

No. 887,814.

PATENTED MAY 19, 1908.

L. S. JOHNSON.
MOLD FOR HOLLOW CONCRETE BLOCKS.

APPLICATION FILED APR. 20, 1907.

2 SHEETS—SHEET 1.

Fig. 1.

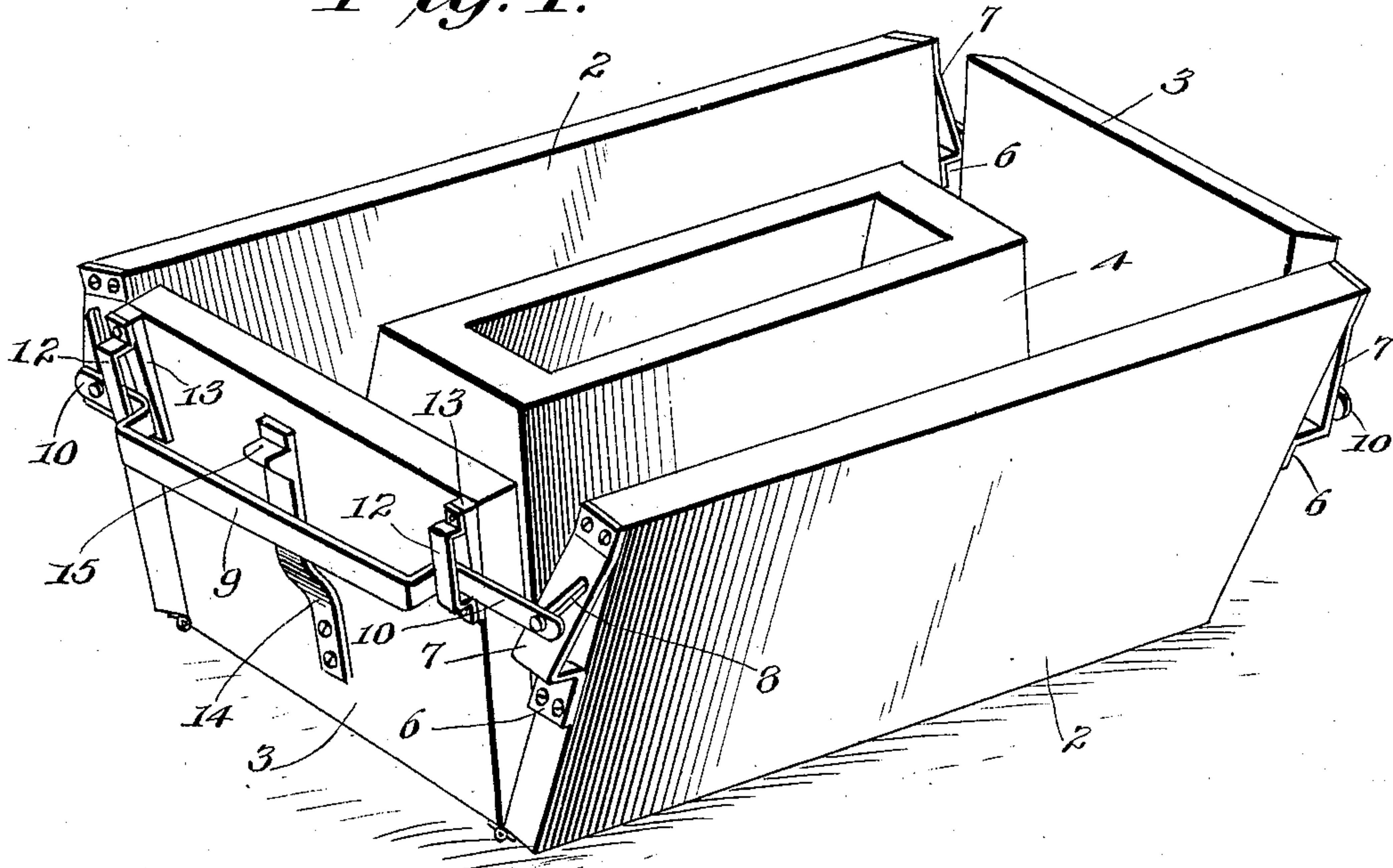
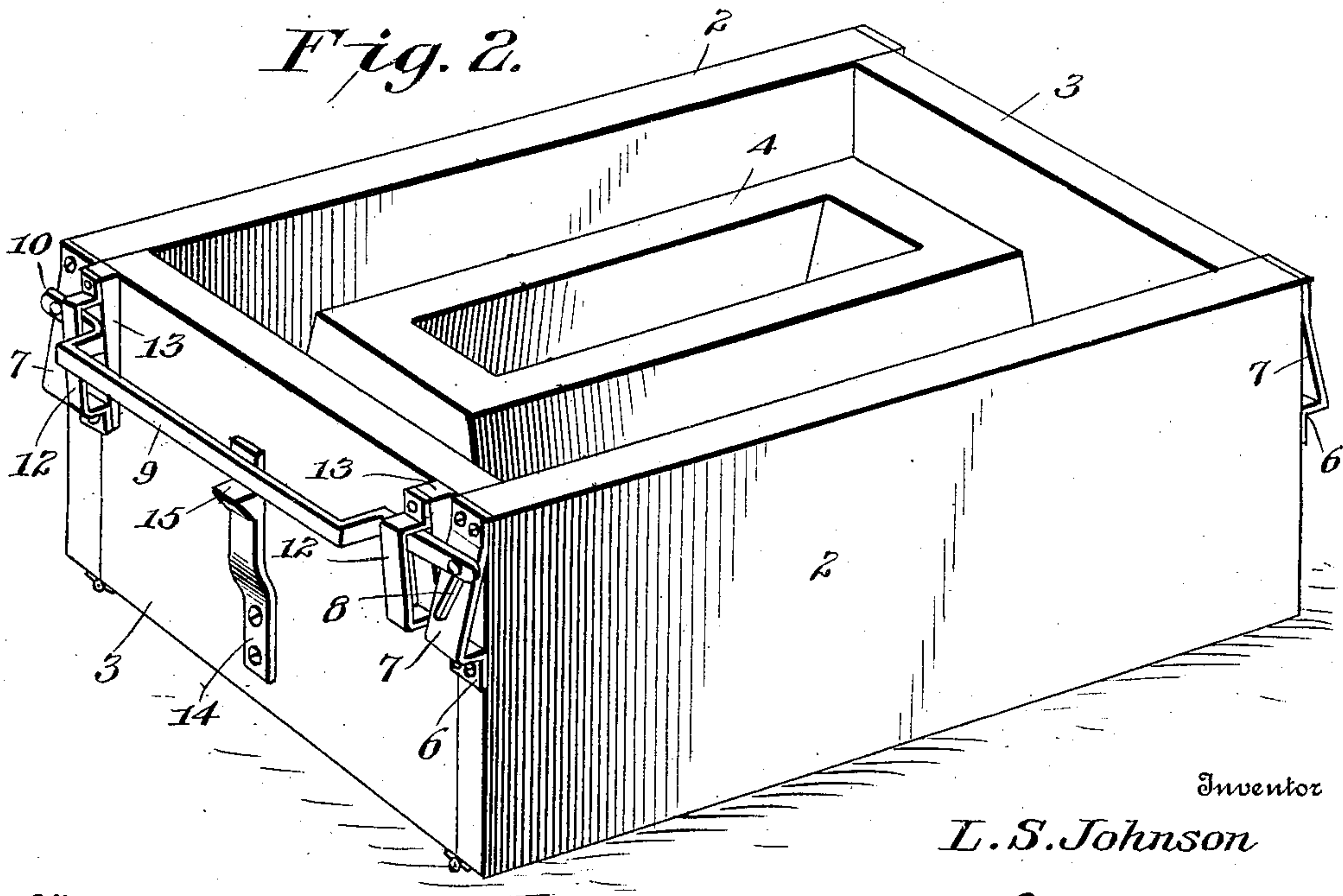


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

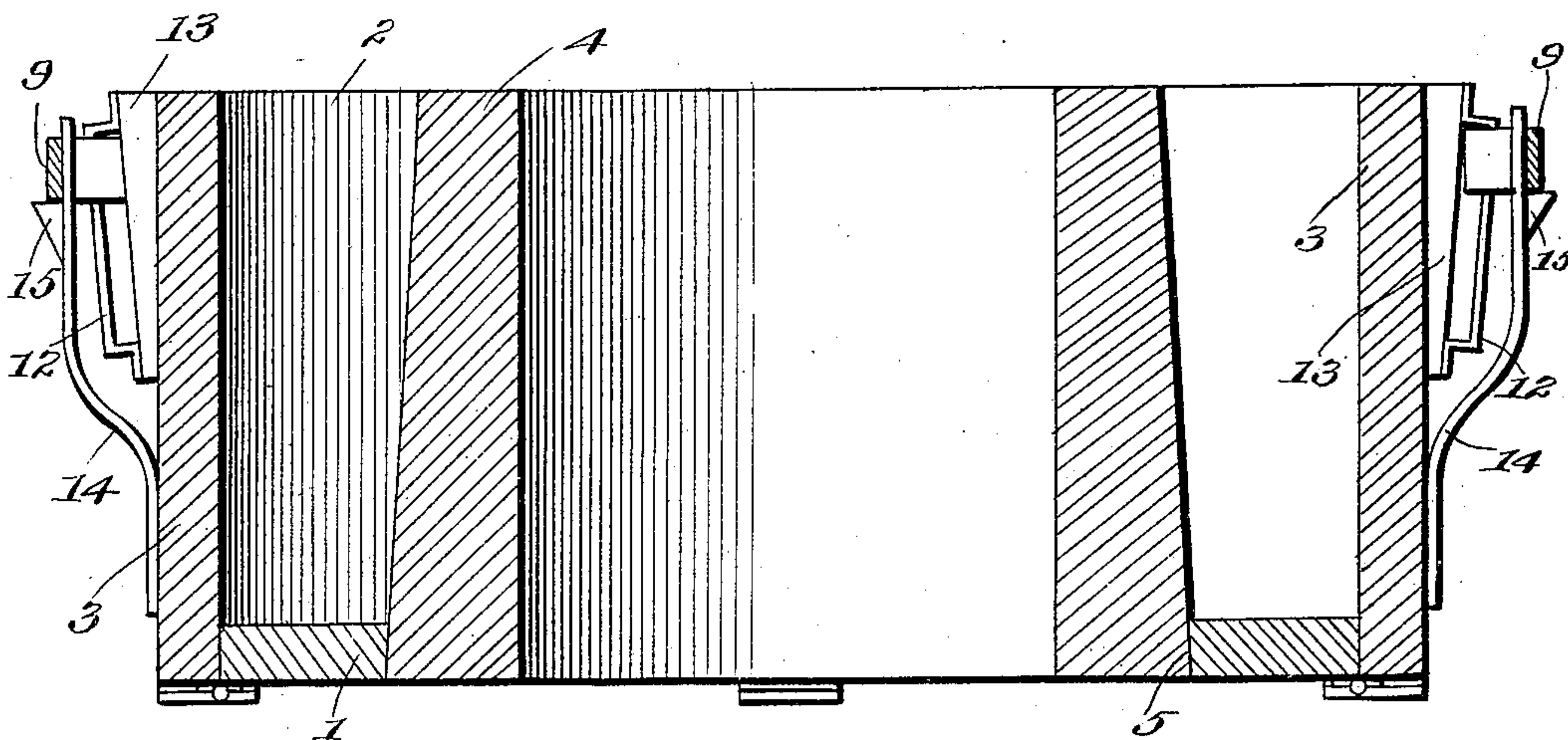


Fig. 4.

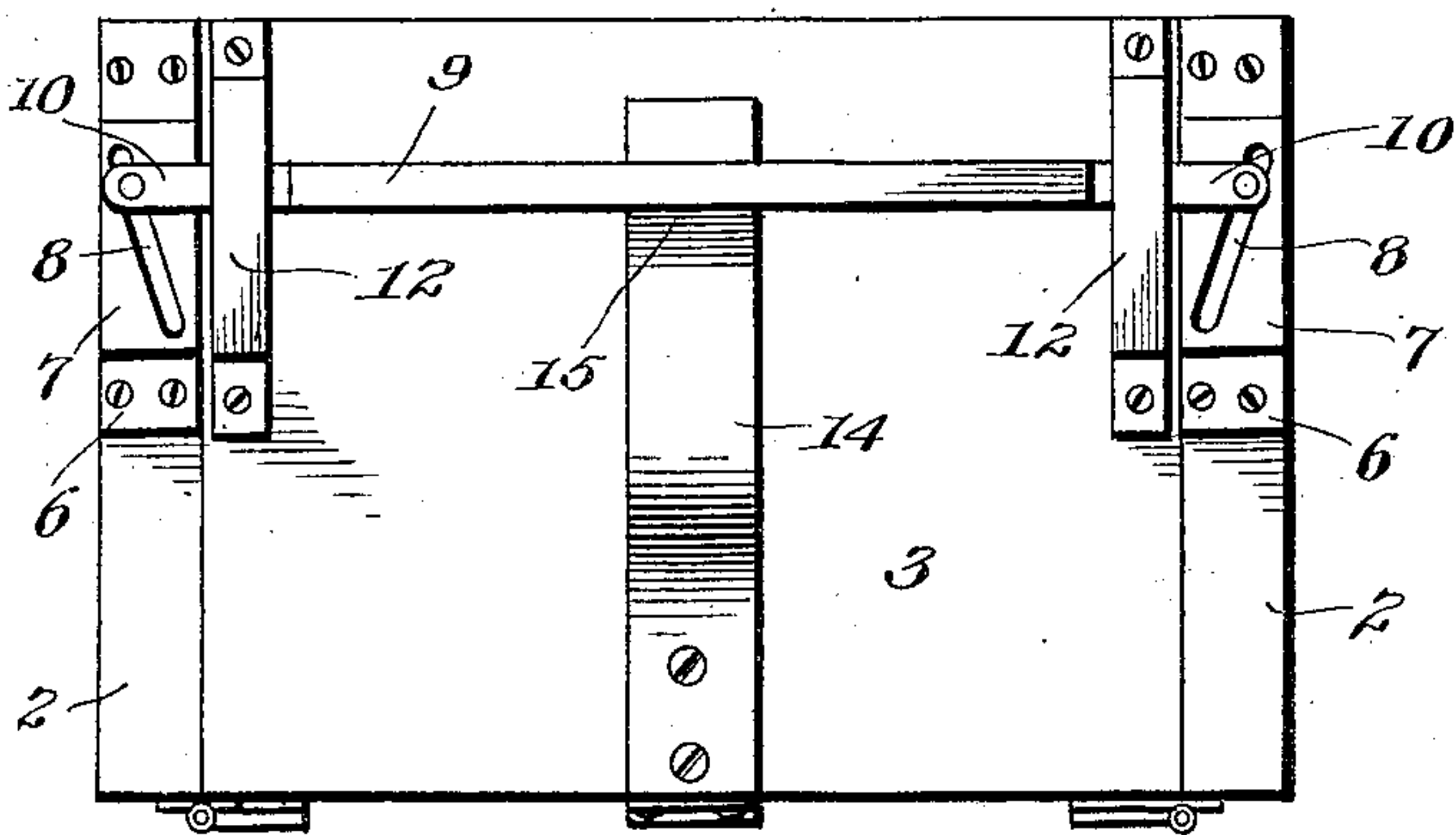
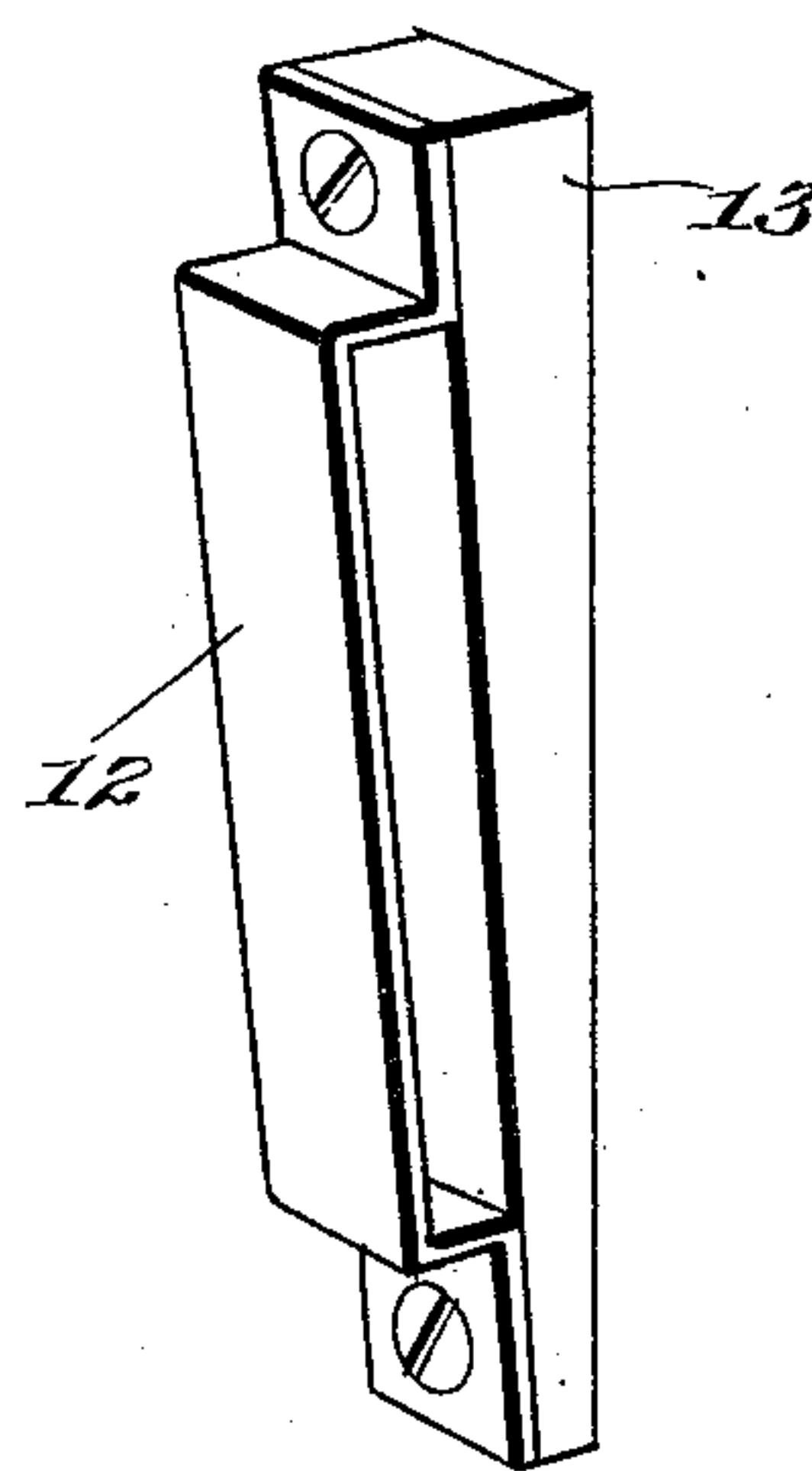


Fig. 5.



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MOLD FOR HOLLOW CONCRETE BLOCKS.

No. 887,814.

Specification of Letters Patent.

Patented May 19, 1908.

Application filed April 20, 1907. Serial No. 369,324.

To all whom it may concern:

Be it known that I, LEVI S. JOHNSON, citizen of the United States, residing at Sioux City, in the county of Woodbury and State of Iowa, have invented certain new and useful Improvements in Molds for Hollow Concrete Blocks, of which the following is a specification.

This invention contemplates certain new and useful improvements in molds, particularly for hollow concrete blocks, and the invention has for its object a simple and efficient construction of mold, the parts of which may be readily held locked in closed position for the reception of the concrete or other plastic material, the mold being so arranged that it may be inverted and the parts automatically moved to an open position by the mere act of raising the mold by its handles from the block.

With this and other objects in view as will more fully appear as the description proceeds, the invention consists in certain constructions, arrangements and combinations of the parts which I shall hereinafter fully describe and then point out the novel features in the appended claims.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of my improved mold, the parts being shown in open position; Fig. 2 is a similar view with parts closed; Fig. 3 is a longitudinal sectional view of the mold; Fig. 4 is an end view; and, Fig. 5 is a detail perspective view of one of the sides that are secured to the end members of the mold, and that are intended to coact with the end handles.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

My improved mold comprises a bottom 1, sides 2 that are hinged to the lower edge of the bottom so that in opening the mold the sides will clear from the bottom, and ends 3 which are similarly hinged to the bottom and are adapted to assume a position between the ends of the sides when the mold is in closed condition.

4 designates a core which may be either single or double, as is manifest, and which is

preferably secured in an opening 5 in the bottom 1, by any desired detachable fastening means, the said core having sufficient draw or taper from all sides so as to enable it to be readily released from the completed block.

Plates 6 of sheet metal or the like are secured by screws or other fastening means to the end edges of the sides 2. Each of said plates is bent at one end as indicated at 7, whereby that end which is lowermost when the mold is in its normal receiving position is offset from the said edge, the said plates thereby sloping downwardly away from the mold. Each plate 6 is formed with an oblique slot 8, and the said slots of a pair of plates at the same end of the mold converge towards their normally lower ends.

9 designates a pair of end handles that are provided with outwardly extending offset extremities 10, and thumb nuts or similar fastening devices or pins are secured to said extremities and are mounted to work in the slots 8 of the plates 6. Each end of the mold is provided with a pair of vertically extending straps 12 that are secured by screws or other fastening devices to wedge shaped plates 13 that are in turn attached to the outer sides of the mold ends. The handles 9 have the bases of their extremities 10 fitted to move in and are guided by the straps 12.

14 designates springs that are secured at one end to the ends 3, each spring being provided with a locking lug 15 adapted to spring under its respective handle 9 to hold the handle at the upper limit of its movement.

In the practical operation of my improved mold, the handles are raised to the position illustrated in Fig. 2, being held by the locking lugs 15, and it is manifest, from the foregoing description, in connection with the accompanying drawings that when the handles have been moved to such position, they will have, through the instrumentality of the wedge-shaped base plates 13 and their straps 12, as well as the diagonal slots 8 in the plates 6 and the engagement of the handles with such slots, brought the sides and ends of the mold together to close the same for the reception of the plastic material. The mold is then filled in and tamped. The mold is then inverted or turned bottom side up and the handles released by pressing the springs 14 inwardly. By then placing one's thumbs on the bottom of the mold and drawing the handles upwardly, it is obvious that the

sides of the mold will be automatically released from the block and swung outwardly, while the ends will be simultaneously released and swung out so as to permit the mold to be readily raised from the completed block. When the mold is turned over for this operation, the core should be drawn before the mold members are released.

It will thus be seen that my invention provides a simple, durable, and efficient construction of mold of this character which may be readily locked in closed condition, and the parts of which may be automatically swung outwardly away from the completed block and by the mere operation of lifting the mold bottom side up from the block, very little pressure upon the bottom, as the handles are raised in this operation, being necessary, owing to the weight of the mold members themselves.

It is to be understood that the mold box is so constructed that different face plates may be used: These face plates may be interchangeable and secured to the mold by means of screws, springs, or any other suitable fastening devices.

Having thus described the invention, what is claimed as new is:

1. A mold, comprising a bottom, and sides and ends hinged thereto, plates secured to the end edges of the sides and sloping outwardly towards the bottom, said plates being formed with oblique slots and the slots of the plates at the same end of the mold converging towards the bottom, end handles having a sliding connection with the said slots, and guides secured to the ends of the mold and in which said handles are mounted to move.

2. A mold, comprising a bottom, and sides

and ends hinged to the bottom, plates secured to the end edges of the sides and sloping outwardly from the end edges in a direction towards the bottom, said plates being formed with slots, and the slots at the same end of the mold converging towards the bottom, end handles having a sliding engagement with the said slots, wedge shaped base plates secured to the ends, and straps secured to said base plates and extending over the handles.

3. A mold, comprising a bottom, and sides and ends hinged to the bottom, plates secured to the end edges of the sides and sloping outwardly from the end edges in a direction towards the bottom, said plates being formed with slots, and the slots at the same end of the mold converging towards the bottom, end handles having a sliding engagement with the said slots, wedge shaped base plates secured to the ends, straps secured to said base plates and extending over the handles and locking springs secured to said ends and adapted to engage said handles.

4. A mold, comprising a bottom and sides and ends hinged thereto, plates secured to the end edges of the sides and provided with oblique slots and the slots of the plates at the same end of the mold converging towards the bottom, end handles having a sliding connection with the said slots, wedge shaped base plates secured to the ends, and straps secured to the said base plates and extending over the handles.

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

LEVI S. JOHNSON. [L. s.]

Witnesses:

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