

J. M. THINNES.
MOLD FOR FORMING CEMENT GARBAGE BOXES.
APPLICATION FILED MAR. 22, 1909.

934,477.

Patented Sept. 21, 1909.

2 SHEETS—SHEET 1.

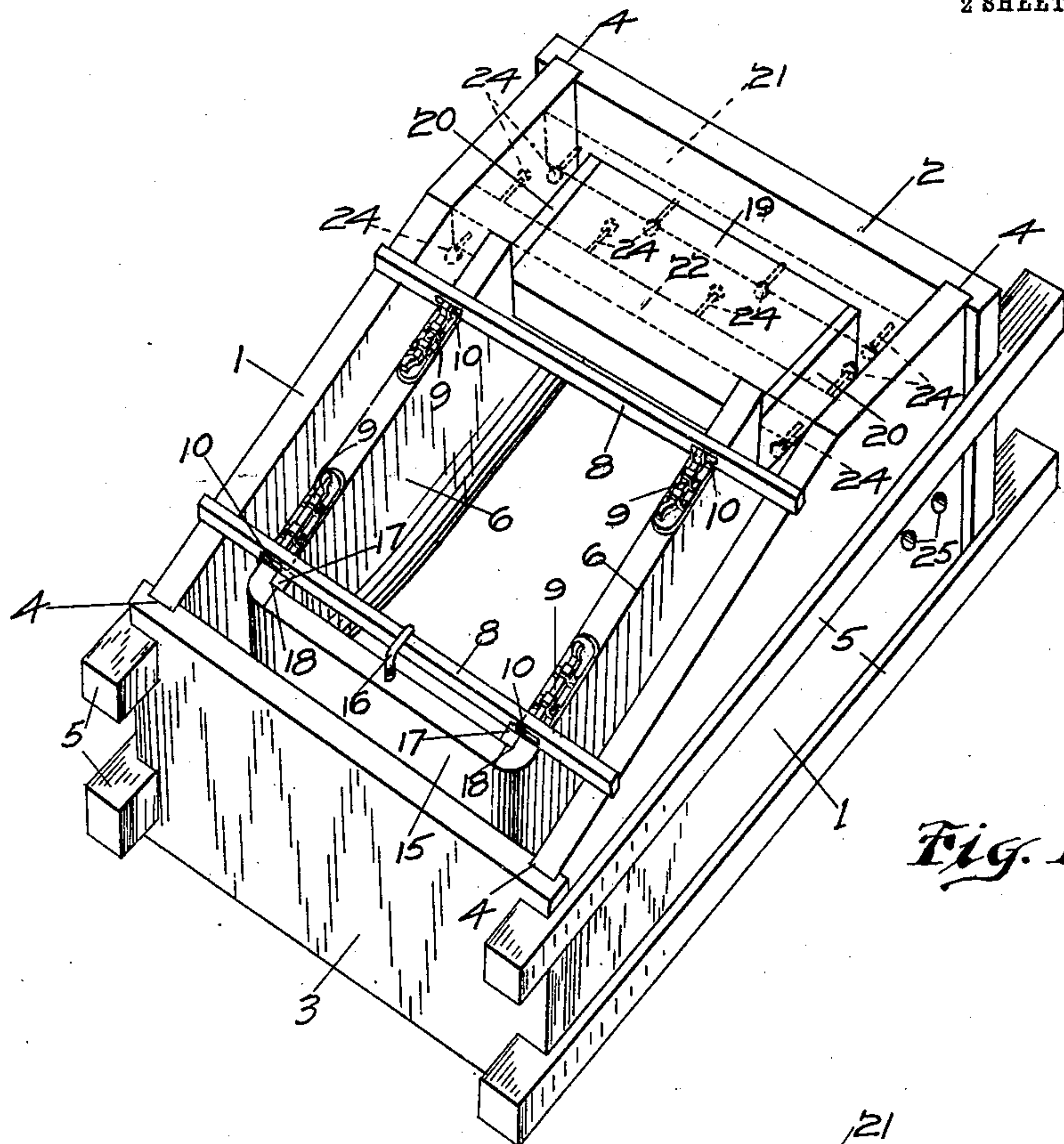


Fig. 1.

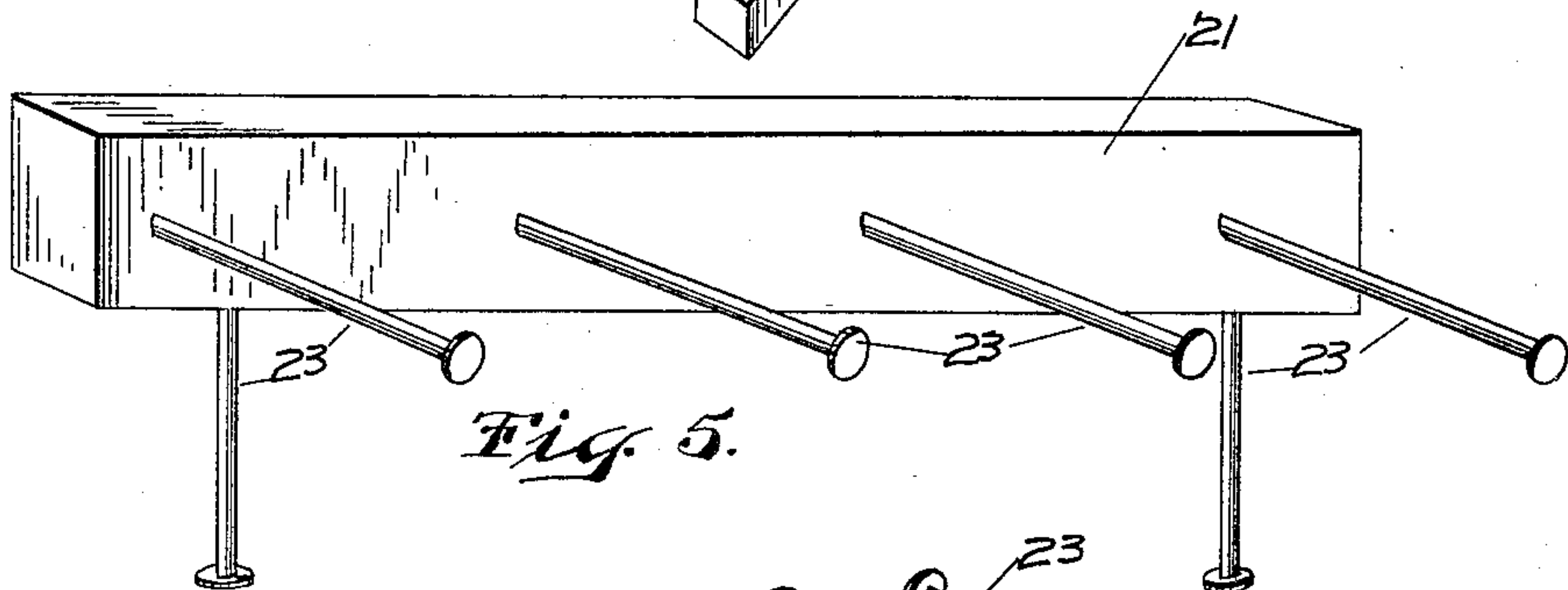


Fig. 5.

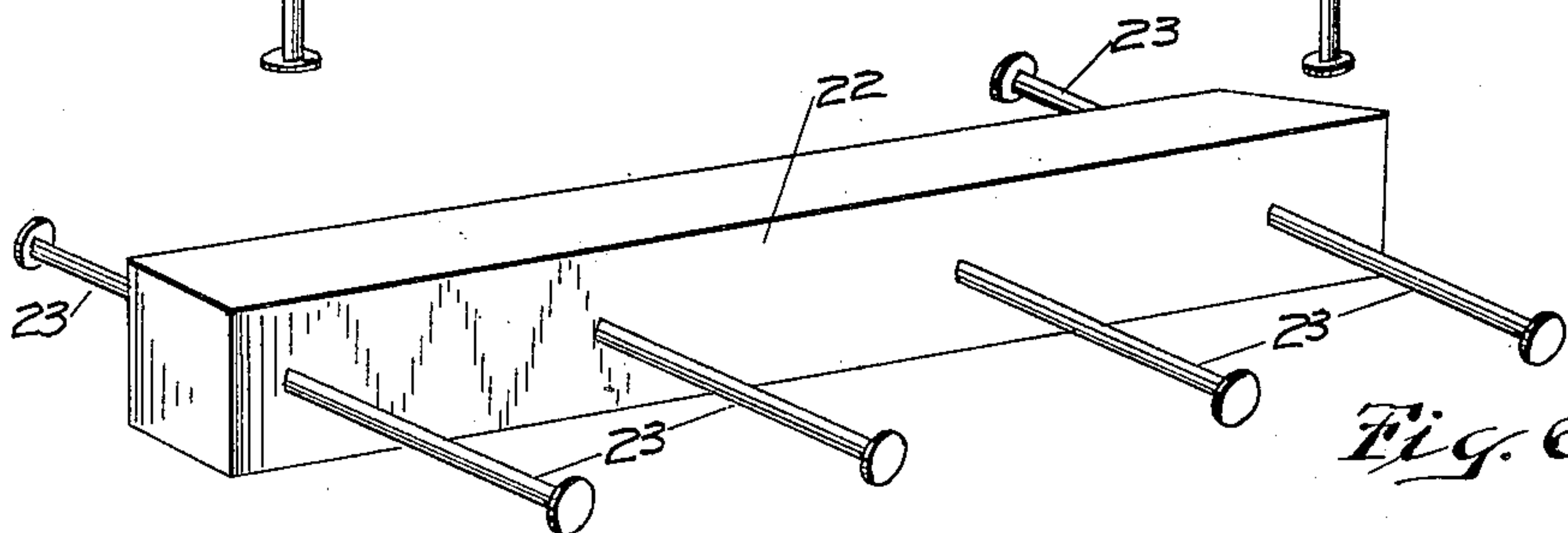


Fig. 6.

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2 SHEETS—SHEET 2.

Fig. 2.

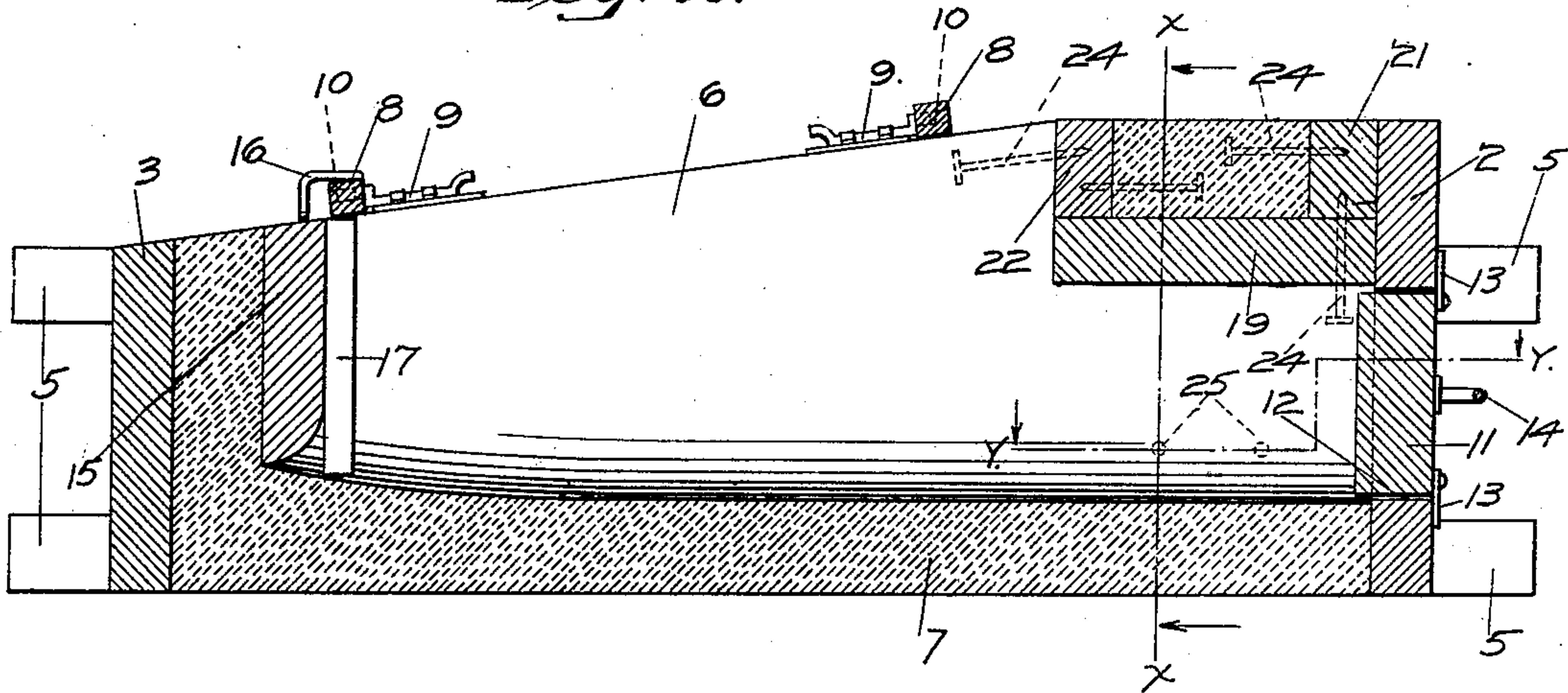


Fig. 5.

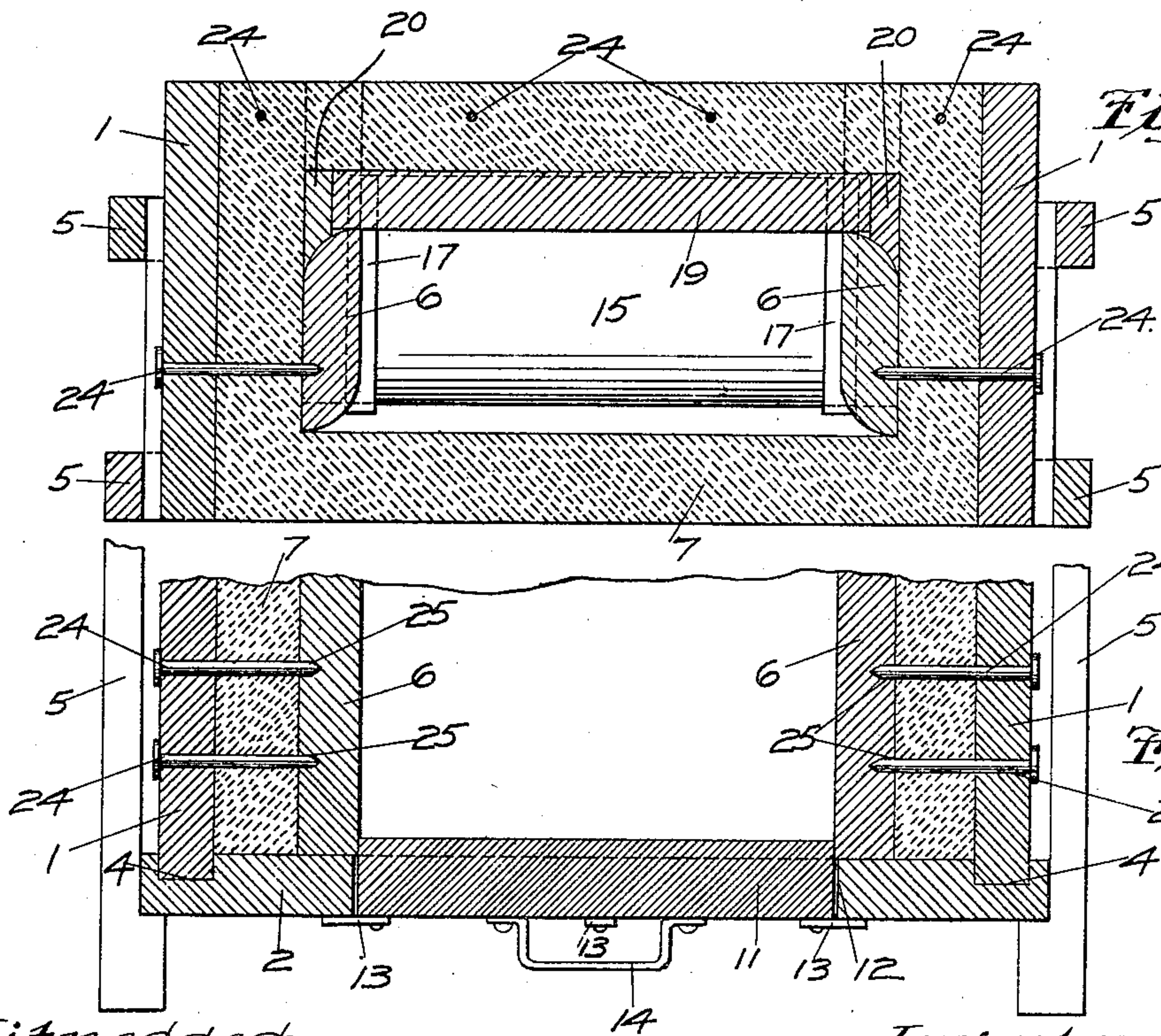


Fig. 4.

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UNITED STATES PATENT OFFICE.

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MOLD FOR FORMING CEMENT GARBAGE-BOXES.

934,477.

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Application filed March 22, 1909. Serial No. 485,019.

To all whom it may concern:

Be it known that I, JOSEPH M. THINNES, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented a certain new and useful Mold for Forming Cement Garbage-Boxes, of which the following is a specification.

My invention relates to molds for cement or concrete construction and more specifically to that class thereof used in such construction of garbage boxes.

The object of my invention is to provide a sectional mold of the character mentioned which may be readily and easily set up or assembled for use and which may be just as readily and quickly disjointed and removed from the object molded after the setting of the cement.

A further object is to provide a mold of such character which will be efficient, strong, durable and comparatively simple of construction.

Other objects will appear hereinafter.

With these objects in view my invention consists in a mold for the cement construction of garbage boxes characterized as above mentioned and in certain details of construction and arrangement of parts all as will be hereinafter fully described and particularly pointed out in the claims.

My invention will be more readily understood by reference to the accompanying drawings forming a part of this specification, and in which,

Figure 1 is a perspective view of the preferred form of my complete mold assembled, Fig. 2 is a longitudinal section thereof showing the cement box formed therein, Fig. 3 is a vertical transverse section taken on the line $x x$ of Fig. 2, Fig. 4 is a horizontal section of one end portion of the mold taken on the line $y y$ of Fig. 2, and Figs. 5 and 6 are similar perspectives of securing strips embodied in my finished garbage box.

Referring now to the drawings 1 indicates the side or longitudinally extending members of the outer mold frame, the same being substantially rectangular in form, the rearward portions of the upper edges thereof being slightly forwardly inclined.

2 and 3 indicate respectively the rectangular forward and rearward end members of the outer mold, the same being provided

close to the lateral edges of the inner surface thereof with vertically extending rectangular rabbets 4 adapted to snugly receive the extremities of the members 1. Longitudinally extending bars 5 the end portions of which are hooked in construction to engage the extremities of the end members 2 and 3, as clearly shown in Fig. 1, serve as a means of securely locking the end members 2 and 3 and consequently the side members 1 in operative position.

Suspended within the outer mold frame, the same extending parallelly with and being spaced equally apart from the side members 1 of said outer frame, are the longitudinal or side members 6 of the inner mold frame. The rearward portions of the upper edges of said members 6 lie in the same inclined plane in which are disposed the rearward portions of the upper edges of the members 1, the rearward portions of the lower edges of said members being slightly upwardly curved, as clearly shown in Fig. 2, consequently causing the rearward portion of the bottom of the resulting receptacle or box 7 to be molded conformable with such construction. Such provision is made to facilitate the removal of the garbage from the box when the latter is in use, such construction obviously effecting such purpose when it is taken into consideration that the removal of garbage from the box is effected by means of a shovel or scoop thrust into the box through the forward opening thereof. The lower inner edge of either of the members 6 is rounded, preferably quarter round in form, as clearly shown in Fig. 3, for a purpose which will be hereinafter described. To effect the suspension of the members 6, as stated, I provide elongate rods 8 of a length such that when in operative position the respective extremities thereof are adapted to rest upon the upper edges of the members 1. The upper edge of each of the members 6 is provided with ordinary door bolts 9 suitably mounted thereon and fixed thereto, the extremities of said bolts being adapted to engage the slots 10 formed in the bars 8 for the reception thereof. In order to space apart the forward end portions of the members 6 I provide a rectangular block 11 removably resting in a slot 12 of a corresponding shape

provided in the end member 2 of the outer mold frame. Said block is preferably of a thickness slightly greater than that of the member 2. The front surface thereof may preferably be provided with projecting stops 13 and a handle 14, said stops being adapted to engage the outer surface of the member 1, in which event, said block projects inwardly to such an extent as to afford an adequate engaging surface for the extremities of the members 6, as clearly shown in Fig. 4.

Having its extremities resting in engagement with the rearward end portions of the inner surfaces of the members 6, hence adapting the same to act in the capacity of a spacing means for said end portions of the latter, is the rectangular rearward end member 15 of the inner mold frame, the same being suspended therein by means of a turn hook 16 which is so positioned as to be adapted to engage the rearmost of the rods 8. For the purpose of limiting the inward movement of the member 15, I provide strips 17 detachably secured in vertically extending rabbets 18 provided for the reception of the same in the inner surfaces of the members 6 close to the rearward extremities thereof. The lower inner edge of the member 15 is also rounded in form, as clearly shown in Fig. 2, for reasons described in the following.

The forward end portion of the upper edge of each of the members 6 is recessed in construction, as shown in Fig. 2. Having its extremities resting in said recesses, the same being of a length slightly less than the width of the inner mold frame, and of a width coextensive with the length of said recesses, is a horizontally disposed member 19. Arranged at either of the extremities of said member 19, the lower edges of the same being obliquely concave in construction to conform with the rounded construction of the outer edges of the forward end portion of the members 6, are similar elongate strips 20, the same being of a length coextensive with the width of the member 19 and of a thickness such that when in position, the outer vertically disposed surfaces thereof are disposed in alinement with the outer vertically disposed surfaces of the member 6.

In using my mold, the parts thereof being arranged as described upon a suitable horizontal surface, the cement is filled in between the inner and outer mold frames, forming a bottom wall of a thickness equal to the extent of elevation of the inner frame above said horizontal surface. During the process of filling in of the cement, spacing members will be positioned between the side members and the rearward end members of the inner and outer mold frames, the same being gradually elevated and finally re-

moved as the cement during such process gradually reaches the upper edge of the mold. Before the cement in such process of filling in has reached the level of the member 19 strips 21 and 22 of a length substantially equal to the interior width of the outer mold frame are provided upon the member 19 at the forward and rearward extremities respectively of the recesses provided at the forward end portions of the members 6. Spikes or nails 23 driven into and projecting from said strips 21 and 22 serve as a means of positively and securely anchoring the same in the cement upon the remainder of the mold being filled in. Said strips 21 and 22 in the completed box 7 respectively serve as a means or place of securing for the hinges of doors or covers arranged upon the top and the front extremity of the box. In order to provide for the attachment of means for locking the front door of the completed box in closed position, removable spikes 24 are inserted into perforations 25 provided for the reception of the same in the forward end portions of the side members of the outer and inner mold frames. Said spikes are removed after the cement has sufficiently set to warrant so doing, in which event perforations are formed through the wall of the box for the purpose above stated. When the cement has sufficiently hardened the removal of the mold therefrom may be quickly and easily effected by proceeding in the following manner: Upon the bolts 9 being withdrawn and the hook 16 turned from engagement with the rods 8, the latter may be removed. The block 11 may next be withdrawn from the slot 12, the same being, if necessary to effect such removal, tapped upon its inner surface. Upon removing the strips 17 the end member 15 may be forced inwardly with the lower edge thereof as a pivotal point and hence removed, said edge being formed rounded, as before stated, to prevent the same from marring or otherwise indenting or injuring the bottom of the box. Side members 6 of the inner mold frame may now be removed in the same manner as the end member 15, the lower edges thereof being formed rounded in construction for the same reason as the similar construction embodied in the latter. Upon the removal of the members 6 the member 19 may be lowered from engagement with the upper transversely extending portion of the box and hence removed, whereupon the strips 20 may evidently be readily disengaged. To remove the outer mold frame the bars 5 need only to be disengaged, such disengagement obviously being readily effected.

While I have shown what I deem to be the preferable form of my mold, I do not wish to be limited thereto, as there might be many

changes made in the details of construction and arrangement of parts without departing from the spirit of my invention.

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

1. A mold for forming cement receptacles, comprising an outer rectangular frame having side and end members, longitudinally extending hooked bars engaging the last named members for locking said side and end members in position, a second rectangular frame having side members and a rear end member arranged within said outer frame, means for suspending said inner frame in said outer frame, the forward extremities of the side members of said inner frame resting in abutment with the forward end member of said outer frame, and means for spacing apart said forward extremities of said inner side member, substantially as described.

2. A mold for forming concrete receptacles, comprising an outer rectangular frame having side and end members, means engaging the extremities of the last named members for locking said side and end members in operative position, a second rectangular frame arranged within said outer frame, means engaging the upper edge of said outer frame for suspending said inner frame in the latter, the forward edge of said inner frame resting in abutment with the forward end member of said outer frame, the forward portion of the upper lateral edges of said inner frame being recessed, and a cement supporting member arranged in said recesses, substantially as and for the purpose specified.

3. A mold for forming cement receptacles, comprising an outer rectangular frame having side and end members, longitudinally extending removable means engaging the extremities of the last named members for locking said side and end members in operative position, a second rectangular frame arranged within said outer frame, transversely extending rods engaging the upper edge of said outer frame, means adapted to engage said rods for suspending said inner frame in said outer frame, the forward extremity of said inner frame resting in abutment with the forward end member of said outer frame, the forward end portions of the longitudinal edges of said inner frame being recessed, a cement supporting member arranged in said recesses below the level of the upper edges of said frames, substantially as and for the purpose specified.

4. A mold for forming cement receptacles, comprising an outer rectangular frame having side and end members, means engaging the adjoining extremities of the members of said outer frame for locking the same in

operative position, a second rectangular frame arranged in said outer frame, said second frame comprising side members and a rear end member, the forward extremities of the side members of said inner frame resting in abutment with the forward end member of said outer frame, means removably arranged upon said forward end member for spacing apart said forward extremities of said inner frame side members, the rearward end member of said inner frame being adapted to space apart the rearward extremities of the side members thereof, and means for supporting said inner frame in said outer frame, substantially as described.

5. A mold for forming cement receptacles, comprising an outer rectangular frame having side and end members, said end members being rabbeted to receive the extremities of said side members, means engaging the extremities of said end members for locking said frame members in operative position, a second rectangular frame arranged within said outer frame, said inner frame comprising side members and a rearward end member, a block detachably secured in the forward end member of said outer frame for spacing apart the forward extremities of the side members of said inner frame, removable stops arranged at the rearward end portions of said inner frame side members for locking said rearward end member thereof against inward movement, and means engaging the top edges of said outer frame for suspending said inner frame in said outer frame, substantially as described.

6. A mold for forming cement receptacles, comprising an outward rectangular frame having side and end members, longitudinally extending means adapted to engage the extremities of said end members adapted to lock said frame members in operative position, a second rectangular frame arranged within said outer frame, said second frame comprising similar side members and a rear end member, the forward extremities of said side members resting in abutment with the inside surface of the forward end member of the outer frame, a forwardly removable block resting in the slot provided in the last named member, said block being adapted to space apart the forward end portions of the inner side members, the rearward end member of said inner frame being adapted to act as a spacing means for the rearward end portions of said inner frame side members, transversely disposed bars adapted to rest upon the upper edges of the side members of said outer frame, means for connecting said inner frame side members and end member to said bars, the forward end portions of the upper edges of said inner frame side members being recessed, a horizontally dis-

posed cement supporting member arranged
in said recesses, said member being of a
length slightly less than the exterior width
of said inner frame, strips arranged at either
5 extremity of said member, the thickness of
said strips being such that the outer surfaces
thereof are disposed in vertical alinement
with the outer surfaces of said inner frame
side members when said strips are arranged

in operative position, substantially as de- 10
scribed.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

JOSEPH M. THINNES.

Witnesses:

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HELEN F. LILLIS.