

No. 887,432.

PATENTED MAY 12, 1908.

F. McM. SAWYER.
MOLD FOR BUILDING BLOCKS.
APPLICATION FILED JULY 26, 1907.

Fig. 1.

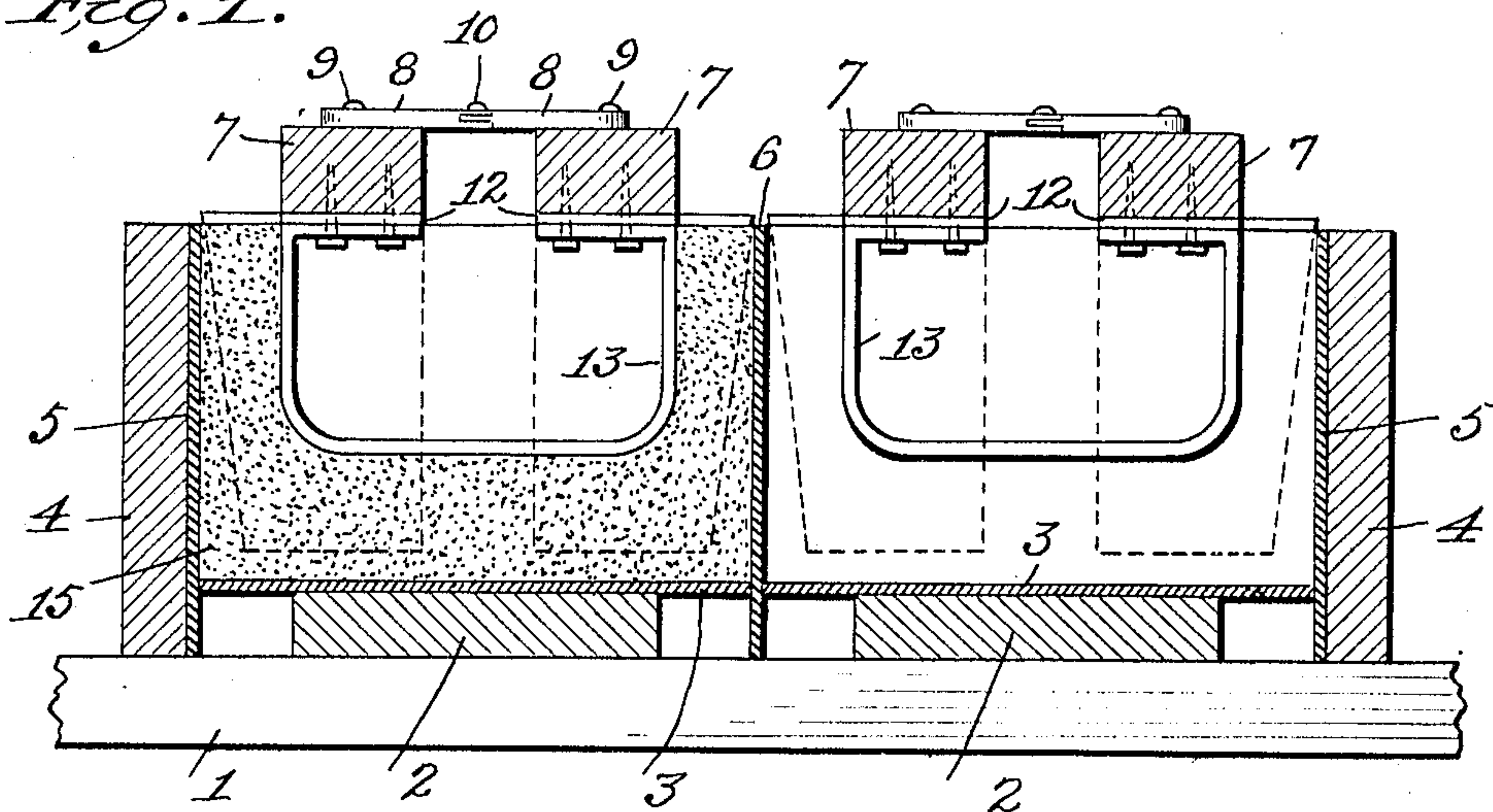


Fig. 2.

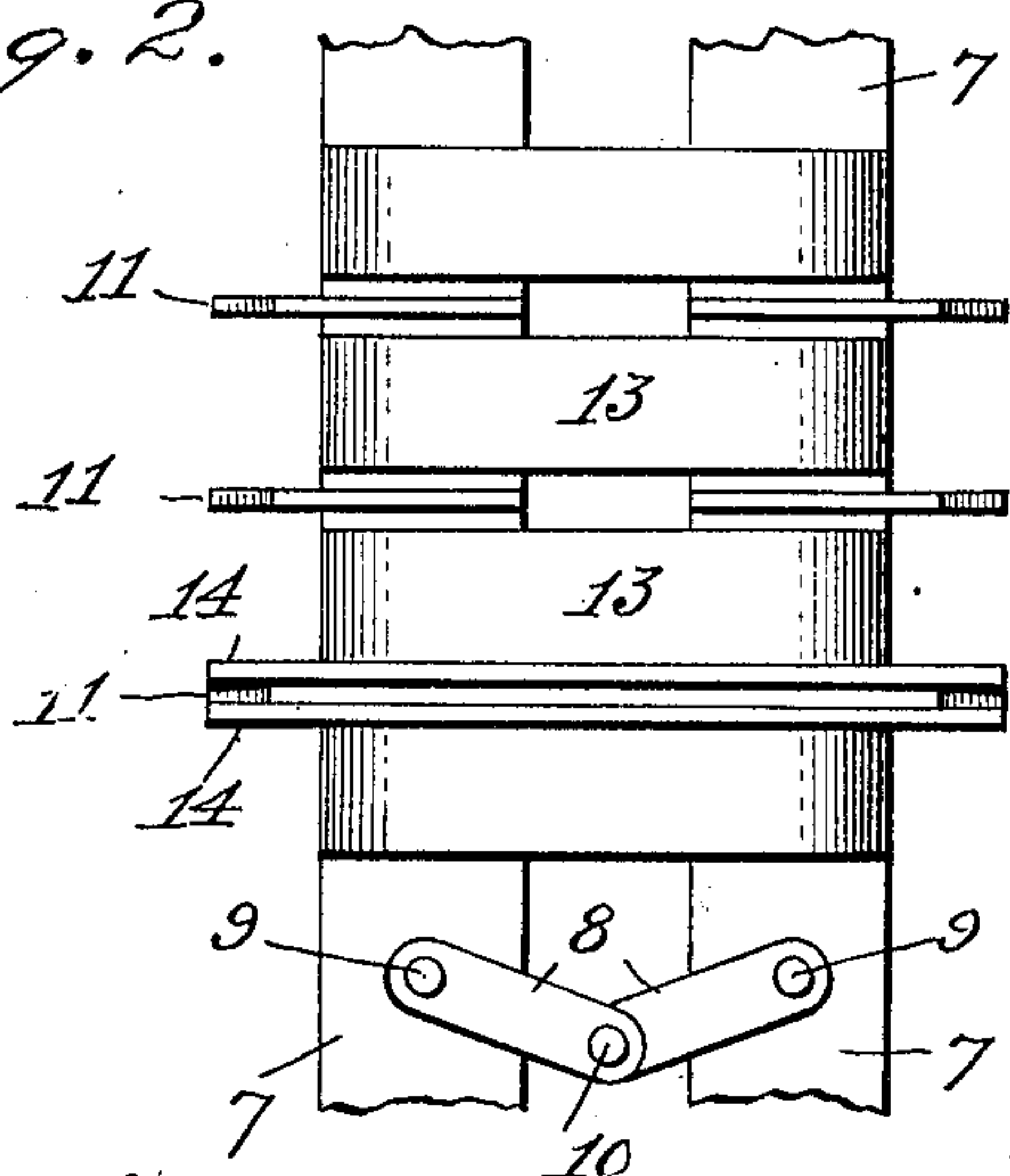


Fig. 3.

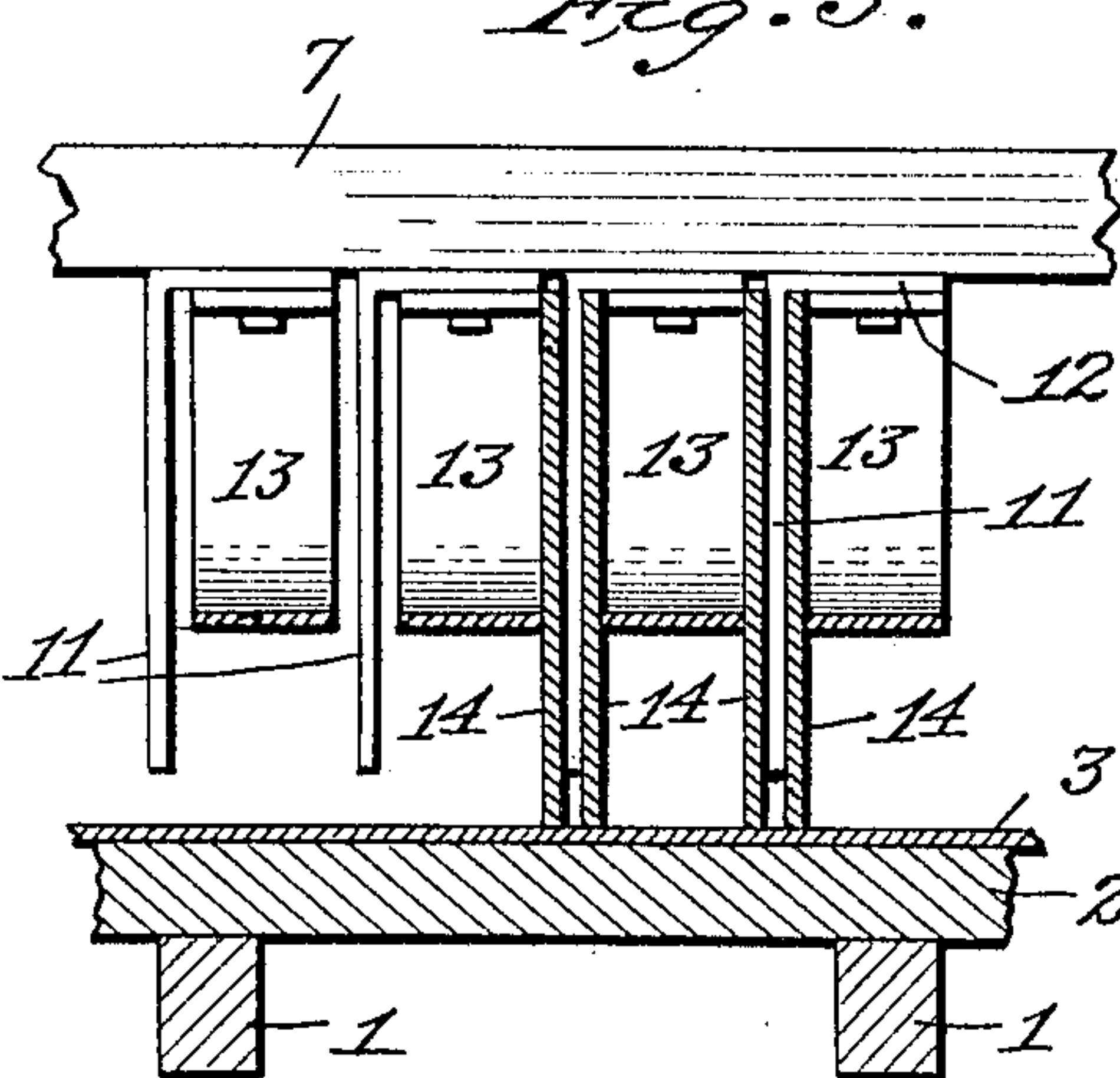


Fig. 4.

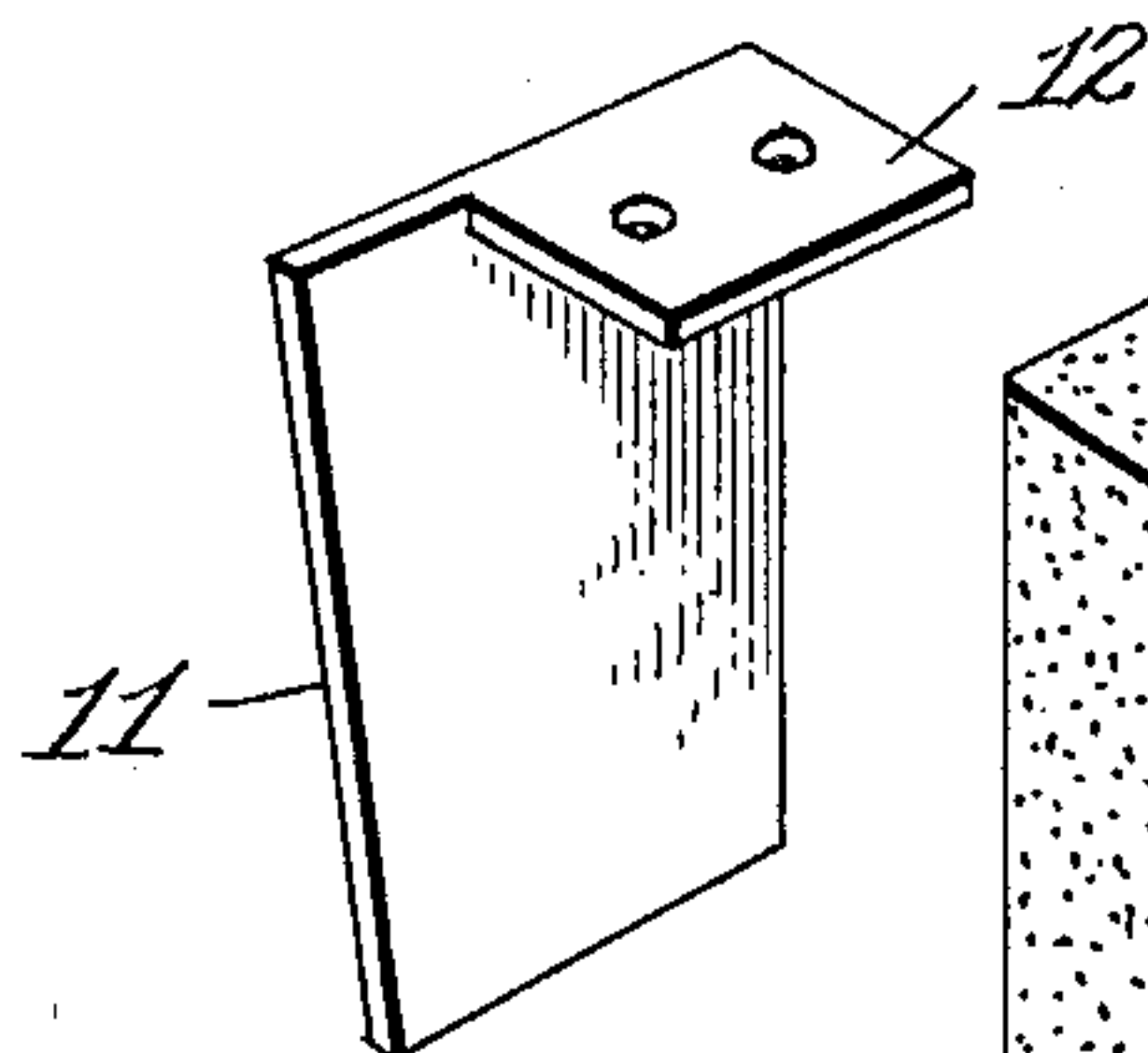
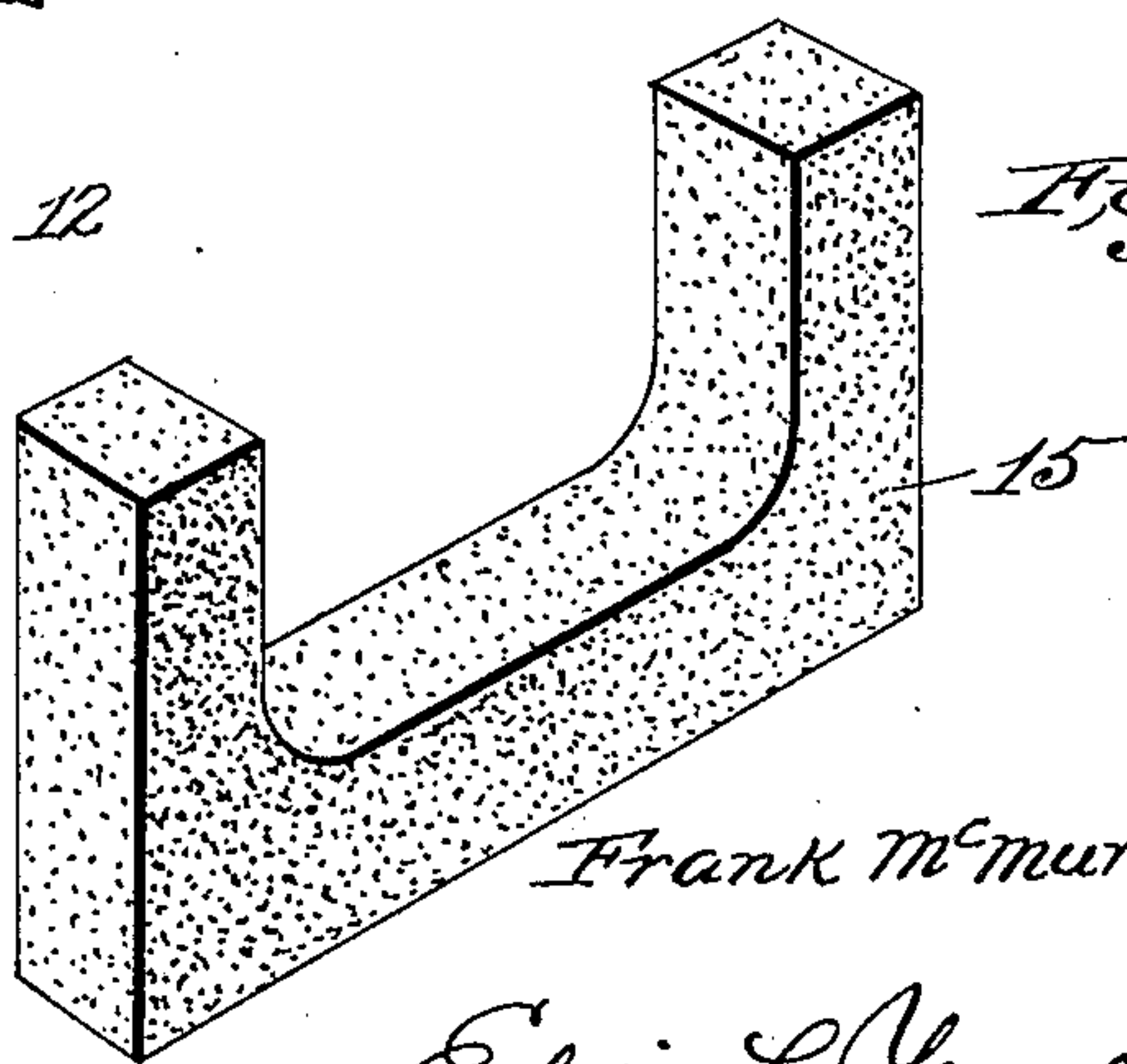


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

FRANK McMURRAY SAWYER, OF CHARLOTTE, NORTH CAROLINA.

MOLD FOR BUILDING-BLOCKS.

No. 887,432.

Specification of Letters Patent.

Patented May 12, 1908.

Application filed July 26, 1907. Serial No. 385,719.

To all whom it may concern:

Be it known that I, FRANK McMURRAY SAWYER, a citizen of the United States; residing at Charlotte, in the county of Mecklenburg and State of North Carolina, have invented certain new and useful Improvements in Molds for Building-Blocks, of which the following is a specification.

My invention relates to devices for molding building blocks, and has for its primary object to provide a plurality of core pieces adapted for use in simultaneously molding a series of blocks, said core pieces being collapsible to permit their ready removal from the mold.

A further object of my invention is to provide in connection with said core pieces spacing plates removable with said core pieces, said plates acting in conjunction with transverse separating plates to form the sides of the blocks, said separating plates when said core pieces and spacing plates are removed, being permitted to move laterally to permit their disengagement from the sides of the formed blocks.

My invention also embodies certain other novel features, as will be hereinafter more particularly described and claimed, reference being had to the accompanying drawing, in which:

Figure 1 is a vertical sectional view showing two longitudinal series of molds with the core pieces in position therein, one of said molds being filled, and the other ready for filling. Fig. 2 is an inverted plan view of a set of core pieces, spacing plates and their supports. Fig. 3 is a vertical central longitudinal sectional view of one of the longitudinal series. Fig. 4 is a detail perspective view of one of the spacing plates. Fig. 5 is a perspective view of one of the blocks formed by my improved apparatus.

Similar numerals of reference denote corresponding parts in the several views.

In the said drawing the reference numeral 1 denotes the transverse base sills, upon which are located longitudinal base sills 2, one for each series of molds, and each having resting thereon a pallet 3.

At 4 are shown the outside side walls of the mold having inner facing plates 5, and at 6 is shown an intermediate side wall.

While I have shown in Fig. 1 two longitudinal series of molds, it will be understood that there may be any number of such series, and that the character of the outside and in-

termediate side walls 4 and 5 is immaterial. Extending longitudinally of each series of molds are two beams 7, the same being connected preferably by the links 8 near their ends, said links being pivoted at 9 to said beams and at 10 to each other, so as to permit a movement of said beams towards each other and yet limit their movement away from each other to properly space them apart. Fixed to the underside of said beams at intervals apart corresponding to the width of a block to be formed, are the spacing plates 11, the same having horizontal portions 12 to permit their attachment to said beams. Said pairs of plates are preferably spaced apart edgewise the distance between said beams 7, and may be somewhat smaller than the interior of the mold, as will be hereinafter explained. Also fixed at their ends to the beams 7 are the series of core plates 13, one for each block to be molded, and each formed preferably of spring steel so as to readily yield or collapse slightly when the beams 7 are brought towards each other. Said core pieces are of the exact width of the blocks to be molded, and are so spaced apart as to just leave room therebetween for the spacing plates 11 and for a transverse separating plate 14 between each core piece and its adjoining spacing plate.

From the above description the operation of my improved device will be understood as follows: To prepare a longitudinal series of molds the outside side wall 4 and pallet 3 are first located in position and the beams 7 carrying the spacing plates 11 and core pieces 13 then lowered into position so that said beams rest on the end plates (not shown) of the molds. The separating plates 14 are then slid into position sidewise between the spacing plates 11 and core pieces 13, and upon then locating in position the side plate 6 and fastening it with respect to side plate 4 in any suitable manner, the molds are ready for filling, it being understood that the separating plates 14 will properly position the side plates 4 and 6. The parts thus assembled form through the separating plates 14 and core pieces 13 a series of independent hollow molds which can then be filled by pouring in the cement or other material in a semi-liquid condition. When the molds have been filled and the cement has set sufficiently for the blocks to retain their shape, the joints of the links 8 are broken so as to bring the beams 7 somewhat towards each other, which corre-

spondingly collapses the resilient core pieces 13 so that they come away from contact with the interior of the formed blocks 15, as will be readily understood. By now lifting beams 7 the core pieces 13 are withdrawn from the formed blocks and at the same time the spacing plates 11 will be withdrawn, leaving an intervening space between their adjacent separating plates 14. Upon now removing one of the side walls, as 4, the separating plates 14 may be withdrawn laterally from between said blocks, the lateral space between said plates left by the removal of the spacing plates 11 affording ample room for their initial disengagement from the sides of said blocks in case there should be any adherence. The removal of said plates 14 will leave the row of formed blocks 15 alone on the pallet 3, which can then be bodily lifted and removed. By placing a fresh pallet 3 in position on the sills 2 replacing and positioning the beams 7 their core pieces 13 and spacing plates 11, the separating plates 14 and the side wall 4, as hereinbefore described, the mold section is ready for a fresh charge of plastic cement.

I have shown in Fig. 1 the side wall 6 separating longitudinally two series of molds, and it will be understood that any number of series of molds may be located side by side with intervening side walls 6.

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

1. In a mold for building blocks, a core piece, and a common means for supporting and positioning the same projected part way into the mold and for contracting the same to withdraw it from the formed block.

2. In a mold for building blocks, a flexible core piece, and a common means for supporting and maintaining said core piece in position in said mold and for contracting the same to withdraw it from the formed block.

3. In a mold for building blocks, a core piece formed of a single piece of resilient material, and a common means for supporting and maintaining said core piece in position in said mold and for contracting the same to withdraw it from the formed block.

4. In a mold for building blocks, a pair of supporting beams movable towards and from each other in parallel relation, and a series of core pieces each formed of a single piece of resilient material connected at its ends to said beams and adapted to be contracted and expanded by the movement of said beams towards and from each other.

5. In a mold for building blocks, a series of open sided core pieces, means for removably supporting the same within the mold, and a series of spacing plates intermediate

said core pieces and supported by the core piece supporting means and removable therewith.

6. In a mold for building blocks, a series of core pieces, a series of spacing plates intermediate said core pieces, and a common means for supporting said core pieces and spacing plates in position within the mold and for contracting said core pieces and removing the same and said spacing plates from said mold.

7. In a mold for building blocks, a pair of supporting beams movable towards and from each other in parallel relation, a series of core pieces connected to said beams and adapted to be contracted and expanded by the movement of said beams towards and from each other and a series of spacing plates intermediate said core pieces and also carried by said beams.

8. In a mold for building blocks, a series of open sided core pieces, a series of spacing plates intermediate said core pieces, and a series of separating plates adapted to be located between said spacing plates and said core pieces to close the sides of the latter.

9. In a mold for building blocks, a series of open sided core pieces, a series of spacing plates intermediate said core pieces, a series of separating plates adapted to be located between said spacing plates and said core pieces to close the sides of the latter, and means for simultaneously removing said core pieces and said spacing plates from said mold.

10. In a mold for building blocks, a series of core pieces, a series of spacing plates intermediate said core pieces, a pair of removable beams carrying said core pieces and spacing plates and movable towards and from each other to contract and expand said core pieces, and a series of separating plates adapted to be removably inserted between said core pieces and spacing plates.

11. In a mold for building blocks, the combination with a base and removable side walls, of a series of core pieces, a series of transverse spacing plates between said core pieces, a common means for supporting and removing said core pieces and spacing plates, and a series of transverse separating plates adapted to be inserted laterally between said core pieces and spacing plates and to be separately removed after the blocks are formed and the core pieces and spacing plates have been removed.

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

FRANK McMURRAY SAWYER.

Witnesses:

THOS. W. ALEXANDER,
JOHN W. TATE.