

No. 782,230.

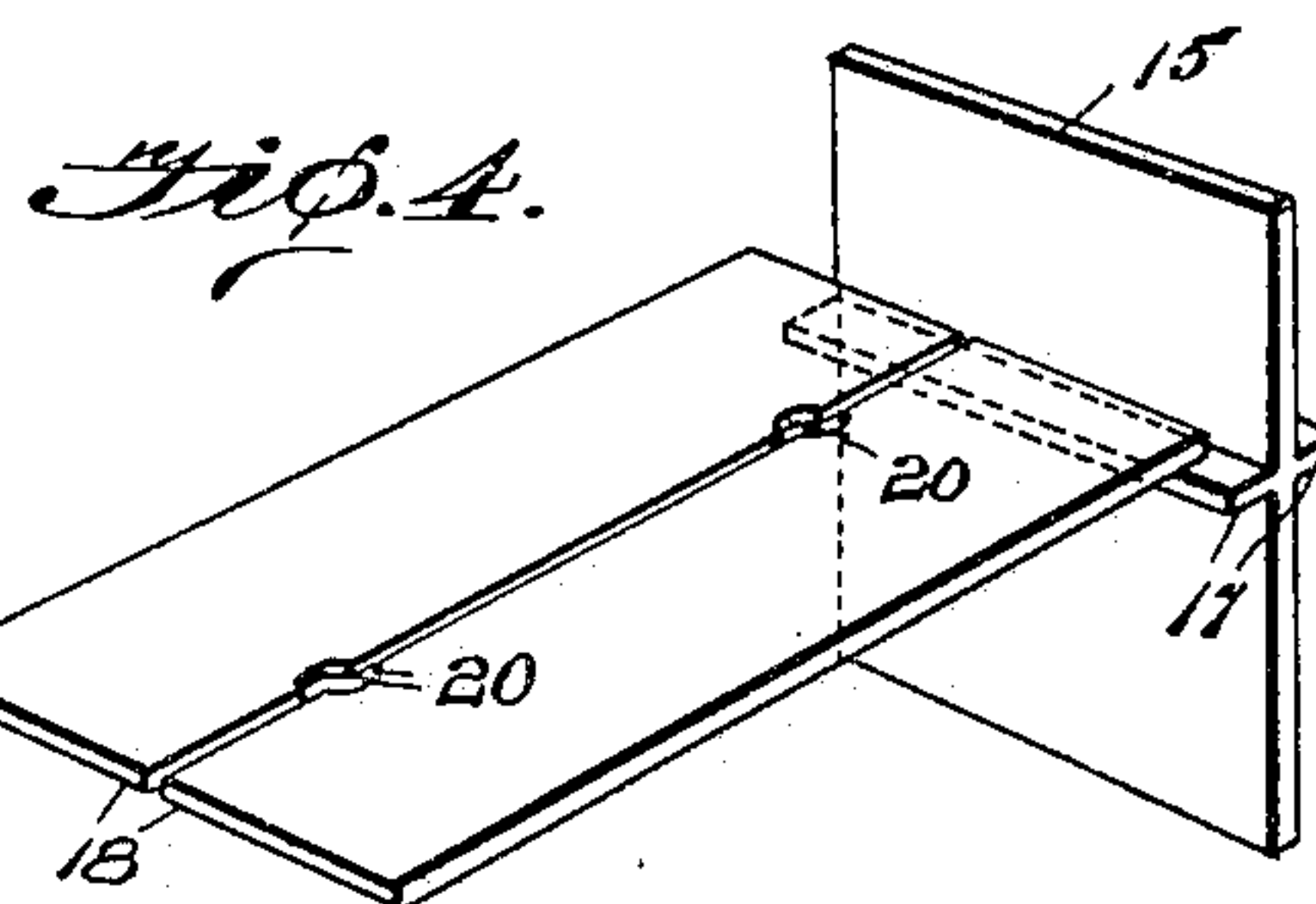
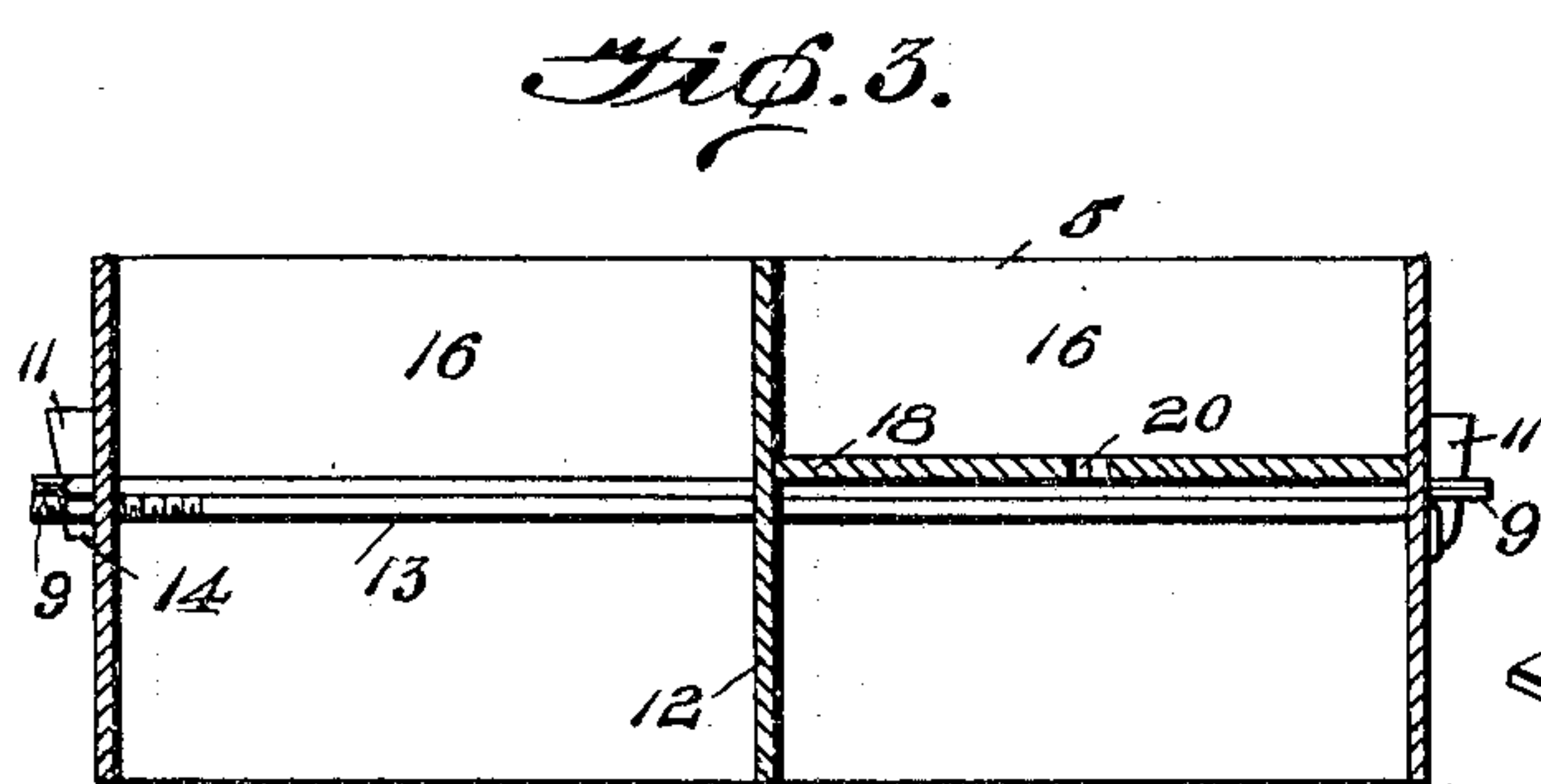
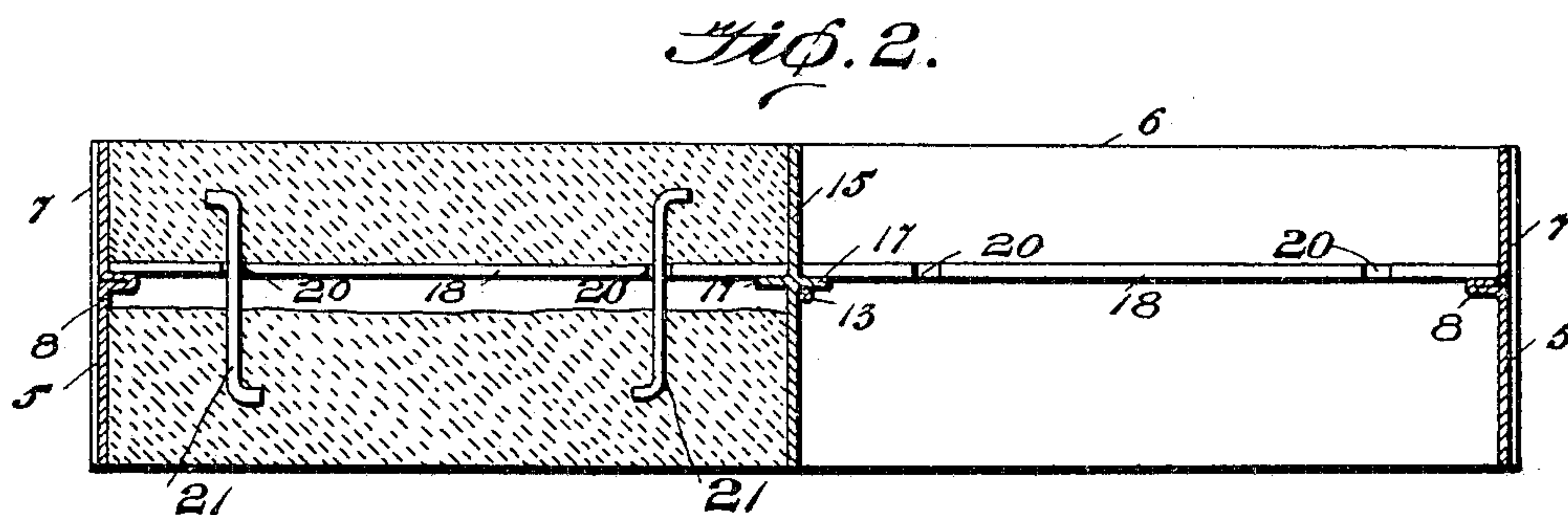
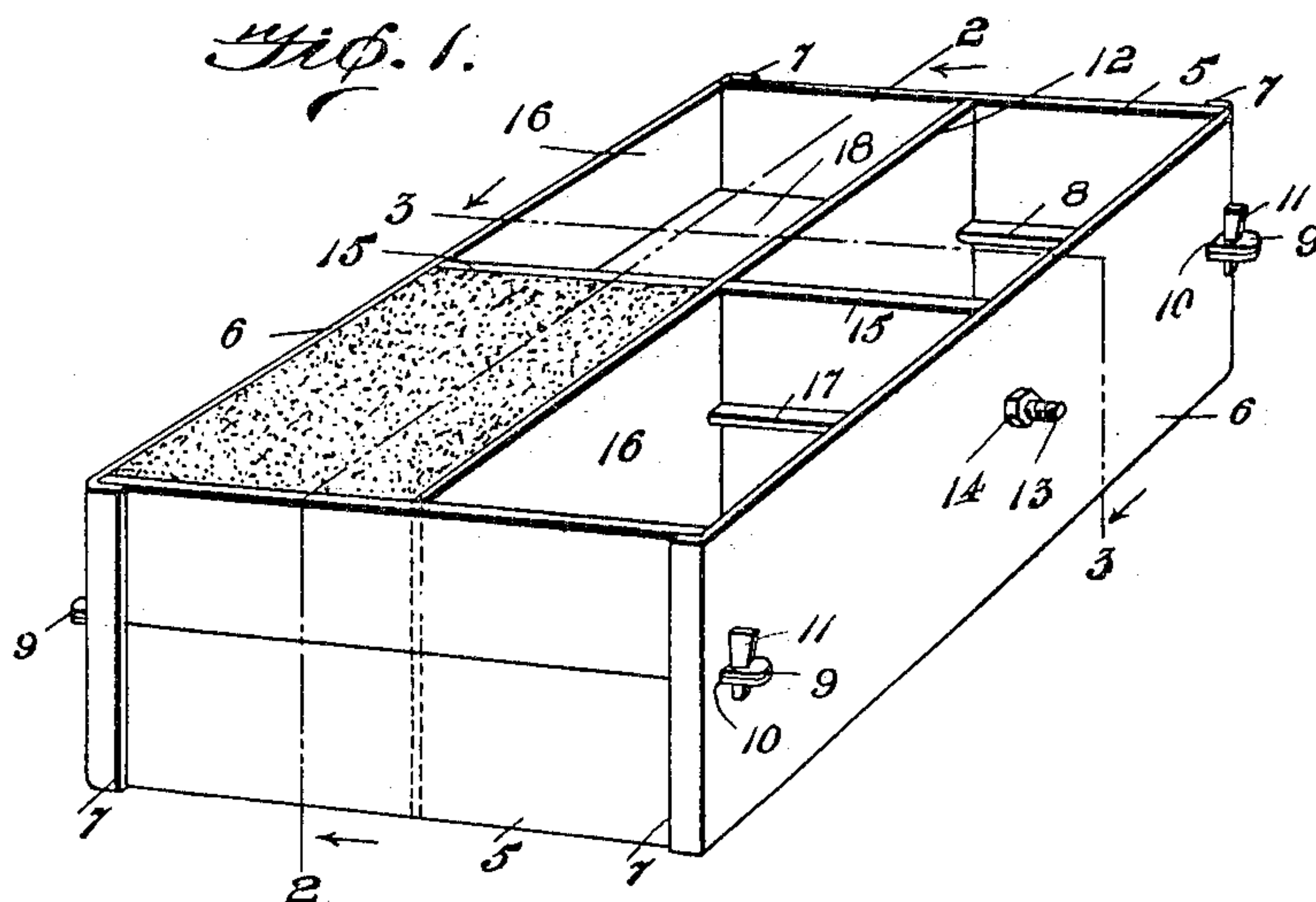
PATENTED FEB. 14, 1905.

J. FINGER.

MOLD FOR MAKING ARTIFICIAL STONE BUILDING BLOCKS.

APPLICATION FILED JULY 18, 1904.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

Fig. 5.

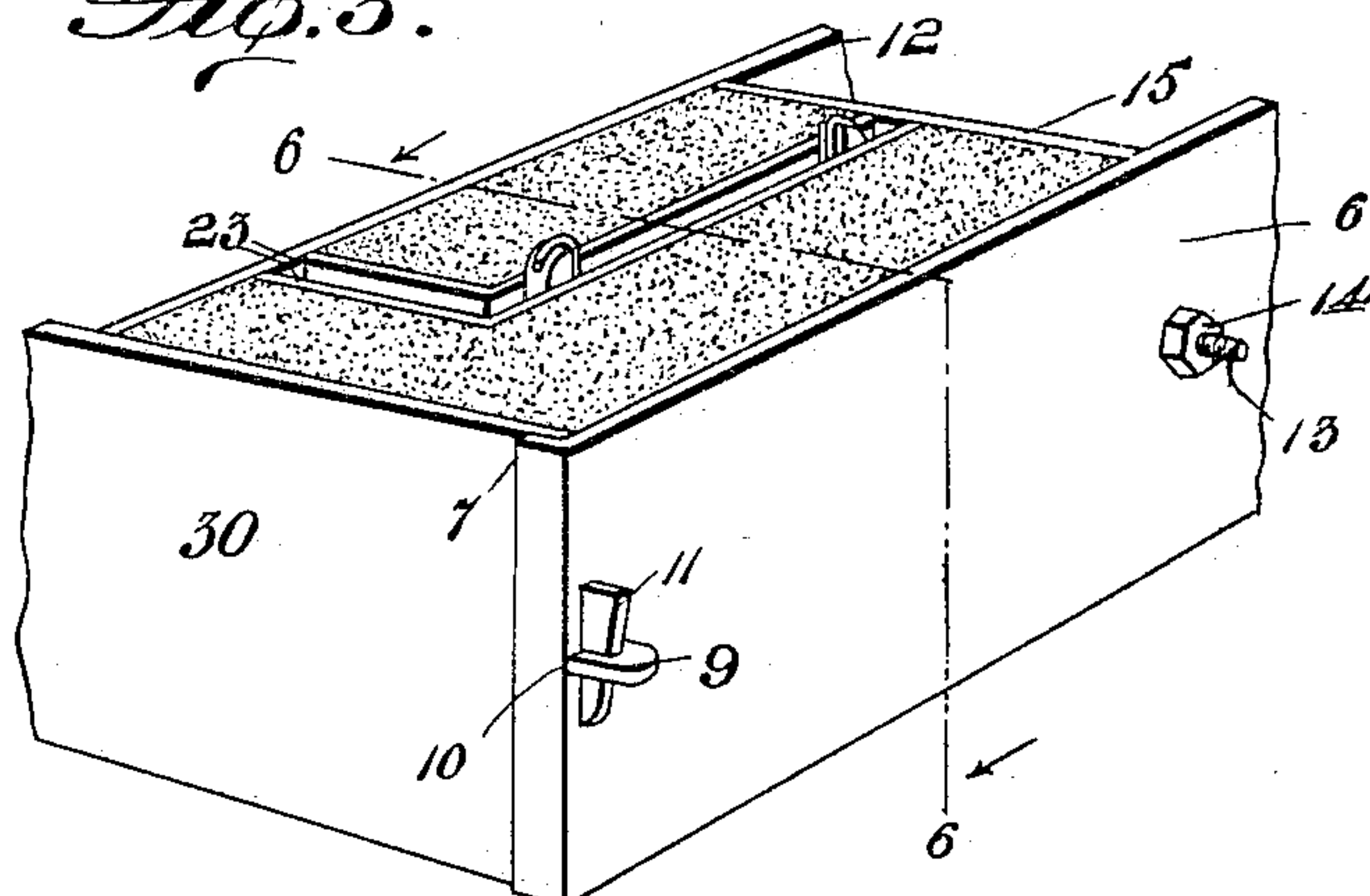


Fig. 6.

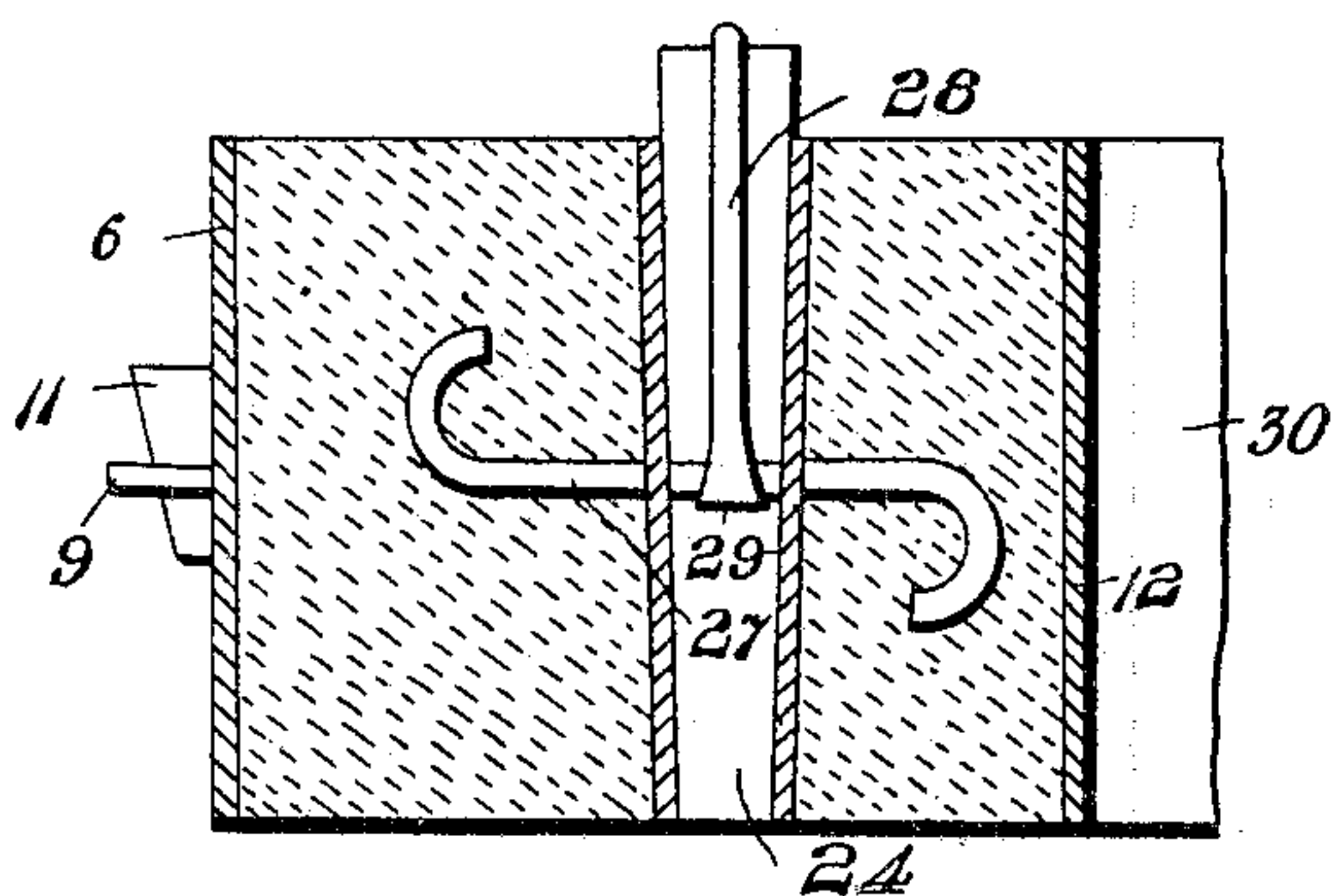


Fig. 7.

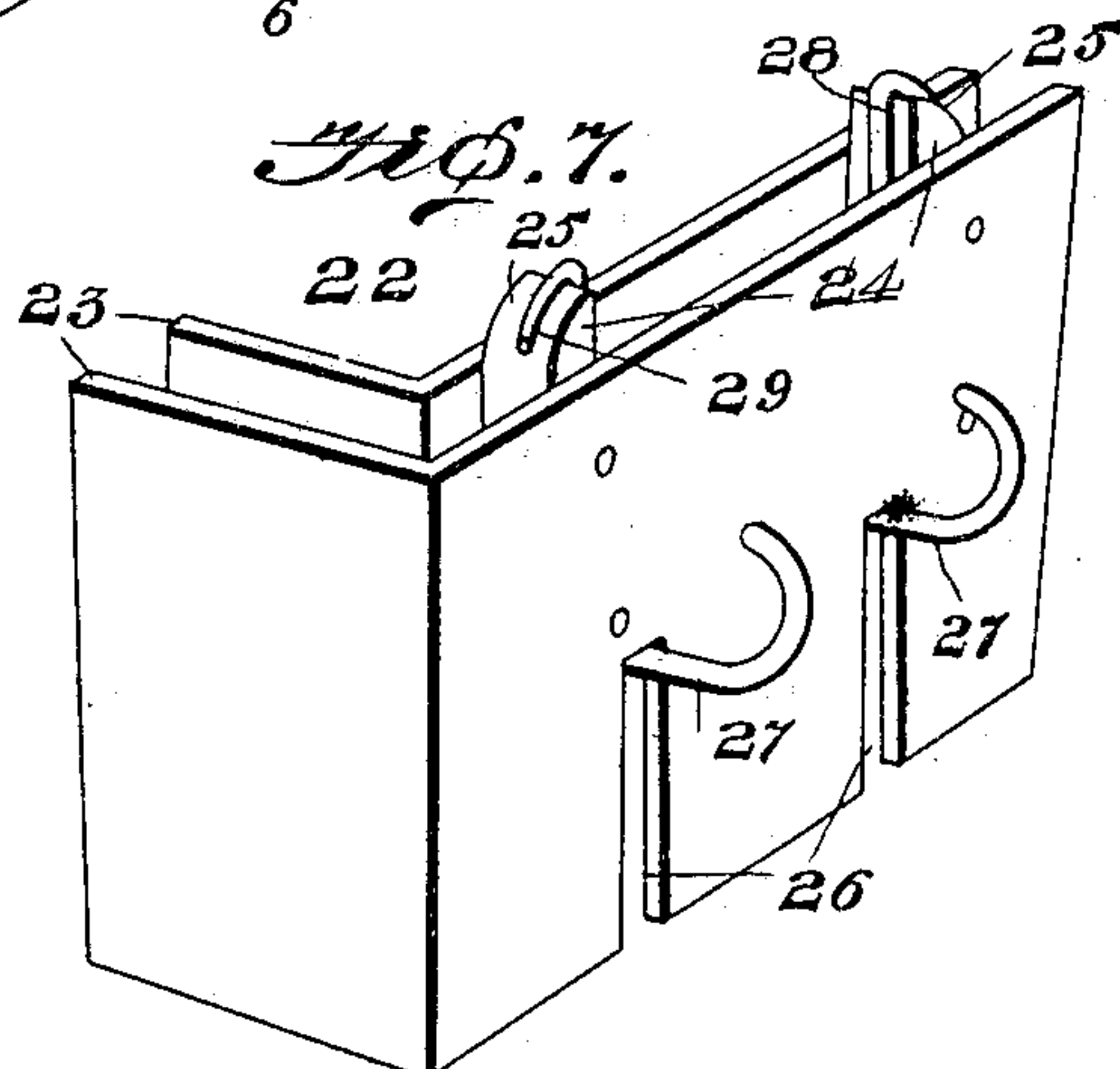


Fig. 8.

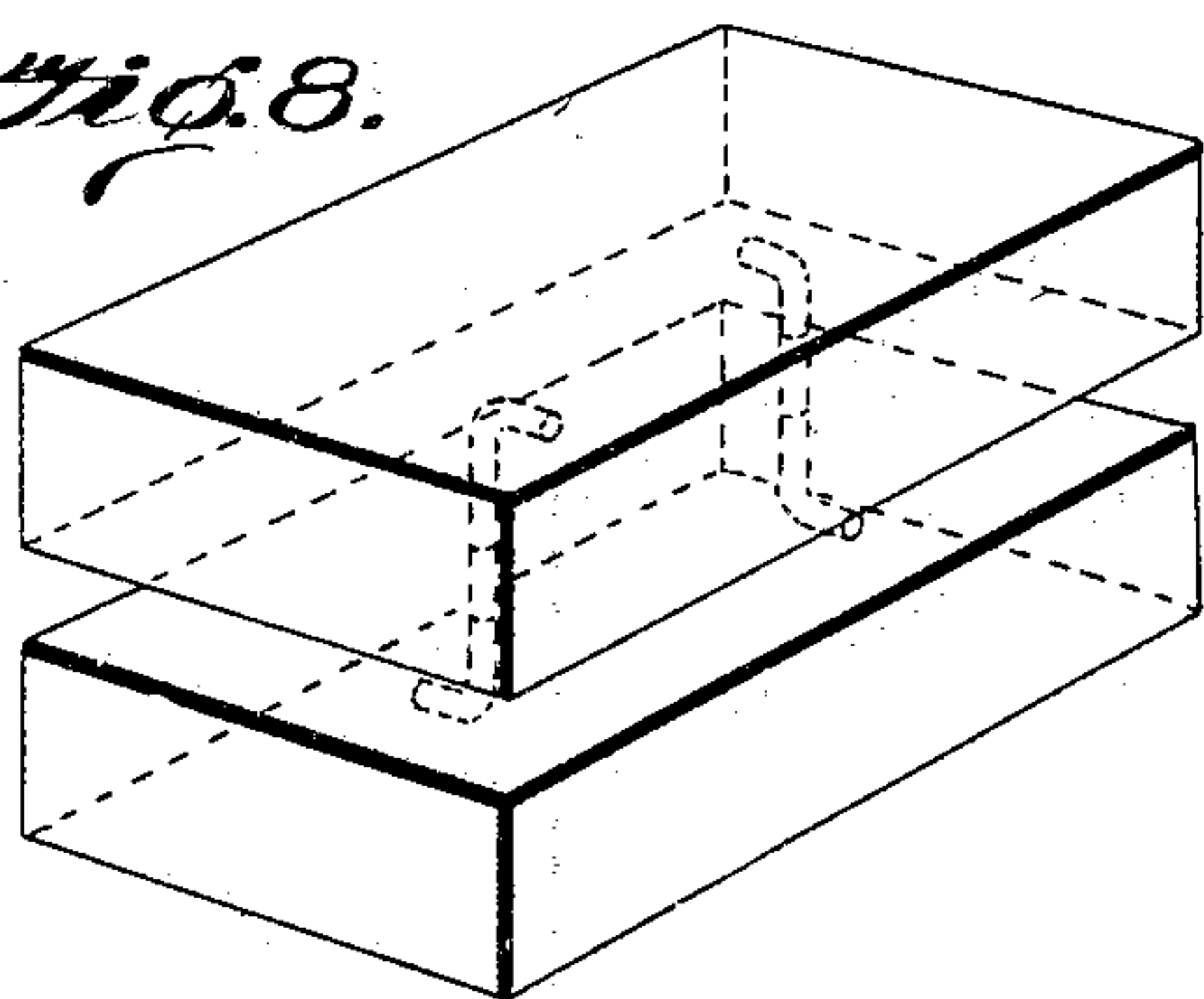
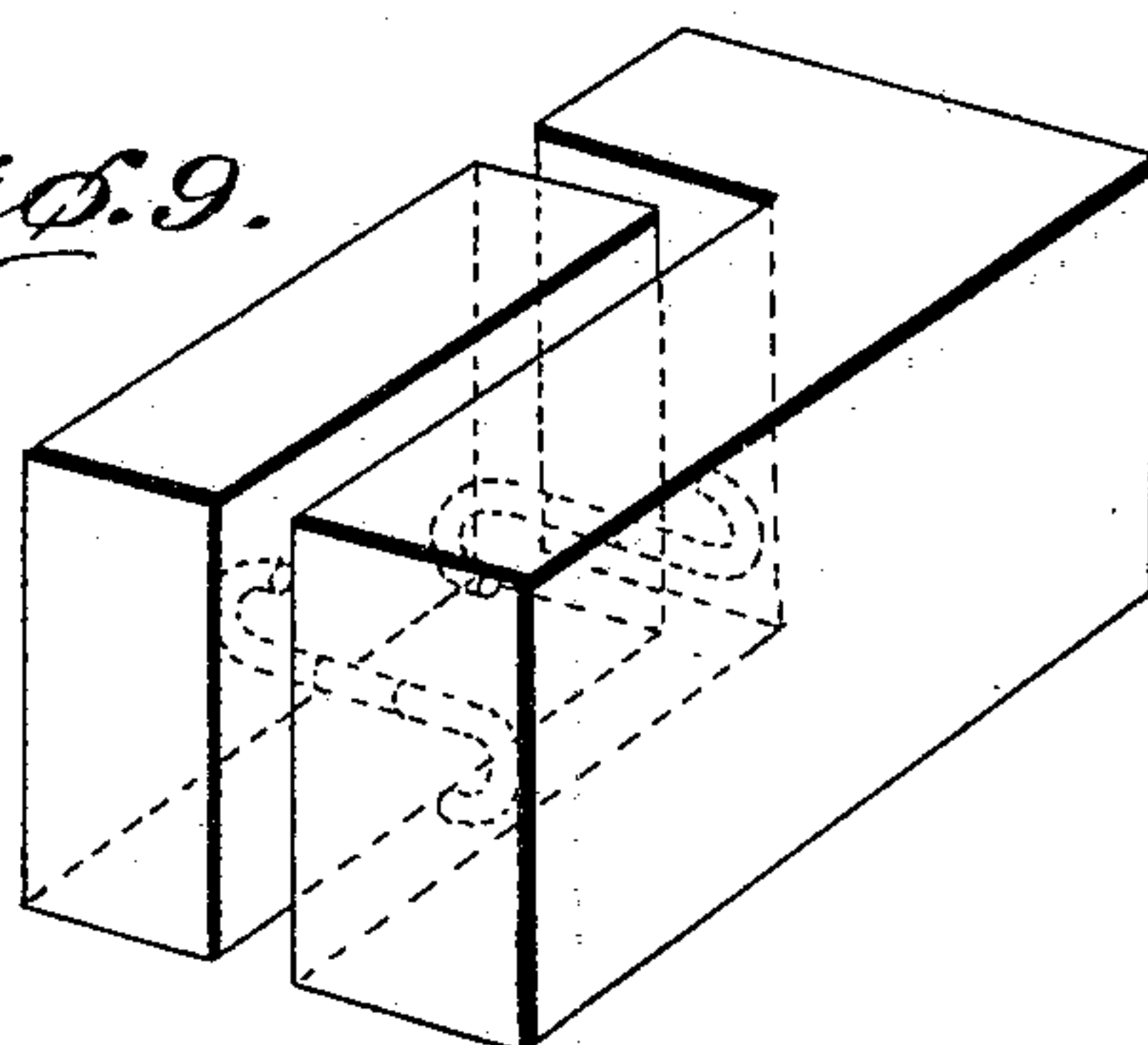


Fig. 9.



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# UNITED STATES PATENT OFFICE.

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## MOLD FOR MAKING ARTIFICIAL-STONE BUILDING-BLOCKS.

SPECIFICATION forming part of Letters Patent No. 782,230, dated February 14, 1905.

Application filed July 18, 1904. Serial No. 216,997.

*To all whom it may concern:*

Be it known that I, JONAS FINGER, a citizen of the United States, residing at Fort Collins, in the county of Larimer and State of Colorado, have invented a new and useful Mold for Making Artificial-Stone Building-Blocks, of which the following is a specification.

This invention relates to molds for making artificial-stone building-blocks, and has for its object to provide a simple, inexpensive, and durable device of this character by means of which hollow concrete building-blocks may be conveniently, rapidly, and cheaply manufactured.

A further object of the invention is to mold the block in two or more sections spaced apart to form air flues or chambers, said sections being connected together by means of tie-rods or anchors preferably embedded in the cement or other material during the formation of the block.

A further object is to provide the mold-box with an adjustable central partition defining a plurality of independent molding chambers or compartments, said compartments being provided with removable bed-plates designed to form the upper sections of the blocks and also support the tie-rods or anchors in position.

A further object is to provide a knockdown mold-box the end walls of which are removable, so as to permit the same to be readily detached and replaced by others suitable for forming corner or end blocks.

A still further object of the invention is to provide a removable core member and means carried by said core member for supporting the tie-rods or anchors preparatory to introducing the concrete, cement, or other material into the mold-box.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in form, proportion, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of a mold-box constructed in accordance with my invention. Fig. 2 is a longitudinal sectional view taken on the line 2 2 of Fig. 1. Fig. 3 is a transverse sectional view taken on the line 3 3 of Fig. 1. Fig. 4 is a detail perspective view of the removable end wall and sectional bed-plates of one of the molding chambers or compartments detached. Fig. 5 is a perspective view of a portion of the mold-box, showing the core member in position for forming corner or end blocks. Fig. 6 is a transverse section taken on the line 6 6 of Fig. 5. Fig. 7 is a detail perspective view of the core member detached. Fig. 8 is a detail perspective view of a building-block made by the mold shown in Fig. 1. Fig. 9 is a similar view of a corner-block formed in the mold illustrated in Fig. 5.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The mold-box, which may be formed of wood, metal, or other suitable material, is preferably of the knockdown type, and consists of the end walls 5 and side walls 6, the former engaging the terminal flanges 7 of the side walls, as shown. The end walls 5 are provided with inwardly-projecting ribs or flanges 8, the ends of which are extended to form oppositely-disposed ears or lugs 9, which pass through apertures 10 in the side walls of the box and are provided with slots or perforations for the reception of keys or wedges 11. Disposed within the box and slidably mounted on the ribs or flanges 8 is an adjustable partition 12, and passing through an opening in said partition and engaging the side walls 6 is a threaded rod 13, provided with a nut 14 for adjusting said rod to clamp the side walls and central portion in position. Interposed between the side walls and the partition 12 are removable plates or auxiliary end walls 15, which divide the box on each side of said partition into two molding chambers or compartments 16. The plates 15 are of a height equal to the height of the side walls and are provided with oppositely-disposed flanges or ribs 17, arranged in horizontal alinement with the



ribs or flanges on the end walls of the box 5 and adapted in conjunction with said ribs to support the horizontal partitions or false bottoms 18. The false bottom 18 forms the bed-  
 5 piece for the upper section of the block (shown in Figs. 2 and 8 of the drawings) and preferably consists of a pair of flat plates, having their adjacent edges provided with openings 20 for the reception of tie-rods or anchors 21.  
 10 The anchors 21 may be formed of wood, metal, or other suitable material and made in any desired shape, said anchors serving to bind or connect the two sections comprising the hollow block.  
 15 In making the corner-blocks (shown in Fig. 9) I employ a removable tapering core member 22, consisting of a pair of plates 23, spaced apart by means of wedge-shaped blocks 24, the upper ends of which are inclined or beveled, as indicated at 25. The plates 23 are  
 20 provided with slots or openings 26 for the reception of the rods 27, the ends of which are preferably bent or curved, so as to cause said rods to be firmly embedded in the cement or  
 25 other material of which the block is formed. The tie-rods or anchors are held within the slots or openings 26 of the spaced plates 23 by means of supporting-rods 28, said supporting-rods being provided with oppositely-dis-  
 30 posed terminal hooks 29, one of which engages the tie-rod and the other the inclined or beveled face of the spacing-block 24. In molding the corner-blocks it is desirable that the exposed faces of the same should present  
 35 a smooth exterior surface or finish, and in order to form the block in this manner the end walls 5 of the mold-box are detached and similar walls 30, formed without the inwardly-extending flanges, substituted, as best  
 40 shown in Fig. 5 of the drawings. Both styles of blocks, however, may be formed with an exterior finish in imitation of chipped rock or other ornamental designs, if desired, by inserting a pattern-plate in the mold-box hav-  
 45 ing the desired design stamped or otherwise imprinted thereon, as will be readily understood.

In molding the blocks (shown in Fig. 8 of the drawings) the mold-box is placed on a  
 50 table, floor, or other support having a smooth surface and a sufficient quantity of cement or other material introduced into the molding chamber or compartment to form the lower section of the building-block. The cement  
 55 is then thoroughly tamped and the plates comprising the false bottom 18 placed in position on the inwardly-extending flanges or ribs, after which the tie-rods or anchors are inserted through the openings in the false bottom  
 60 and driven into the lower section of the block, as clearly shown in Fig. 2. After the tie-rods or anchors have been firmly embedded in the lower section of the block the upper section thereof is formed by introducing more  
 65 cement or concrete and leveling the upper

surface of the block in the well-known manner. When the cement has sufficiently set or hardened, the block may be readily removed from the mold-box by removing the keys or  
 70 wedges and detaching the end walls thereof.

In molding corner-blocks the core member carrying the tie-rods or anchors is placed in the center of the molding chamber or compartment and the cement or other material introduced and thoroughly tamped. The tie-  
 75 rods are then released by slipping the supporting-rods 28 off the inclined or beveled ends of the spacing-strips and the core member withdrawn, leaving said tie-rods or anchors firmly embedded in the body of the  
 80 block.

It is obvious that the mold-box may be divided into any number of molding compartments or chambers, and, if desired, said box may be so arranged as to form but a single  
 85 block at a time. Blocks of different width and length may be formed by properly adjusting the partition 12 and plates 15, said partition and plates being securely held in  
 90 adjusted position by tightening the nut on the clamping-rod.

Having thus described the invention, what I claim is—

1. A mold-box for the formation of sectional blocks having tie-rod connections, and tie-rod-  
 95 supporting means arranged within the box.
2. A mold-box for the formation of sectional blocks having rigid tie-rod connections, and tie-rod-supporting means arranged within the  
 100 box.
3. A mold-box having its end walls provided with inwardly-extending flanges, and a sectional horizontal partition disposed above the bottom of the box and supported on said  
 105 flanges.
4. A mold-box having its end walls provided with inwardly-extending flanges, and a removable sectional horizontal partition disposed above the bottom of the box and supported on said flanges.  
 110
5. A mold-box having a removable horizontal partition for forming sectional blocks having tie-rod connections, said partition serving to support the tie-rods.
6. A mold-box provided with a plurality of  
 115 molding-compartments for forming sectional blocks having tie-rod connections, and tie-rod-supporting means arranged within said compartments.
7. In a mold-box for the formation of sectional blocks having tie-rod connections, a vertical partition dividing the box into a plural-  
 120 ity of molding-compartments, a removable end wall arranged within each compartment, and horizontal partitions supported by the remov-  
 125 able end walls and arranged above the bottom of the box, said horizontal partitions serving to support the tie-rods.
8. A knockdown mold-box having its end walls provided with inwardly-extended flanges  
 130



forming guides, and a vertical partition arranged within the box and provided with terminal recesses adapted to engage said flanges or guides.

5 9. A knockdown mold-box having its end walls provided with inwardly-extended flanges the ends of which are extended to form terminal perforated lugs adapted to engage openings in the side walls of the box, and keys or  
10 wedges engaging the perforations in said lugs.

10 10. A knockdown mold-box having its side walls provided with terminal laterally-extended flanges adapted to engage the end walls of the box, a longitudinal partition arranged  
15 within the box and engaging the end walls thereof, a transverse partition disposed on each side of the longitudinal partition, and a clamping-rod passing through the side walls and longitudinal partition for securing the  
20 several parts together.

11. In a mold-box for the formation of sectional blocks having tie-rod connections, a removable horizontal partition formed in a plurality of sections the adjacent faces of which  
25 are provided with alined openings for the reception of the tie-rods.

12. In a mold-box for the formation of sectional blocks having tie-rod connections, a re-

movable core member, and tie-rod-supporting means carried by said core member. 30

13. In a mold-box for the formation of sectional blocks having tie-rod connections, a removable core member provided with vertical slots or recesses for the reception of the tie-rods. 35

14. In a mold-box for the formation of sectional blocks having tie-rod connections, a tapering angularly-disposed core member, and tie-rod-supporting means carried by said core member. 40

15. In a mold-box for the formation of sectional blocks having tie-rod connections, a removable core member having its spaced walls provided with alined slots or recesses for the reception of the tie-rods, spacing-blocks 45 interposed between the walls of the core member and having their upper ends inclined or beveled, and supporting-bars engaging the tie-rods and inclined ends of the spacing-blocks.

In testimony that I claim the foregoing as 50 my own I have hereto affixed my signature in the presence of two witnesses.

JONAS FINGER.

Witnesses:

F. C. GRABLE,  
C. GOODRICH.