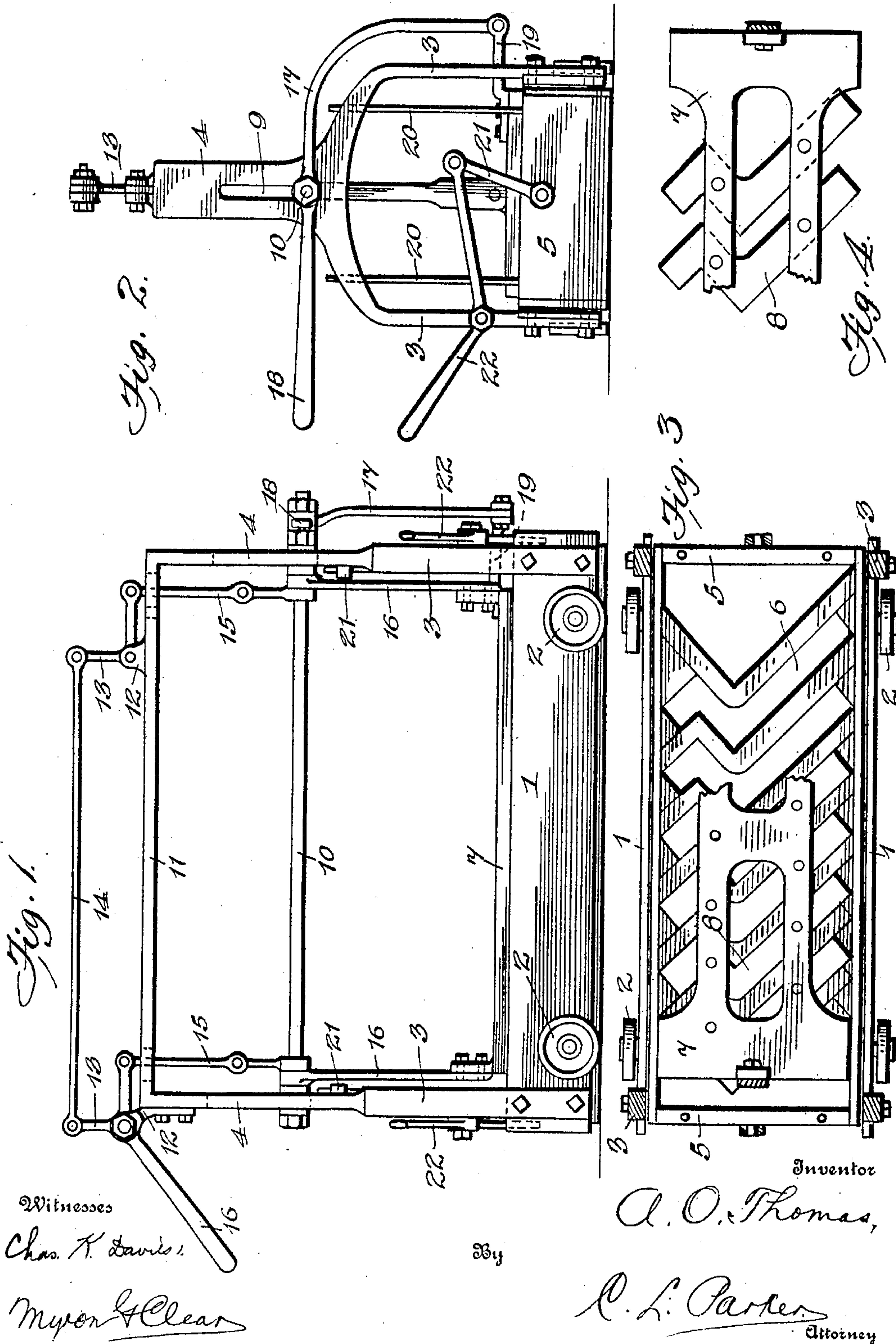


A. O. THOMAS.  
GANG MACHINE.

APPLICATION FILED JUNE 18, 1907.

904,734.

Patented Nov. 24, 1908.





# UNITED STATES PATENT OFFICE.

AUGUSTUS O. THOMAS, OF KEARNEY, NEBRASKA.

## GANG-MACHINE.

No. 904,734.

Specification of Letters Patent.

Patented Nov. 24, 1908.

Application filed June 18, 1907. Serial No. 379,649.

*To all whom it may concern:*

Be it known that I, AUGUSTUS O. THOMAS, a citizen of the United States, residing at Kearney, in the county of Buffalo and State of Nebraska, have invented certain new and useful Improvements in Gang-Machines, of which the following is a specification.

My invention relates to gang machines, and particularly contemplates the provision of a mold which will obviate the use of pallets, which may be transferred from place to place, and in which the mold and its shoe may be quickly and easily removed from the molded form.

The object of my present invention is to provide a simple, inexpensive and easily operated structure for molding a plurality of bricks or similar forms.

My invention specifically resides in the following features of construction, arrangement, and operation as hereinafter described with reference to the accompanying drawings, in which like numerals are used to indicate like parts in the several views, and in which,

Figure 1 is a side elevation of my improved machine. Fig. 2 is an end elevation thereof. Fig. 3 is a horizontal section showing the mold and its shoe in plan view, and Fig. 4 is a plan view of a portion of the mold shoe.

In the practical embodiment of my invention I provide side frames 1 having rollers 2 mounted thereon, in order that the mold may be transferred quickly from place to place, and rigidly connected to the standards 3 at both ends thereof. The standards 3 extend in the form of a yoke from the central standards 4.

Between the frames 1 is located the mold body 5 having a plurality of openings 6 therethrough, of any suitable form or design for the reception of the material to be molded. A shoe 7 is provided with a plurality of mold pieces 8 adapted to fit the openings 6 within the mold 5.

The central standards 4 are provided with longitudinally extending slots 9, through which is mounted a shaft 10. The upper ends of the standards 4 are preferably united by a horizontal arm 11 on which are provided bearings 12 for the reception of bell crank levers 13, the vertical arms of said levers being preferably united by a connecting rod 14, while the horizontal arms thereof are connected to the shaft 10 by means of

jointed rods 15. A handle 16 serves to operate said bell crank levers to draw said shaft upward within the slots 9, and further to draw the shoe 7 upward therewith from the mold body 5 by means of the connecting arms 16 arranged between said shoe and said sliding shaft 10. The connections, however, with said sliding shaft 10 are of such nature as to permit of its rotation, and I preferably provide a curved lever 17, pivoted intermediate its ends to said shaft and forming an operating handle 18 at one end thereof. The other end of said lever 17 is pivotally connected to a bracket 19, rigidly carried upon the shoe 7 by means of which said shoe may be moved to one side of the mold out of the way of the workman by the use of said lever 17 when the sliding shaft 10 has been raised by means of the lever 16<sup>a</sup> and its connections. This operation will, of course, take place after the material has been compressed within the mold openings 6.

The mold body 5 is provided with a plurality of vertical guide rods 20 arranged through lugs 21 in the upper portions of standards 3, and said mold body 5 is further connected at both ends thereof by means of loose pivotal links 21<sup>a</sup> to the ends of operating rods 22, pivoted intermediate their ends on the standards 3. By this means it will be seen that after the material has been molded, and the shoe 7 removed from the mold as described, the mold body 5 may be raised vertically by means of the operating rods 22, the connections 21<sup>a</sup> and the guides 20, to withdraw the same from the material, allowing the molded form to remain upon the ground. When this is accomplished, the entire mechanism may be shifted to the next place of molding, if it be so desired, by means of the rollers 2 located upon the stationary side frames.

While the elements herein shown are well adapted to perform the functions described, it will be readily seen that numerous minor changes may be made in the construction throughout the mechanism without departing from the spirit of my invention and the scope of the appended claims.

Having thus fully described my invention I claim:

1. In a gang mold, the combination of a pair of roller mounted side frames, standards rigidly secured to and extending upwardly from said frames, a mold body arranged within said side frames, a shaft ro-



tatively mounted to slide vertically within said standards, a mold shoe arranged upon said mold body, connecting rods secured to said shoe and journaled on said shaft, a lever  
5 mechanism for raising said shaft, a lever for swinging said shoe to one side, and a lever for raising said mold body in said standards, substantially as described.

2. In a gang molding machine, the combination of a pair of roller mounted side  
10 frames, standards extending upwardly therefrom, a mold body arranged within said side frames, a shaft rotatably mounted to slide vertically in said standards, a mold shoe arranged upon said mold body, connections between  
15 said shoe and said shaft whereby the former may be raised and swung to one side, mechanism carried by said standards for raising said shaft, and mechanism also carried by said standards for raising said mold  
20 body therein, substantially as described.

3. In a gang molding machine, the combination of a pair of roller mounted side frames, standards rigidly secured to and extending upwardly from said frames, a mold  
25 body arranged within said frames, a shaft rotatably mounted to slide vertically within said standards, a mold shoe arranged upon said mold body, connecting rods secured to said shoe and journaled on said shaft, mechanism carried by said standards for raising  
30 said shaft, mechanism carried by said shaft for swinging said shoe to one side, and mechanism carried by said standards for raising said mold body therein, substantially as described.  
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In testimony whereof I affix my signature in presence of two witnesses.

AUGUSTUS O. THOMAS.

Witnesses:

GEO. N. PORTER,  
SARA L. GARRETT.