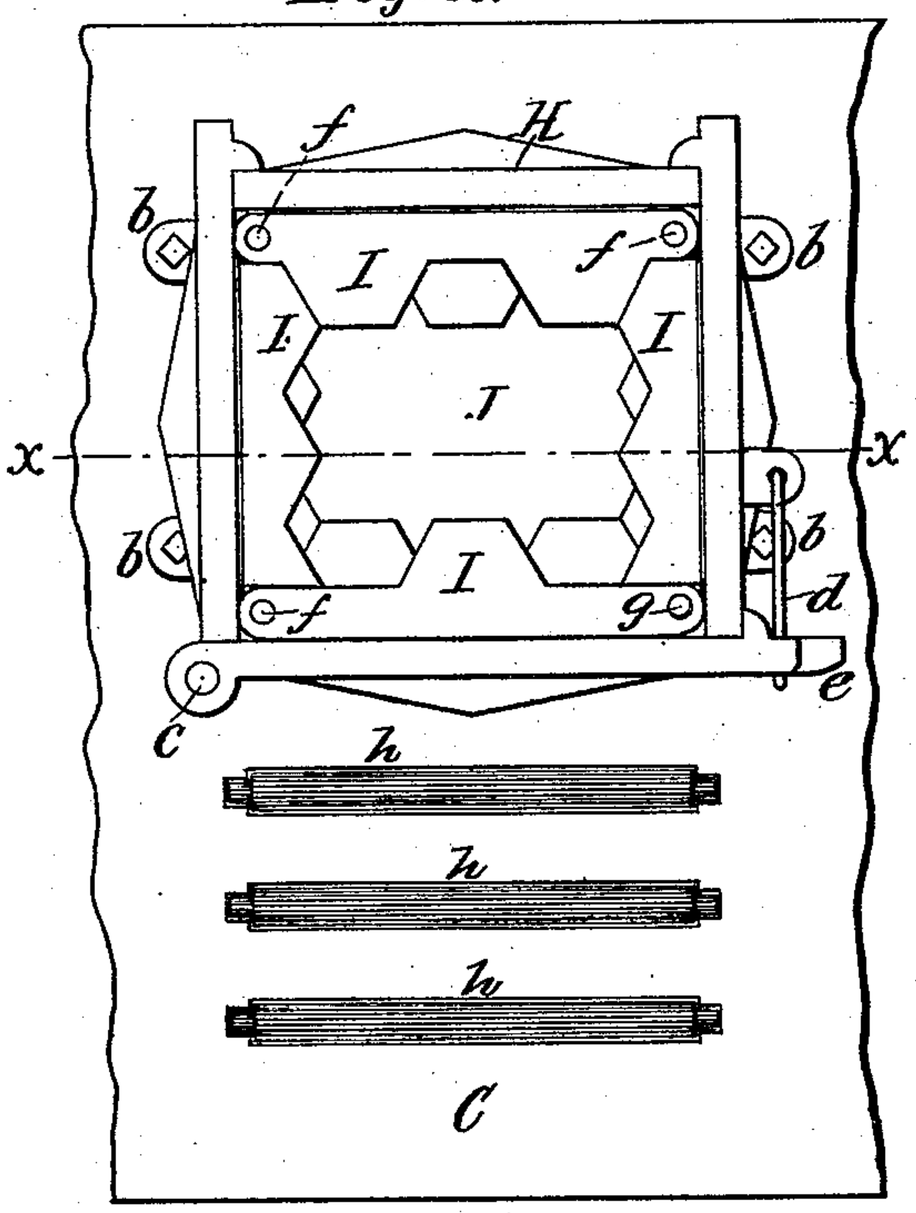


Fig. 3.

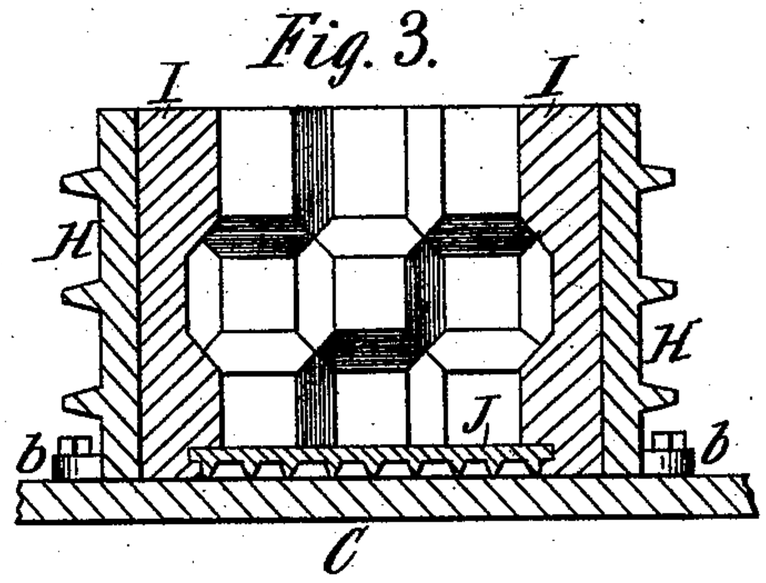
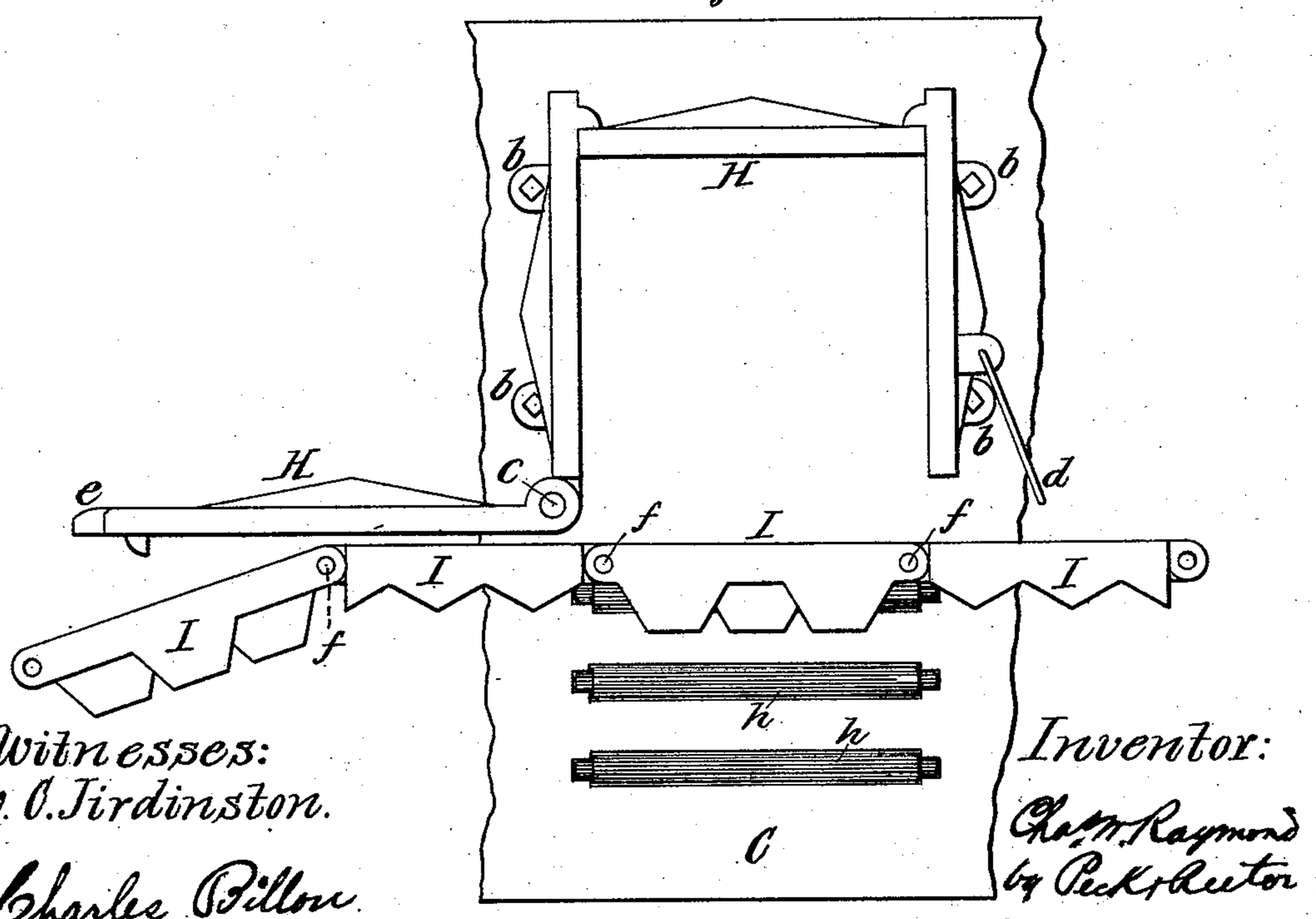


Fig. 4.



Witnesses:
W. O. Tirdinston.
Charles Dillon.

Inventor:
Chas. W. Raymond
by Peck & Reeton
his Attorneys

UNITED STATES PATENT OFFICE.

CHARLES W. RAYMOND, OF DAYTON, OHIO.

BRICK MOLD AND PRESS.

SPECIFICATION forming part of Letters Patent No. 455,951, dated July 14, 1891.

Application filed February 1, 1889. Serial No. 298,311. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. RAYMOND, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Presses, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to that class of presses for forming bricks or other objects from plastic material; and it has for its object such a construction as to enable the faces of the brick or other object to be given the desired configuration in relief or intaglio, or partly in both, as may be desired, and on as many sides as desired.

The novelty of my invention will be herein set forth, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1, Sheet 1, is a side elevation of a press embodying my invention. Fig. 2, Sheet 2, is a plan view of a portion of the table and the press and mold-boxes thereon ready for use. Fig. 3, Sheet 2, is a sectional elevation through the dotted line *x x* of Fig. 2. Fig. 4, Sheet 2, is a plan view of a portion of the table and the boxes thereon opened. Figs. 5, 6, and 7, Sheet 3, represent different sides of the finished block.

The same letters of reference are used to indicate identical parts in all the figures.

The press (shown in Figs. 1 and 5) is substantially that of my prior patent, No. 354,226, of December 14, 1886; but it may be of any other suitable construction. In describing it here it is only necessary to say that A is the frame; B, the stationary platen or die; C, the table carrying the press and mold boxes; D, the toggle-levers for raising and lowering the table; E F, the links for connecting the toggle-levers, and the operating-handle G, pivoted, as at *a*, to the frame A.

Upon the table C, directly beneath the die B, (see Figs. 1, 2, 3, and 4,) is secured the press-box H, in this instance rectangular in form and bolted to the table through lugs *b*. The top of the box is open, and the table C may form its bottom, if desired, as in this instance. One side of the box is hinged, as at *c*, to enable it to be swung open, as seen in Fig. 4, and when closed it is secured by means of the hinged link *d*, slipped over the projection *e*, or by any other suitable fastening device.

I represents an interior mold-box composed of four sides hinged together, as at *f*, Fig. 4, and adapted to be folded together to form a rectangular box, which will snugly fit the interior of the press box H, as shown in Fig. 2, the two free ends of the mold-box I being locked together by a pin or any other suitable fastening, as at *g*. The inner faces of the mold-box I are given the configuration or ornamentation that it is desired the object to be pressed shall possess, in this instance being shown as of a shape to form a peculiar interlocking paving-block, which block of itself, however, forms no part of my invention. Fitted within the bottom of said box is a removable bottom piece J, resting upon the table C, and preferably having ribs or lugs upon its under side, as seen in Fig. 3. The inner sides of the box I are recessed near their lower edges to receive the edges of the bottom J and form close joints. If desired, the top of the piece J may be given ornamentation, as may also the under side of the die B, so as to ornament the block or other object on all of its faces. The top of the box I is open and the die B is made to fit snugly therein.

In carrying out the operation of pressing, the unfolded mold-box I being placed upon the table C in front of the open press-box H, as shown in Fig. 4, the removable bottom J is placed in position and the sides of the box I folded together and locked around said bottom to form the rectangular mold, which is then pushed into the open press-box H and the hinged door of the latter closed and locked by the link *d*. The material to be pressed is then placed within the mold-box I, so as to completely fill the same; or, if desired, this may be done before the mold-box is placed in the press-box. The press is then operated to lift the table C and the boxes H I to cause the die B to enter the top of the box I and compress the material therein, causing it to conform to the shape of the interior of the box. After the pressing operation is com-

pleted the table C and boxes H I are lowered to their normal position, the hinged door of the box H is opened, and the box I, with its bottom J, drawn out upon the table C, which may be provided with rollers *h*, let into its surface, and then the fastening at *g* is withdrawn and the box I opened out, as seen in Fig. 4, so as to free its sides from the pressed block without injury to the ornamentation thereon. The finished block is left upon the bottom piece J and carried thereon to be dried or burned, as required, while another bottom piece J, of which a number are provided, is placed in position instead of the one removed, and the operation repeated.

While I have illustrated my invention as applied to the manufacture of a peculiarly-shaped paving-block, it will be understood that it may be applied to the manufacture of a great variety of objects which are pressed from plastic material, and this whether it is desired merely to ornament said objects or to form them of particular shapes for mechanical purposes.

Having thus fully described my invention, I claim—

1. The combination of the outer press-box having a hinged or detachable side and the inner mold-box having hinged sides arranged to be folded together and fitted within the press-box, substantially as and for the purpose described.

2. The combination of the outer press-box having a hinged or detachable side, the inner mold-box having hinged sides arranged to be folded together and fitted within the press-box, and the removable bottom for the mold-box, substantially as and for the purpose described.

CHARLES W. RAYMOND.

Witnesses:
WALTER D. JONES,
EDWARD F. LIPP.