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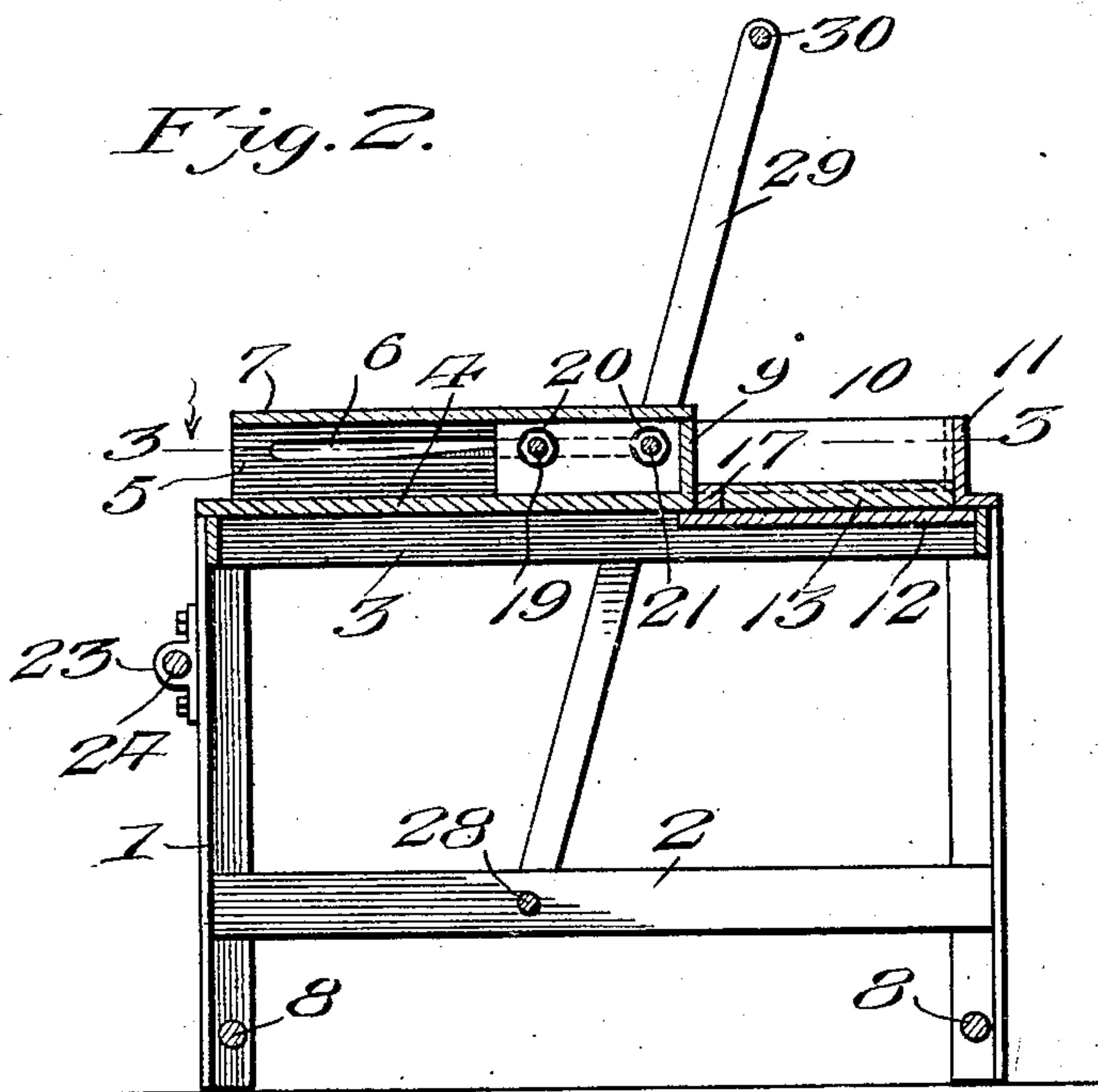
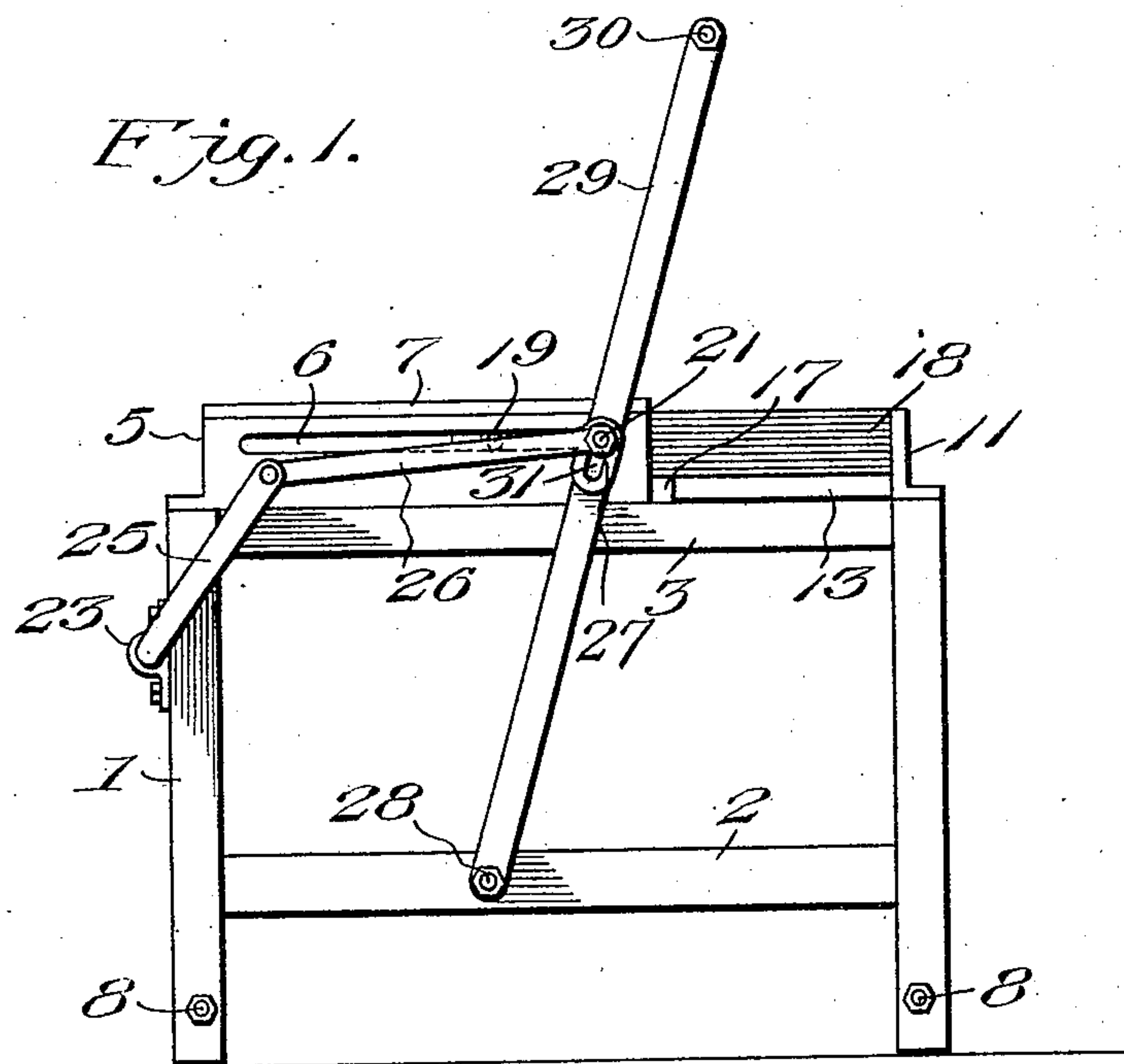
PATENTED MAY 28, 1907.

N. H. BOLTON & J. BELISLE.

BRICK MOLDING MACHINE.

APPLICATION FILED OCT. 13, 1906.

2 SHEETS—SHEET 1.



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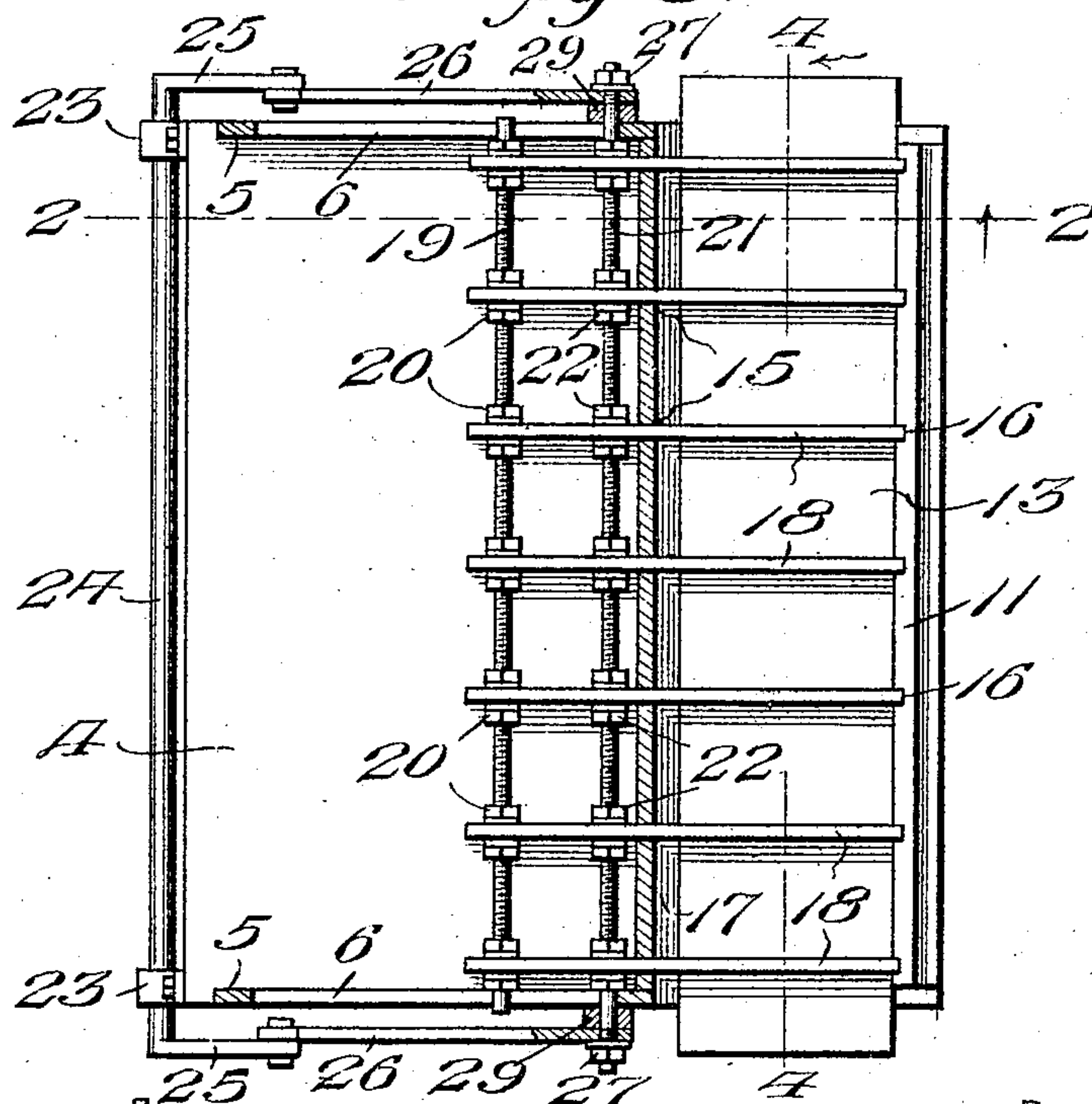
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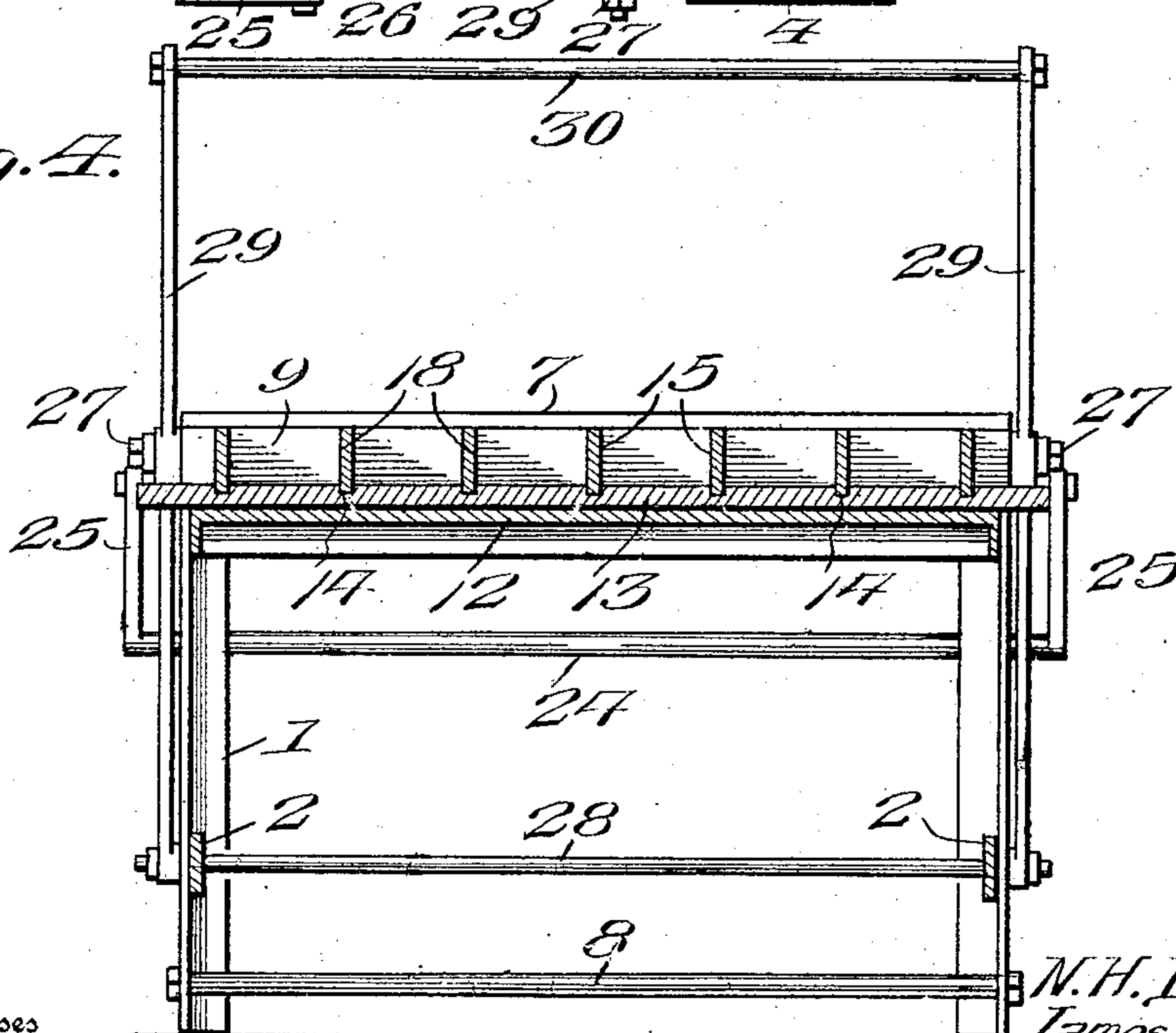
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2 SHEETS—SHEET 2.

*Fig. 3.*



*Fig. 4.*



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# UNITED STATES PATENT OFFICE.

NEWTON H. BOLTON AND JAMES BELISLE, OF MINNEAPOLIS, MINNESOTA.

## BRICK-MOLDING MACHINE.

No. 855,382.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed October 13, 1906. Serial No. 338,867.

*To all whom it may concern:*

Be it known that we, NEWTON H. BOLTON and JAMES BELISLE, citizens of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented new and useful Improvements in Brick-Molding Machines, of which the following is a specification.

This invention relates to brick molding machines and embodies in its organization a mold having a removable pallet arranged therein, together with a series of partitions adapted to be moved into and out of the mold, and has for its objects to produce a comparatively simple, inexpensive device of this character wherein a series of bricks will be cast at a single operation, one in which the partitions will be properly guided in their movements and prevented from lateral play during movement into or out of the mold, and one wherein the pallet may be conveniently removed from the latter and the completed bricks in turn removed from the pallet.

With these and other objects in view, the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings: Figure 1 is an end elevation of a machine embodying the invention. Fig. 2 is a vertical, transverse section from front to rear, taken on the line 2—2 of Fig. 3. Fig. 3 is a horizontal section taken on the line 3—3 of Fig. 2. Fig. 4 is a vertical, longitudinal section taken on the line 4—4 of Fig. 3.

Referring to the drawings, it will be seen that the main frame of the machine comprises legs 1 connected between their ends by transverse brace members or bars 2 and at their upper ends by transverse frame bars 3 on which is supported a horizontal bed or table 4 having at its ends integral, vertically uprising portions or flanges 5 provided with longitudinal guide openings or slots 6 and on which is sustained a top plate 7 extended longitudinally of the machine, while connecting the legs 1 are longitudinal tie bolts 8.

Formed at the forward edge of the bed or table 4 is a vertically uprising flange 9 constituting the rear wall of a mold 10 positioned in advance of the table and comprising in addition to the wall 9 a front wall 11 and a bottom 12, on which latter there is removably disposed within the mold a pallet 13, on the upper face of which there is formed a plu-

rality of equidistantly spaced raised panels extended across said pallet and numbering one for each brick to be molded, thereby molding into the bottom of each brick a recessed indenture, which forms a small air space and constitutes a suction chamber necessary in laying the brick into a perfect wall, the pallet 13 being somewhat narrower than the space between the wall 9 and the front wall 11 to facilitate removal of the pallet with the molded bricks thereon, said space being closed by a removable filling piece or strip 17.

Arranged for movement horizontally into and out of the mold and in a direction transversely of the latter and in grooves 14 is a series of vertical partitions 18 connected at their rear ends in series by means of a longitudinally extending connecting member or rod 19 having its ends arranged for movement in the guideways 6, there being threaded onto the rod retaining nuts 20 arranged in pairs for engagement respectively at opposite sides of the several partitions, while arranged in advance of the rod 19 is a second connecting rod 21 on which are tapped clamping nuts 22 corresponding to the nuts 20 and having its ends projected through the guide openings 6 for a suitable distance beyond the walls 5 for a purpose which will presently appear.

Journaled in bearings 23 at the rear of the frame is a rock shaft 24 having terminal crank portions or arms 25 to which are pivoted the ends of links 26 having their other ends pivoted on the projecting ends of the rod 21 and secured by nuts 27, there being extended longitudinally of the frame and having bearing in the frame members 2 a rod 28 on which is fulcrumed the lower ends of a pair of operating levers 29 in turn connected at their upper ends by a handle bar 30 and fulcrumed between their ends on the ends of the rod 21, which are disposed in slots 31 provided in the levers to compensate for lost movement between the parts.

In practice, the pallet is arranged in the mold and the levers 29 moved forwardly for projecting the partitions 18 through the openings 15 and into the mold, as shown, it being understood that when the partitions are so arranged their lower edges will seat in the grooves 14 and their outer ends in the grooves 16, whereby the partitions are held rigidly and properly separate the various compartments formed thereby in the mold. After



the partitions have been properly arranged the mold is filled with plastic material and after the same has partially set the handle bar 30 is grasped and the levers swung rearwardly, thereby retracting the partitions from the mold and from between the bricks, whereupon the ends of the pallet which project beyond the mold are grasped and the pallet lifted out and carried to the drying house, it being apparent that when the pallet has been removed the bricks will project at one end beyond the edge of the pallet a distance equaling the width of the spacing piece 17, whereby they may be conveniently removed from the pallet after drying. It is to be observed that in the movements of the partitions they will be properly guided owing to engagement of the rods 19 and 21 with the guideways 6, and further that unequal movement of the ends of the rod 21 and consequent lateral movement of the partitions will be obviated due to the link connections 26 with the crank arms 25.

Having thus described my invention, what I claim is:

1. A brick molding machine comprising a supporting frame, a table carried thereby, said table being provided at its rear with upwardly extending longitudinal flanges, forming the front and rear walls of a mold chamber, the front wall being formed with a plurality of slots, said table also being provided

in front of said front wall with side flanges having longitudinal guide slots, a plurality of partitions arranged for movement through said slots in the front walls to be projected into and out of the mold, a pallet removably arranged within the mold chamber, said pallet being of a width somewhat less than said chamber, a filling piece between the front wall of the mold and front edge of the pallet, a pair of rods connecting the forward ends of the partitions, the ends of the rods forming guides movable in the slots in the guide flanges, the ends of one of the rods being extended beyond the flanges to provide journals, a rock shaft having crank arms beyond the sides of the frame, links connecting said arms with the journals, and an operating lever having a slot therein receiving one of said journals.

2. In a device of the class described, a mold, a pallet removably arranged therein, said pallet being of a width somewhat less than that of the mold, and a filling piece extended longitudinally of the mold at one edge of the pallet.

In testimony whereof, we affix our signatures in presence of two witnesses.

NEWTON H. BOLTON.  
JAMES BELISLE.

Witnesses:

WM. C. SALMON,  
C. E. BOLTON.