

O. C. HIATT.
FLUE BLOCK MOLD.
APPLICATION FILED AUG. 28, 1908.

Patented Dec. 7, 1909.

2 SHEETS—SHEET 1.

942,779.

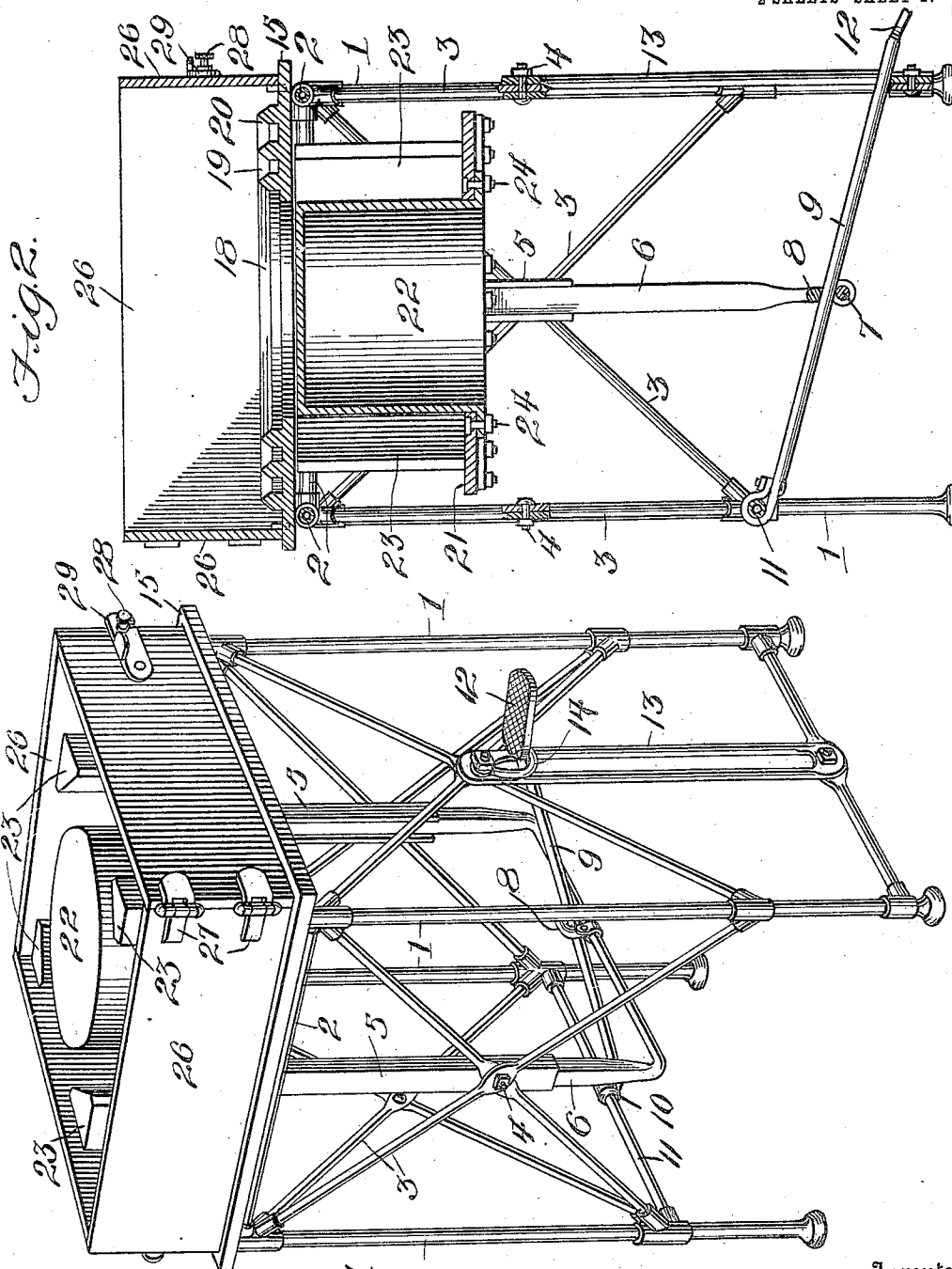


Fig. 2.

Fig. 1

Witnesses

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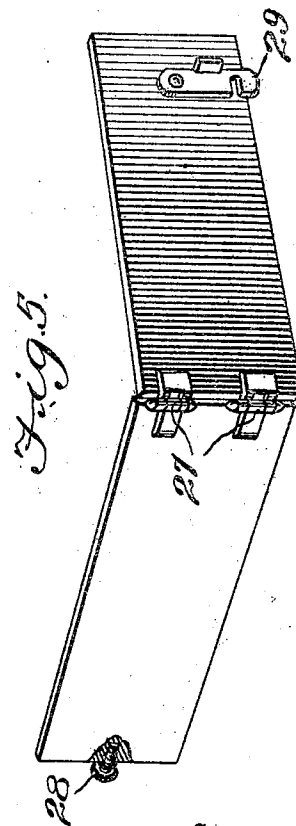
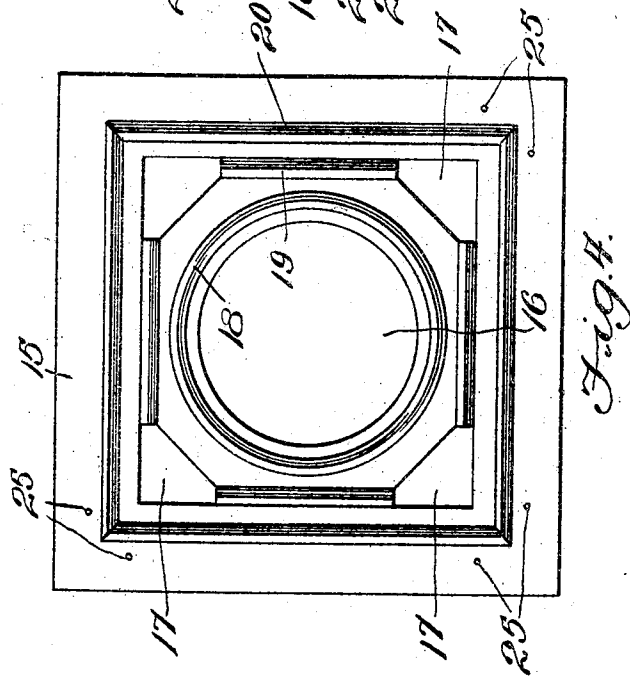
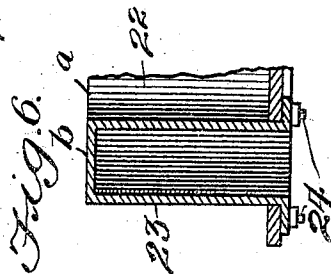
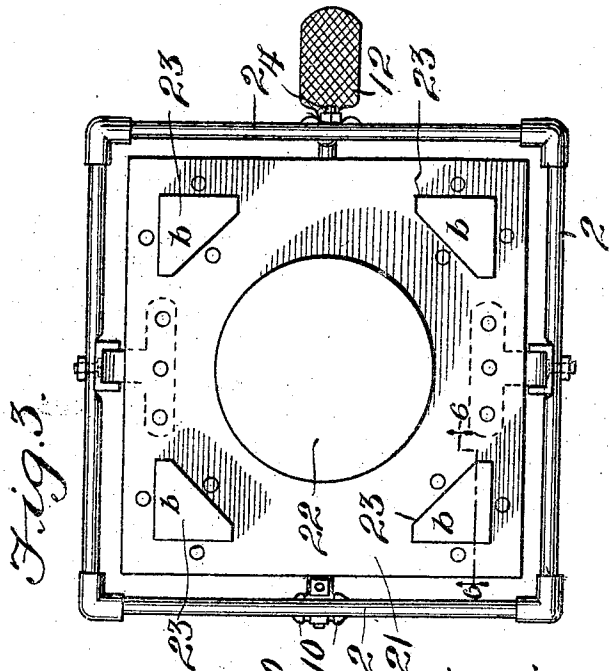
Attorney

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Witnesses

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UNITED STATES PATENT OFFICE.

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FLUE-BLOCK MOLD.

942,779.

Specification of Letters Patent.

Patented Dec. 7, 1909.

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To all whom it may concern:

Be it known that I, OLIVER C. HIATT, a citizen of the United States, residing at Elwood, in the county of Madison and State of Indiana, have invented new and useful Improvements in Flue-Block Molds, of which the following is a specification.

This invention relates to flue block molds, the object of the invention being to provide a more practical machine which will greatly facilitate and expedite the making of flue blocks and which will insure the accurate molding of the blocks so that they will fit properly together and form a flue of uniform and neat appearance.

With the above and other objects in view, the nature of which will more fully appear as the description proceeds, the invention consists in the novel construction, combination and arrangement of parts as herein fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a perspective view of the mold complete shown in position for use. Fig. 2 is a vertical sectional view of the same showing the core plate and cores depressed preparatory to the removal of a molded block. Fig. 3 is a plan view of Fig. 1. Fig. 4 is a plan view of the pallet. Fig. 5 is a perspective view of one pair of horizontal side pieces. Fig. 6 is a detail vertical section through one of the ventilator cores.

The machine comprises a supporting standard which may conveniently consist of corner posts or legs 1 connected by a pallet supporting horizontal top frame 2 which is substantially square, and further connected by means of braces 3 arranged diagonally and crossing each other and connected together at their crossing points by suitable fasteners 4. The same fasteners 4 may be used to secure in place a pair of oppositely arranged channel iron guides 5 in which are placed the side bars or slides 6 of a vertically movable yoke the connecting bar 7 of which is jointed at 8 to an operating lever 9, the latter being fulcrumed at 10 on a cross bar 11 of the frame of the standard and provided at its opposite end with a treadle 12. 13 designates a slotted guide in which the free end of the lever plays up and down as shown in Fig. 1, while 14 designates a pivoted latch in the form of a hook adapted to be moved into engagement with the lever 9 when the latter is raised, for the purpose of

holding the core plate hereinafter described in its normal elevated position of use.

Resting upon the top frame 2 of the standard is a pallet 15 which is shown substantially squared but it will be understood that the pallet may be of any suitable shape according to the shape of the block to be molded thereon. The pallet 15 is provided with a central core opening 16 and is provided with corner openings 17 to receive the ventilator cores hereinafter described, the central opening 16 being adapted to receive the smoke flue core to be hereinafter described. In the preferred embodiment of this invention, a raised circular rib 18 extends around the central opening 16 and other straight ribs 19 and 20 are raised on the upper surface of the pallet as shown in Fig. 4, the ribs 20 being arranged in the form of a square while the ribs 19 extend parallel with the inside of the ribs 20 and reach from one core opening 17 to another as clearly shown, said ribs 19 and 20 being disposed tangentially with reference to the central opening 17. The ventilator core openings 17 are substantially triangular in shape with the outer sides thereof parallel to the sides of the complete molded block adjacent to the corners of the latter.

Moving beneath the pallet 15 is a core bed plate 21 having extending upwardly from the center thereof a smoke flue core 22 and having arranged around said smoke flue core a plurality of corner ventilator cores 23. The cores 22 and 23 are preferably of hollow construction as shown in Figs. 2 and 6 and each of said cores is detachably connected to the plate 21 by suitable fasteners 24 as shown in said figures, thereby enabling the cores of different sizes and shapes to be connected to the plate 21. The plate 21 is fastened to the oppositely arranged slides 6 of the vertically movable yoke hereinabove described so that as said yoke is moved up and down the core plate and the cores carried thereby are simultaneously moved into corresponding direction, the core 22 moving through the opening 16 of the pallet and the cores 23 moving through the openings 17 of the pallet. The pallet is further provided on its upper surface with gage pins 25 which are for the purpose of positioning the sides 26 of a square rectangular marginal frame illustrated in Figs. 1, 2 and 5. By reference to Figs. 1 and 5, it will be seen

that the sides of such frame are hinged together in pairs as shown at 27 and provided at their opposite free ends with complementary fastening devices 28 and 29. The pairs

5 of hinged sides are thus detachably connected together in the manner illustrated in Fig. 1, the gage pins 25 lying inside of the side pieces of said frame and serving to position the same at the proper distance from the
10 raised outside rib 20 hereinabove described.

In making the block, the plate 21 is moved to its upper limit, thereby positioning the cores 22 and 23 within the marginal frame 26, as shown in Fig. 1. The concrete is then
15 placed in the spaces between the cores and the marginal frame and tamped to a level with the top edges of the mold sides 26 and the cores 22 and 23 and after becoming set, the core plate 21 is depressed by means of
20 the lever 9 thus withdrawing the cores from the molded block. The pallet may then be removed from the stand and deposited on a suitable support such as a table or floor, after which the sides 26 are removed for use in
25 connection with another pallet corresponding exactly with the pallet 15, it being understood that any desired number of pallets 15 may be employed according to the time required for the blocks to harden. It will also
30 be understood that pallets of different sizes may be mounted upon the same stand and

that cores of different sizes and shapes may be secured to the core plate 21 for the purpose of correspondingly varying the apertures formed in the completed block.

I claim:

A flue block mold comprising a frame, a pallet supporting top, a vertically movable core plate, a flue core and four ventilator cores carried by the core plate, a stationary pallet
40 having apertures of the same size and shape as the flue core and ventilator cores, a detachable side wall frame, and means for raising and lowering the core plate to project the flue core through said aperture comprising
45 a U-shaped sliding yoke having upwardly extending bars terminally connected to the core plate, guides in which said arms slide, a single operating lever fulcrumed at one end of the stand and having a sliding connection at an intermediate point with the
50 cross bars of the yoke, a slotted guide for said lever, and a catch for holding said lever in position to sustain the core plate elevated.

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

OLIVER C. HIATT.

Witnesses:

KATE A. CHIPMAN,
D. C. CHIPMAN.