

No. 872,106.

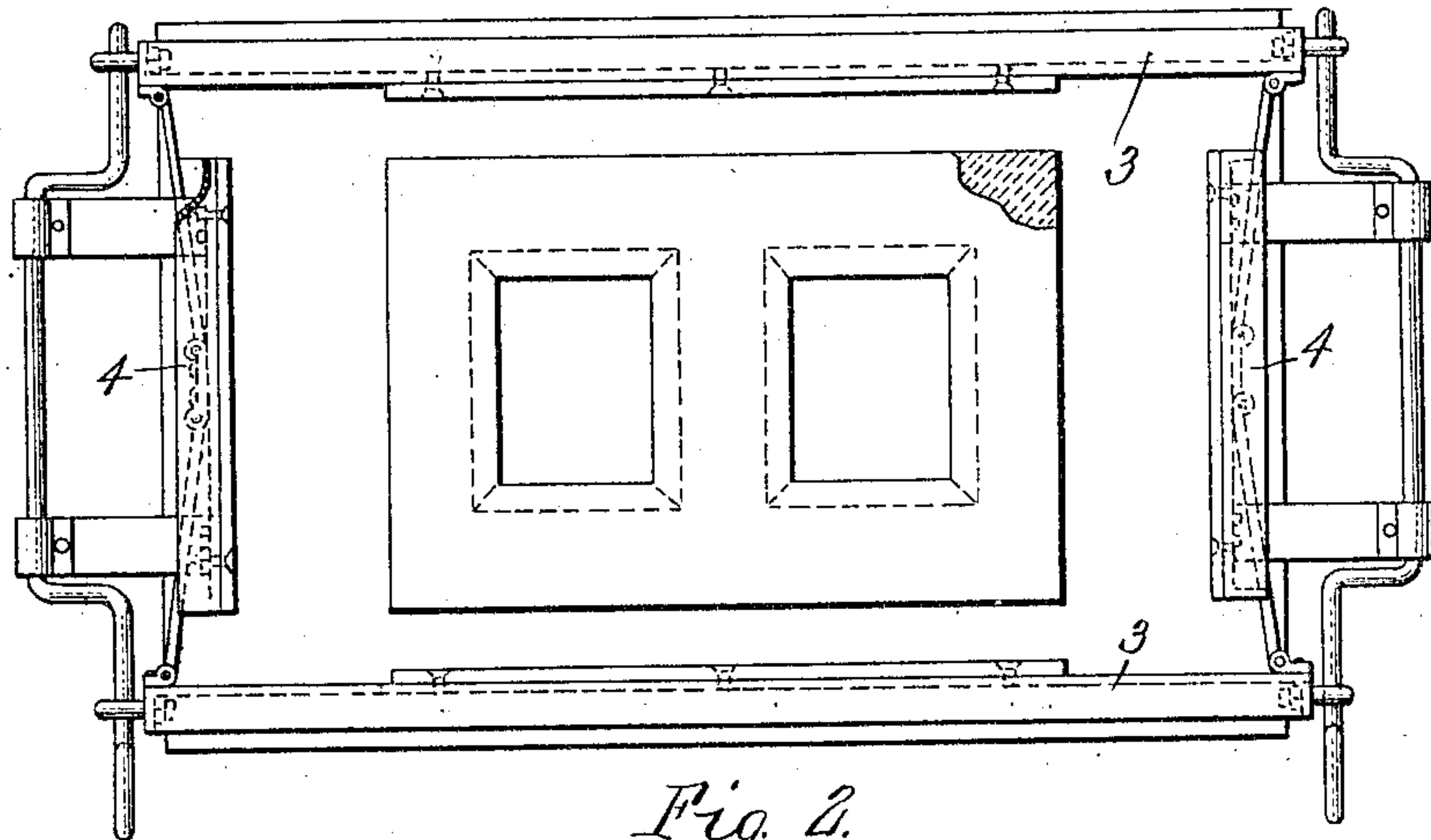
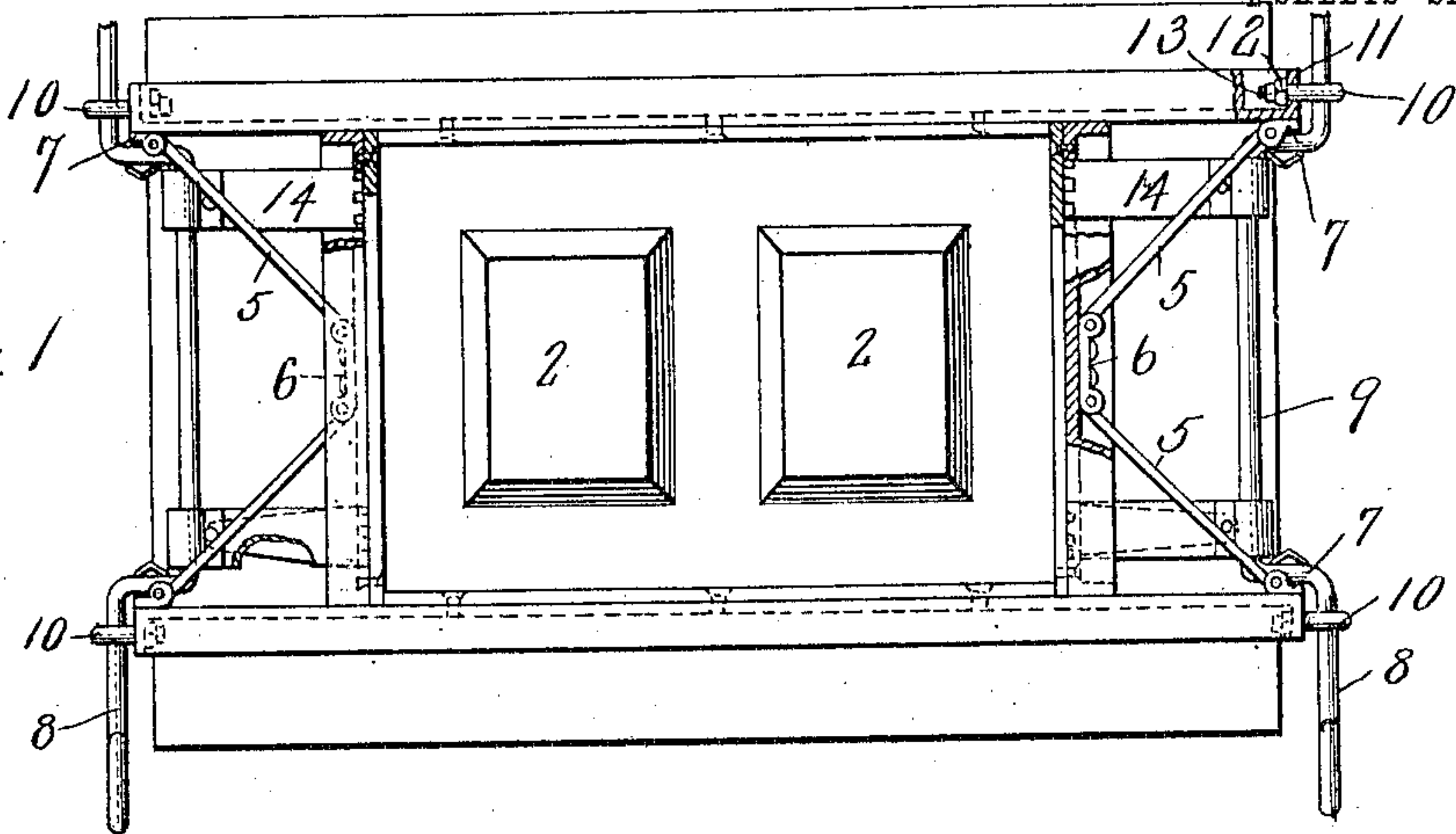
PATENTED NOV. 26, 1907.

G. B. BLODGETT.  
MOLD FOR FORMING CEMENT BLOCKS.

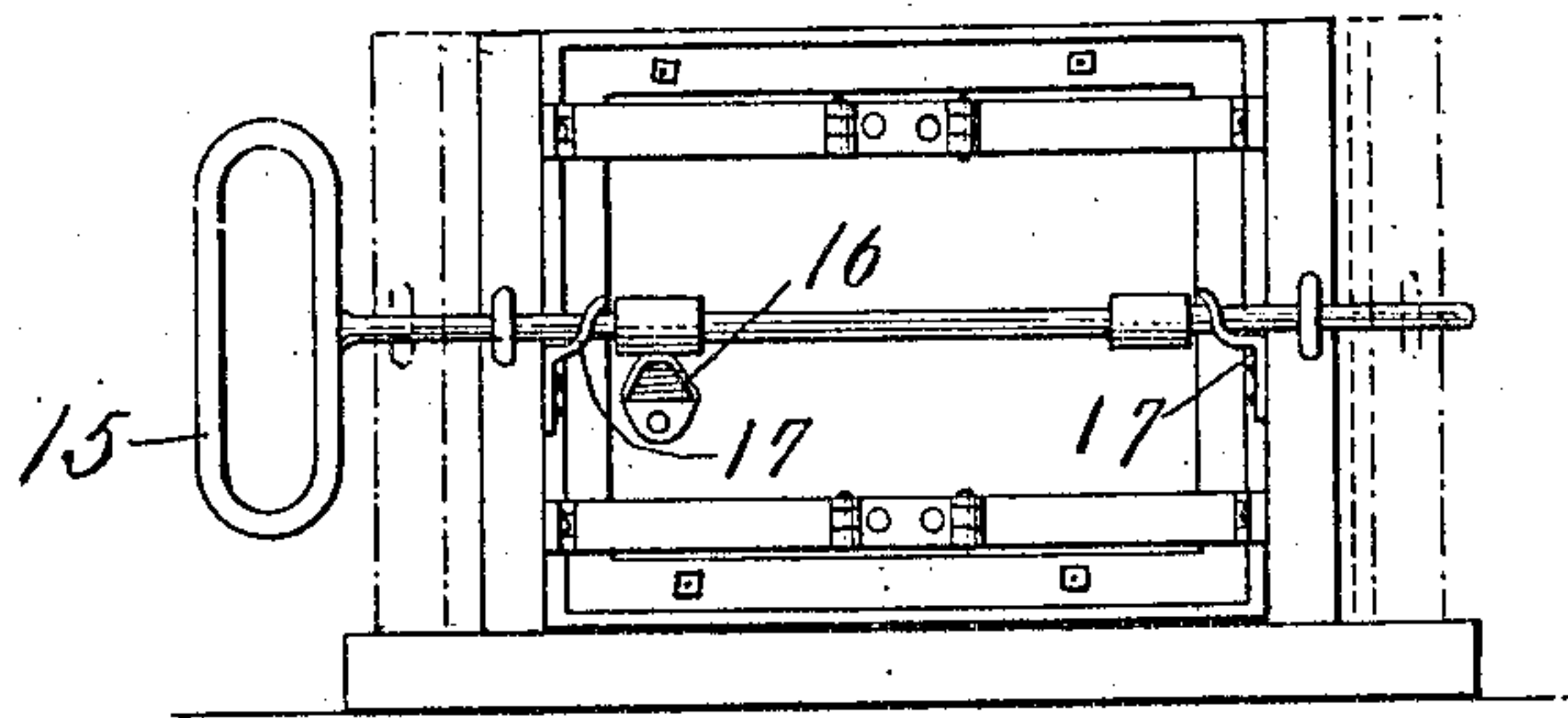
APPLICATION FILED OCT. 11, 1906.

2 SHEETS—SHEET 1.

*Fig. 1*



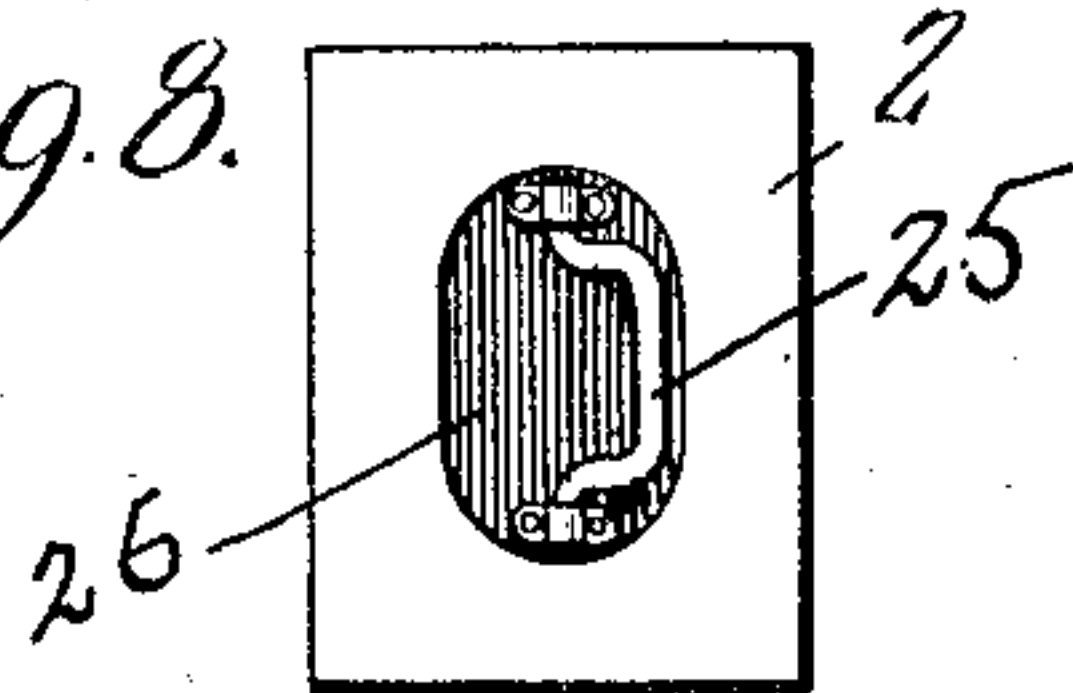
*Fig. 2.*



*Fig. 3.*

Witnesses  
*Albert Hopkins*  
*Mary W. Hammer*

*Fig. 8.*



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2 SHEETS—SHEET 2.

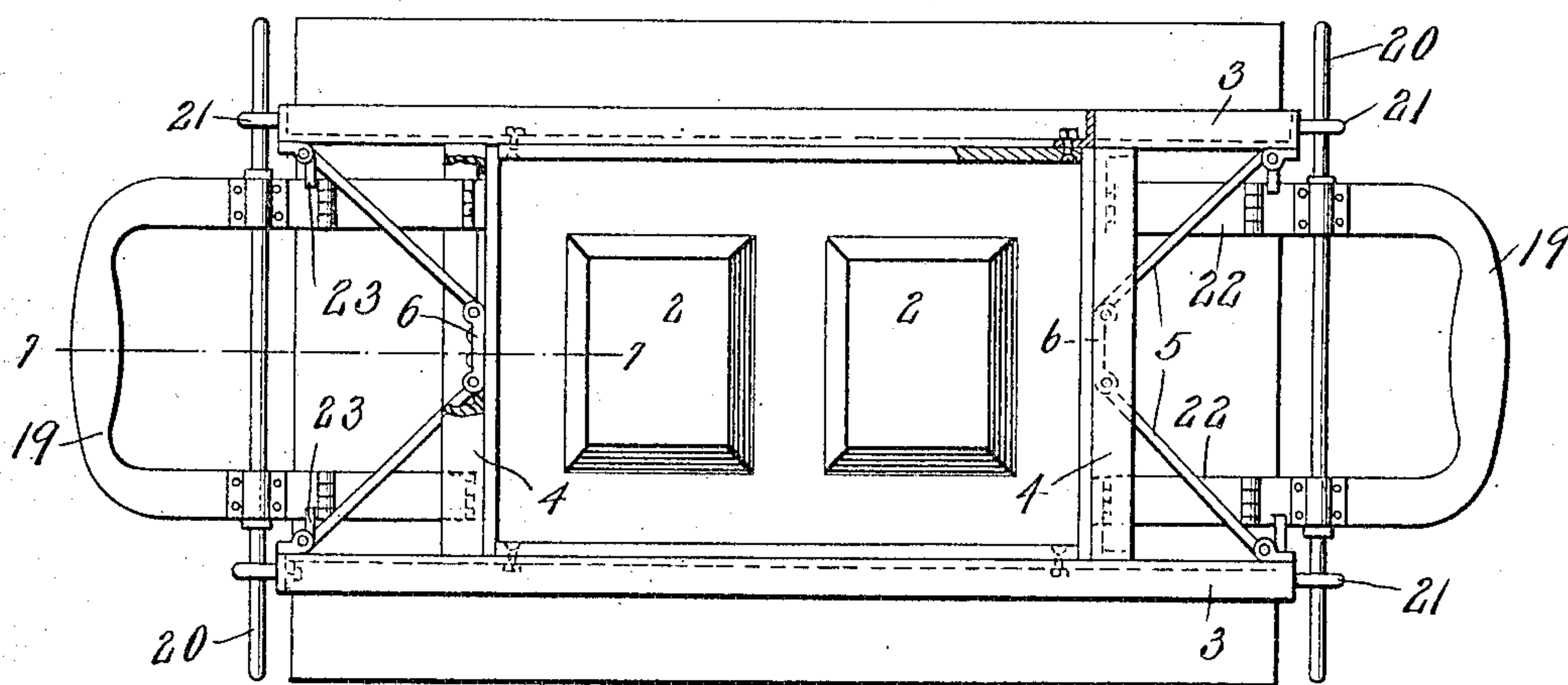


Fig. 6.

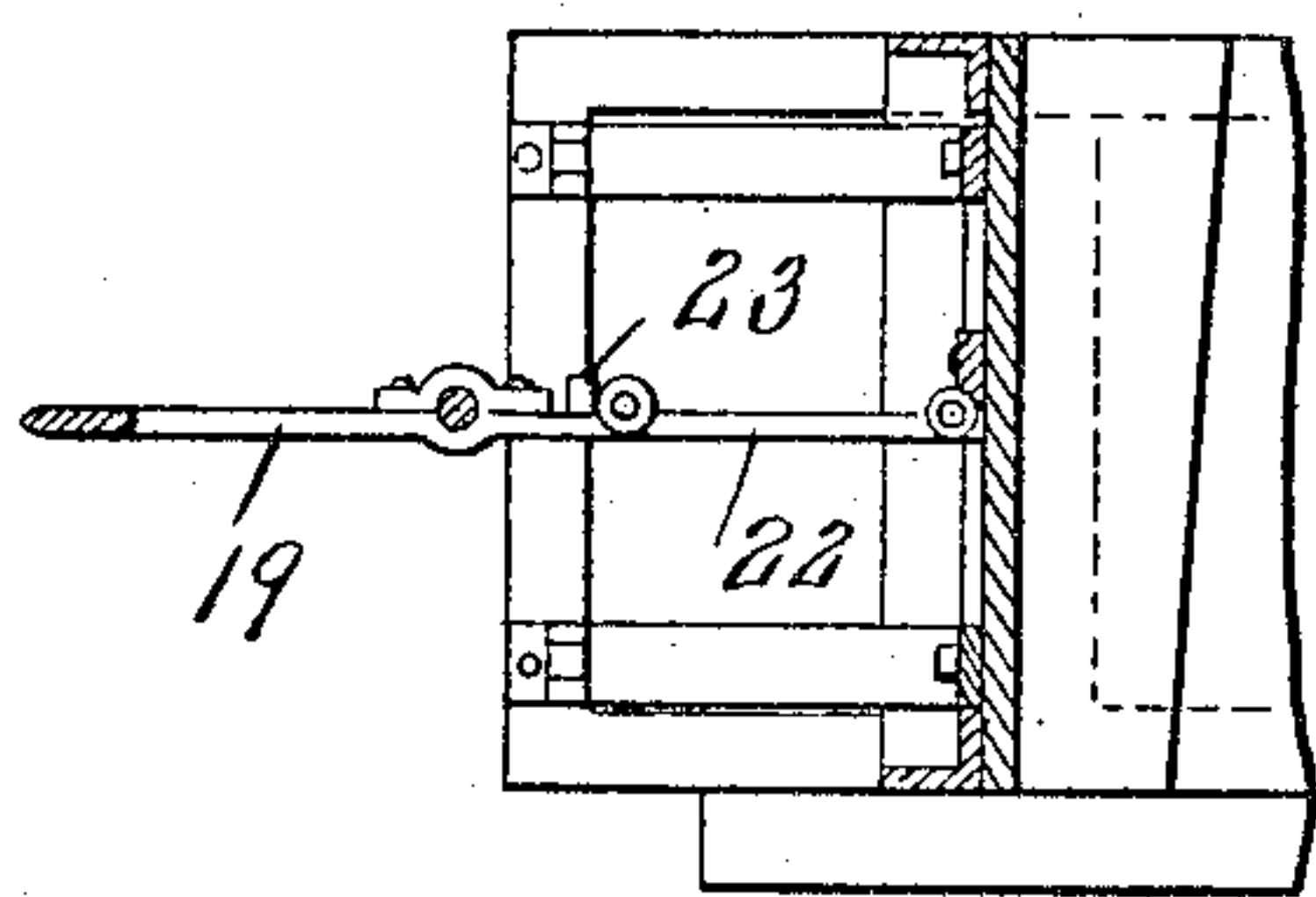


Fig. 7.

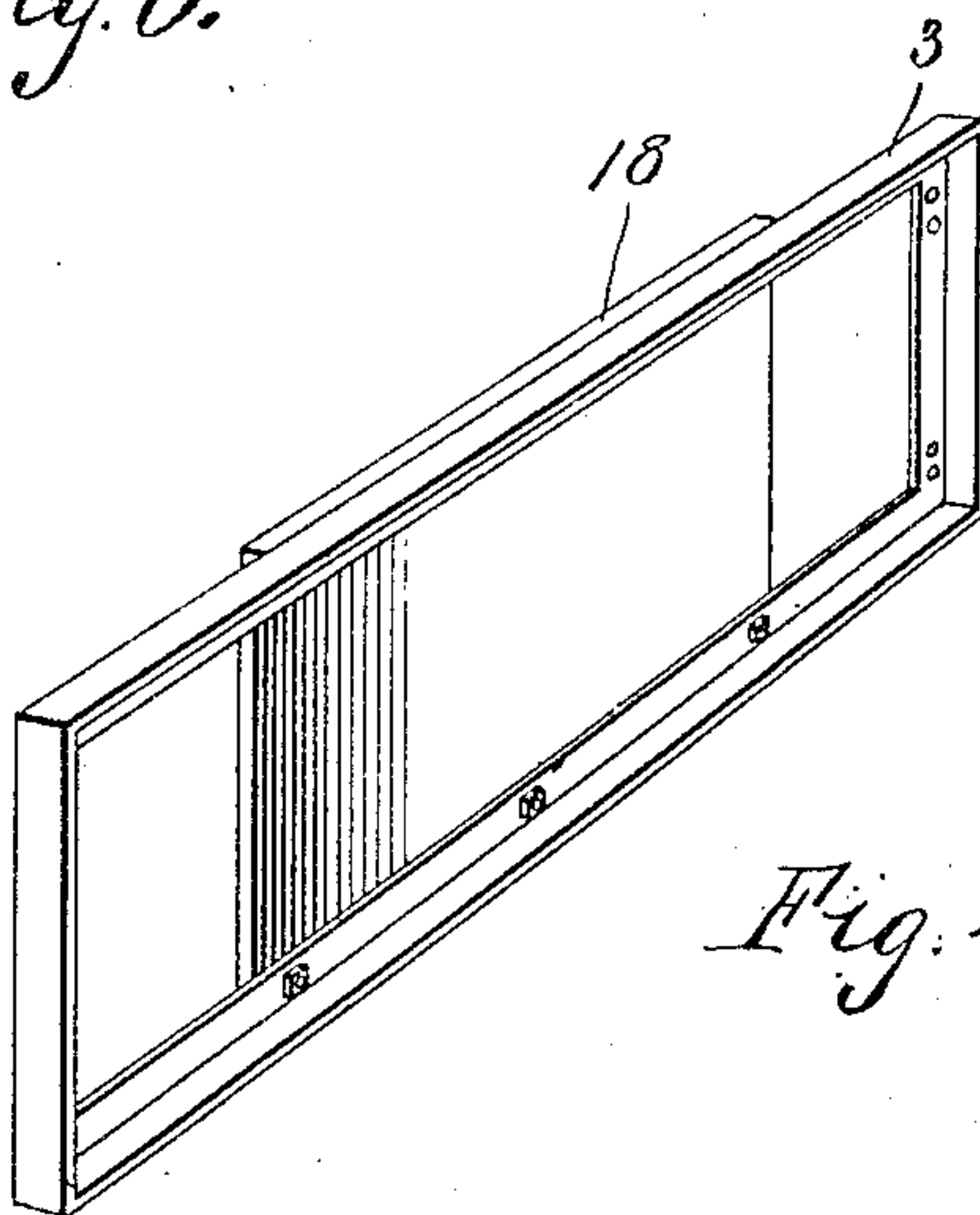


Fig. 4.

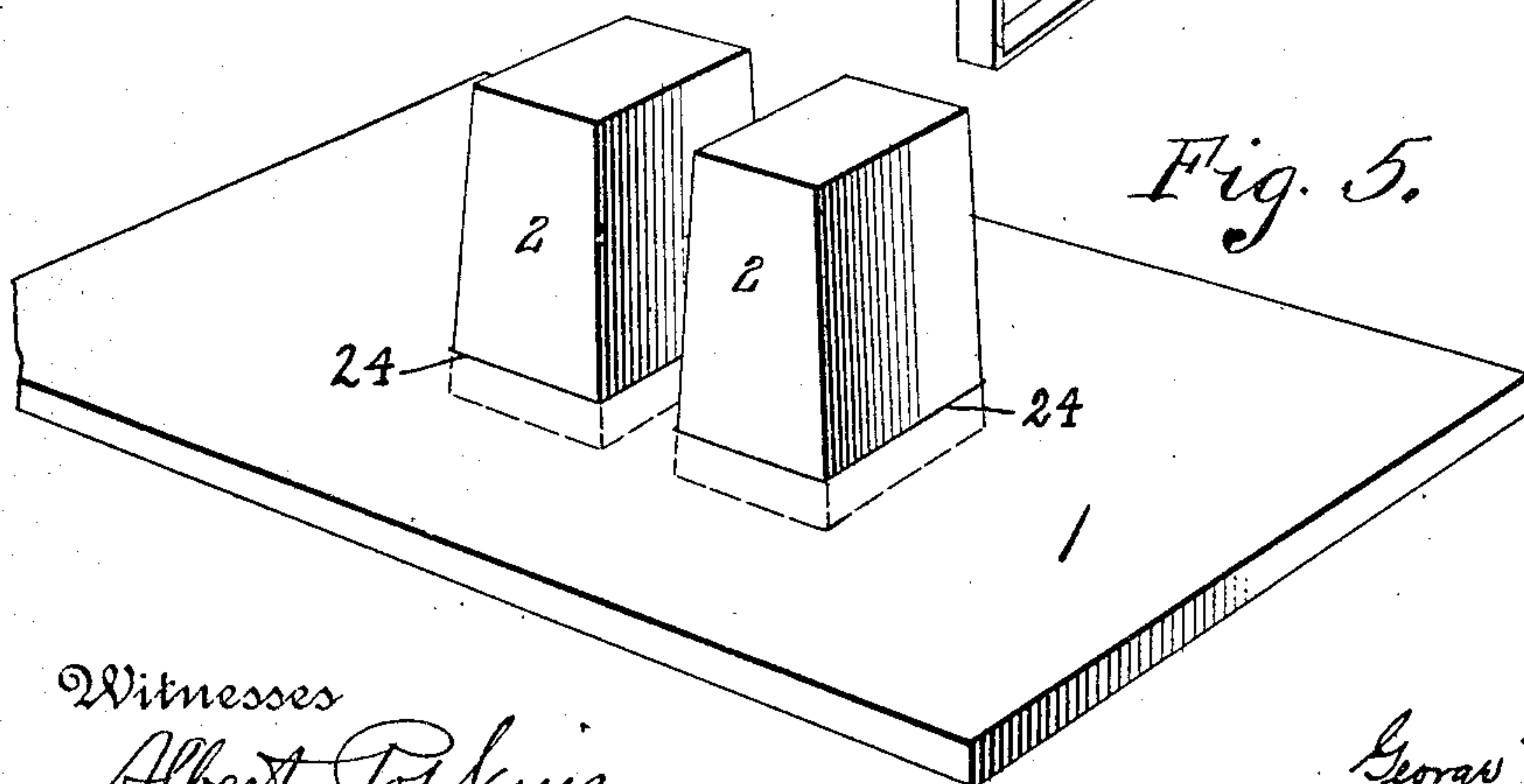


Fig. 5.

Witnesses  
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# UNITED STATES PATENT OFFICE.

GEORGE B. BLODGETT, OF FREDONIA, NEW YORK.

## MOLD FOR FORMING CEMENT BLOCKS.

No. 872,106.

Specification of Letters Patent.

Patented Nov. 26, 1907.

Application filed October 11, 1906. Serial No. 338,441.

*To all whom it may concern:*

Be it known that I, GEORGE B. BLODGETT, a citizen of the United States, residing at Fredonia, in the county of Chautauqua, State of New York, have invented certain new and useful Improvements in Molds for Forming Cement Blocks, of which the following is a description, reference being had to the accompanying drawing and to the letters and figures of reference marked thereon.

My invention relates to new and useful improvements in molds for shaping materials of various character, but more especially to molds for use in the manufacture of concrete blocks commonly used in place of stone, brick and the like.

An object of my invention is to provide a mold of the character referred to which may be readily opened or closed.

A further object of my invention is to provide means for opening and closing the mold which shall be self-locking when in closed position.

A further object of my invention is to provide an improved follow board and core for use in molds for shaping of blocks.

These and other objects will in part be obvious and will in part be hereinafter more fully described.

In the accompanying drawings, I have illustrated one embodiment of my invention, the same serving in connection with the description herein, to illustrate the principle thereof.

Figure 1 is a top plan view of my improved mold in its closed position. Fig. 2 is a top plan view of the same in an opened position, showing the cement block formed thereby. Fig. 3 is an end elevation of my improved mold, showing in dotted lines, the position of the side frames when the mold is open. Fig. 4 is a perspective detail view of one of the side frames. Fig. 5 is a perspective view of the follow board and the cores carried thereby. Fig. 6 is a top plan view of a modified form of my invention. Fig. 7 is a sectional view of one end of my modified form of mold, taken on the line 7, 7 of Fig. 6. Fig. 8 is an end view of one of the cores, showing the handle for withdrawing the same.

In the drawings, the follow board 1, as shown in Fig. 5, has secured thereto cores 2, 2, said cores being tapered from the follow board toward the upper end as clearly shown in said figure. While it is usually desired to secure these cores to the follow board, so

that they are held in proper position and kept from sliding, it is obvious that said cores may be loosely mounted on said follow board and any suitable means may be provided for drawing the cores from the finished block.

My mold is composed of side members 3, 3, and end members 4, 4. In the present embodiment of my invention, the side members are connected to the end members 4, 4 by links 5, 5. Said links 5, 5 are pivoted to a bracket 6 at one end which is firmly secured to the end members of my mold. The links 5, 5 are pivotally connected at their opposite ends to brackets 7, 7 carried by the side members 3, 3. The axis of the pivotal connection between the links 5, 5 and the side and end members is vertical so that when the end member is moved from a position shown in Fig. 1 to a position shown in Fig. 2, the links 5, 5 cause the end members of my mold to move outward in opposite directions. As a means for moving the end members outward and inward, I have shown in my preferred form, a shaft 8 which is provided between its outer ends with a deflected portion 9, 9 forming a crank arm. Said shaft is mounted in bearings 10, 10 carried by the side members. Said bearing 10, in the present instance is shown as formed from an eye in which the shaft is supported and said eye is provided with a shank which passes through an opening 11 in the side frame and has threaded thereon a nut 12, and also a locking nut 13. It will be apparent however, that any other form of bearing for the shaft may be substituted for that herein shown without departing from the spirit of my invention. Loosely engaging the shaft 9 are arms 14 which are in turn pivotally connected to the end members of my mold so as to swing in a vertical plane about a horizontal axis.

It will be apparent from the above description that when the shaft 8 is oscillated by a suitable handle 15 or any other convenient means that the crank arm 9 moving about the axis of the shaft through the arms 14, moves the end members toward and from the axis of said shaft. This movement of the end members through the links 5, 5, causes a corresponding movement of the side members of the mold longitudinally of the shaft and the bearings 10, 10 for the shaft are of such construction as to slide freely lengthwise of the shaft. It will be noted that the length of the crank arm 9 and the



length of the arms 14, 14 are so proportioned that when the end members are in their inner or closed position that said crank arms 14 are substantially in line or have just passed the  
 5 dead center so that said parts are held normally in this position. A bracket 16, carried by the end member is engaged by the arm 14 when in closed position and prevents the same from moving further below the horizontal position of said arm. As a further means for locking the parts in closed position, I have provided the side members with a spring catch 17, 17 which engage the shaft and hold the same in the position shown in  
 10 Figs. 1 and 3.

In the preferred form of my invention, I construct my side and end members of angle iron. Said angle iron is bent into a rectangular frame and has detachably secured  
 20 thereto a face plate 18. In the drawings I have shown small screws which pass through the face plate and nuts for engaging said screws and holding the face plate on the angle iron frame. It will be obvious however, that  
 25 any other suitable means may be used instead of that shown. It will also be obvious that in certain aspects of my invention that any other form of frame may be substituted for that herein shown and described.

The face plate on the end frame or member is the full size of said member and when the parts of the mold are in closed position, said plate engages the end of the face plate on the side members as clearly shown in  
 35 Fig. 1, of the drawings. In order that said plates may be brought into close contact, I have provided the adjustable bearings for the shaft 8 above described. By adjusting the nut 12 on the threaded end of the bearing 10, the amount of inward movement of the end members may be adjusted. This is an essential feature of my invention as it allows the end plate to be brought closely in contact with the side face plates, thus making a sharp and well defined outline in the  
 45 block made in my mold.

Instead of using a shaft having a deflected portion to form a crank, I may use a U shaped member 19 such as shown in Figs. 6 and 7 of the drawings. Said U shaped member 19 is pivotally supported by a shaft 20, passing through bearings 21, carried by the end members. This U shaped member extends beyond the shaft 20 and is pivotally  
 50 connected at 21, 21 to the arms 22, which are in turn pivoted to the end members of my mold. A small lug 23 is rigidly secured to the end members and extends into the path of said U shaped member. When it is desired  
 60 to open the mold as shown in Fig. 6, the operator grasps the U shaped member which serves as a handle and by lifting on said member the same is turned about the shaft 20 as on axis, causing the arms 22, to draw  
 65 the end members outward and the links 5, 5

to move the side members 3, 3 outward in a direction longitudinal of the shaft 20. When the mold is in its closed position as shown in Figs. 6 and 7 the U shaped member 19 and the arms 22 are substantially in line so that  
 70 said parts are locked, thus holding the members in closed position.

In the operation of my device, the shaft 8 is turned by means of the handle 15, so that the end and side members are brought in  
 75 close contact, and then the mold is placed on the follow board 1 so that the cores 2, 2 extend up into the central part of the mold. The material from which the block is formed is now placed in the mold around the cores  
 80 2, 2. It will be noted that the cores are of the same height as the mold so that the surplus material may be easily removed from the top of the mold. A plain follow board is now placed on the top of the mold, and the  
 85 whole device inverted. The cores 2 which are inserted from the lower side of the follow board 1 in openings 24, corresponding in shape with the cores, are then withdrawn by means of the handle 25, which folds into the  
 90 recess 26 formed in the lower end of the cores. The shaft 8 is now turned by means of the handle 15, or by lifting on the U-shaped member 19, as shown in my modified form and the side and end members thus  
 95 withdrawn from the finished block.

It will be obvious that any one of the face plates may be removed, and others with different surface characteristics substituted therefor, thus changing the appearance of  
 100 the finished block.

It will be obvious that many changes in the minor details in the construction of my device, may be made without departing from the spirit of my invention.  
 105

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

1. A mold having side and end members, each of said side members being connected to  
 110 said end members by swinging links, a crank shaft carried by said side members, arms connected to said crank shaft, and said end members, said crank shaft and said arms, being so located that the connection between the same lies substantially in a plane  
 115 co-incident with the axis of the crank shaft, and the point of connection between said arms and said end members, when said mold is in closed position, whereby said mold is  
 120 locked in position and means for holding said arms and crank shaft in closed position.

2. A mold, having side and end members, each of said side members being connected to said end members by swinging links, a  
 125 crank shaft carried by said side members, arms connected to said crank shaft, and said end members, said crank shaft and said arms being so located that the connection between the same lies substantially in a plane  
 130



co-incident with the axis of the crank shaft, and the point of connection between said arms and said end members, when said mold is in closed position, whereby said mold is 5 locked in position, means for holding said arms and crank shaft in closed position, and means for adjustably supporting said rock shaft on said side members.

3. A mold having side and end members, 10 swinging links pivoted at their opposite ends to the side and end members respectively, a crank shaft carried by said side members and extending substantially parallel to said end members, arms pivoted to the end mem- 15 bers and to said crank shaft, said crank shaft and said arms being so located that the connection between the same lies substantially in a plane co-incident with the axis of the crank shaft, and the point of connection be- 20 tween said arms and said end members when said mold is in closed position, whereby said mold is held in said closed position and means for maintaining said arms and crank shaft in closed position.

25 4. A mold comprising side members and end members, links pivoted to said side members and end members, a crank shaft carried by said side members, arms connect- 30 ed to said crank shaft and to said end members, a bracket for supporting said arms and crank shaft when the mold is in closed position, said arms and crank shaft being so dis- 35 posed as to hold the mold in closed position, and an auxiliary locking device for engaging and holding the crank shaft when supported by said bracket.

5. A mold including in combination side members and end members, face plates car- ried by said side and end members, said side 40 members extending beyond said end mem- bers, and said face plates being so disposed that the end members contact with the ends of said face plates on the side members, links for connecting said end members and side 45 members, means for opening and closing said mold comprising a crank shaft, arms pivotally connected to said end members and to the crank shaft, a bracket for sup- 50 porting said arms and said crank shaft when the mold is in closed position, said arms and said crank shaft being so disposed as to lock the mold when in closed position.

6. The combination with a mold having end and side members, means for opening and closing the same, a follow board on 55 which the mold may rest in either open or closed position, said follow board having openings therein, cores adapted to be inserted in and fitting said openings in said fol- 60 low board with the lower ends of the cores substantially flush with the outer face of the follow board, said cores having recesses in their lower ends, and handles located in said 65 recesses, whereby said cores may be withdrawn from said mold through the openings in the follow board.

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

GEO. B. BLODGETT.

Witnesses:

H. C. DRAKE,  
GEO. D. FOSTER.