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PATENTED MAY 12, 1908.

C. W. JONES.
BRICK AND BLOCK MOLD.
APPLICATION FILED JULY 30, 1907.

Fig. 1.

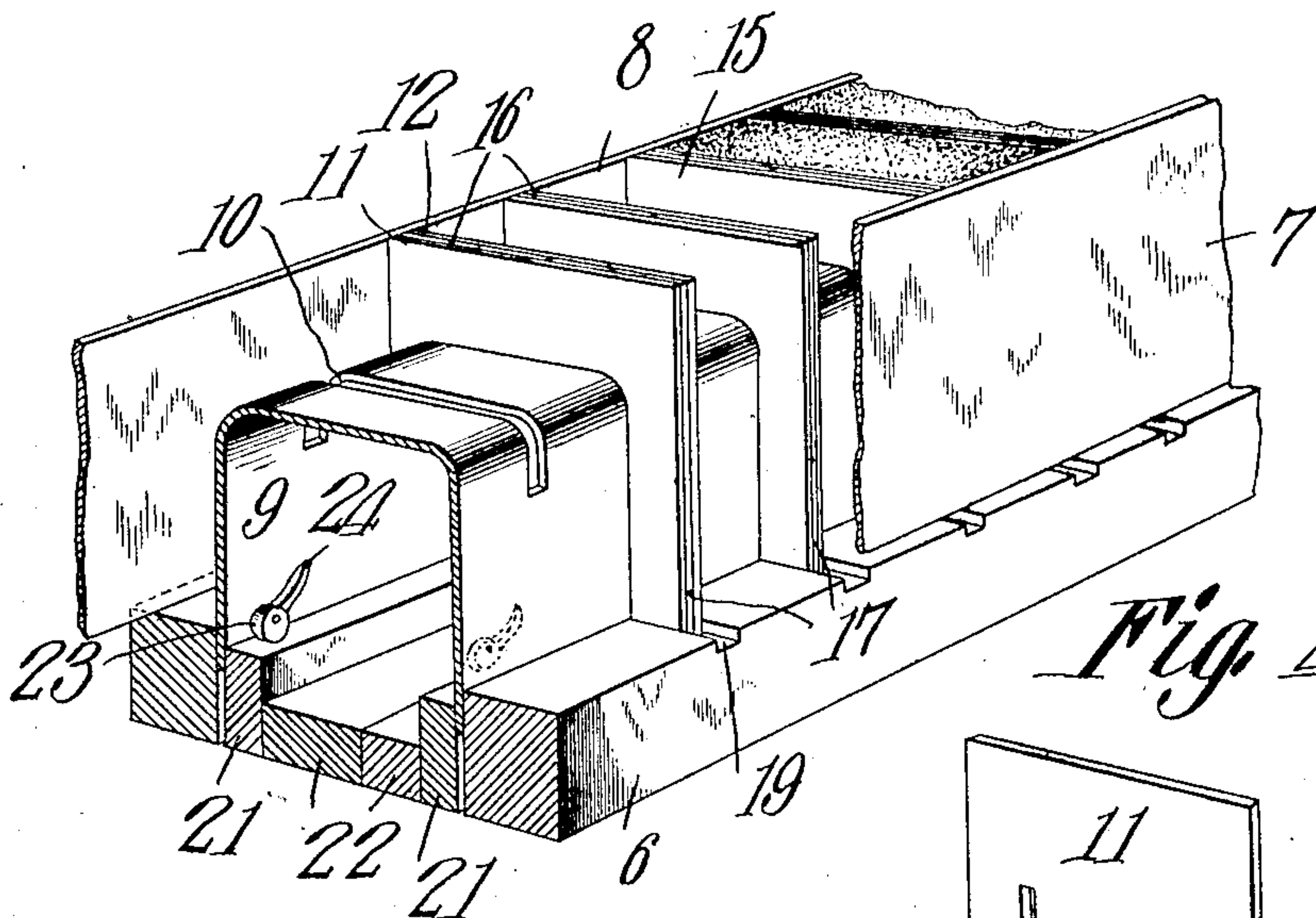


Fig. 4.

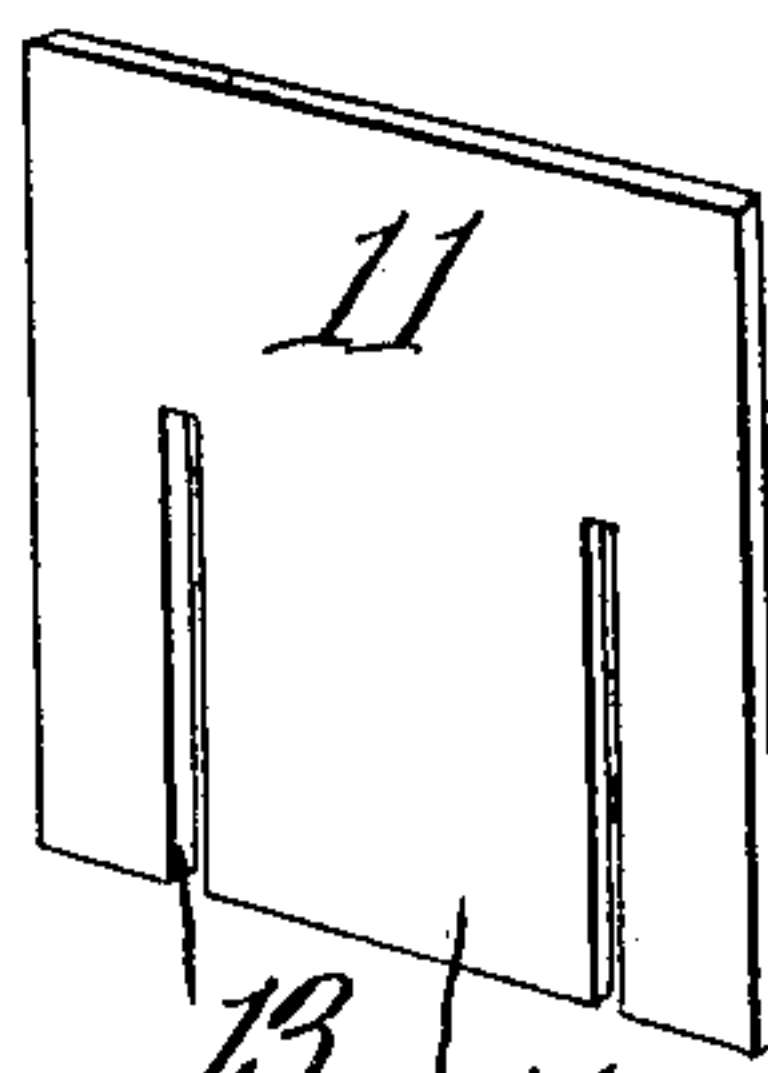


Fig. 2.

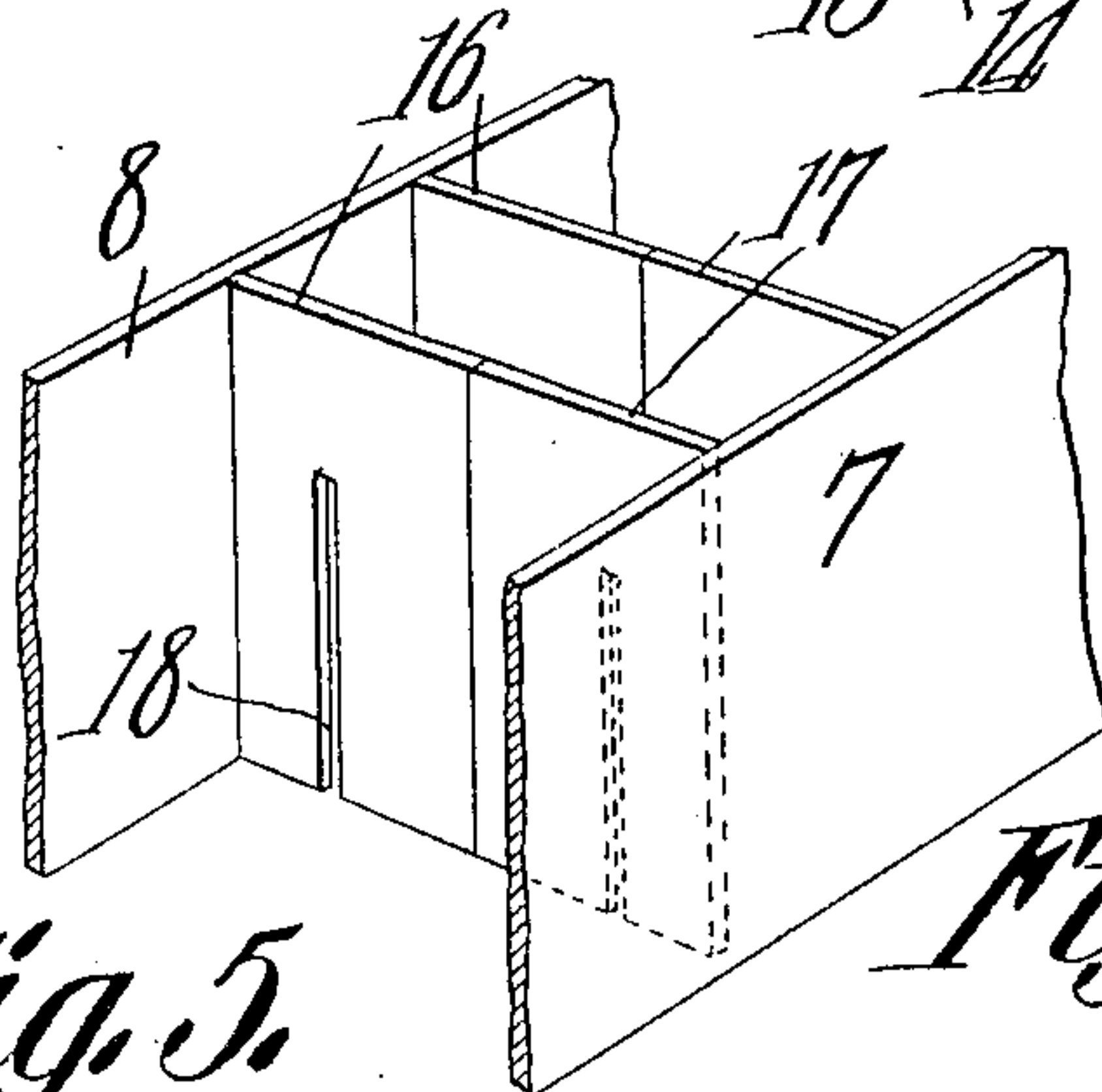
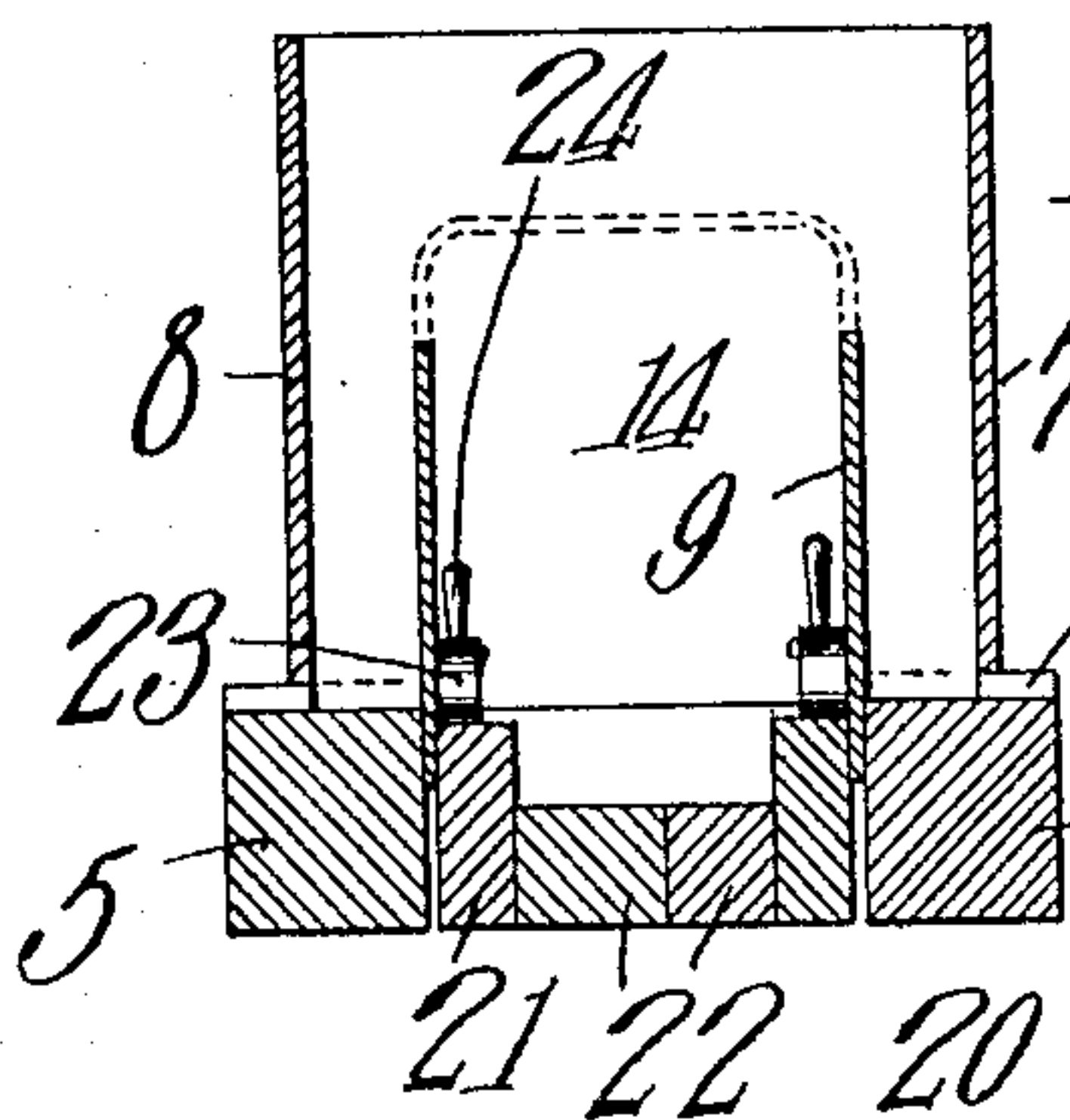
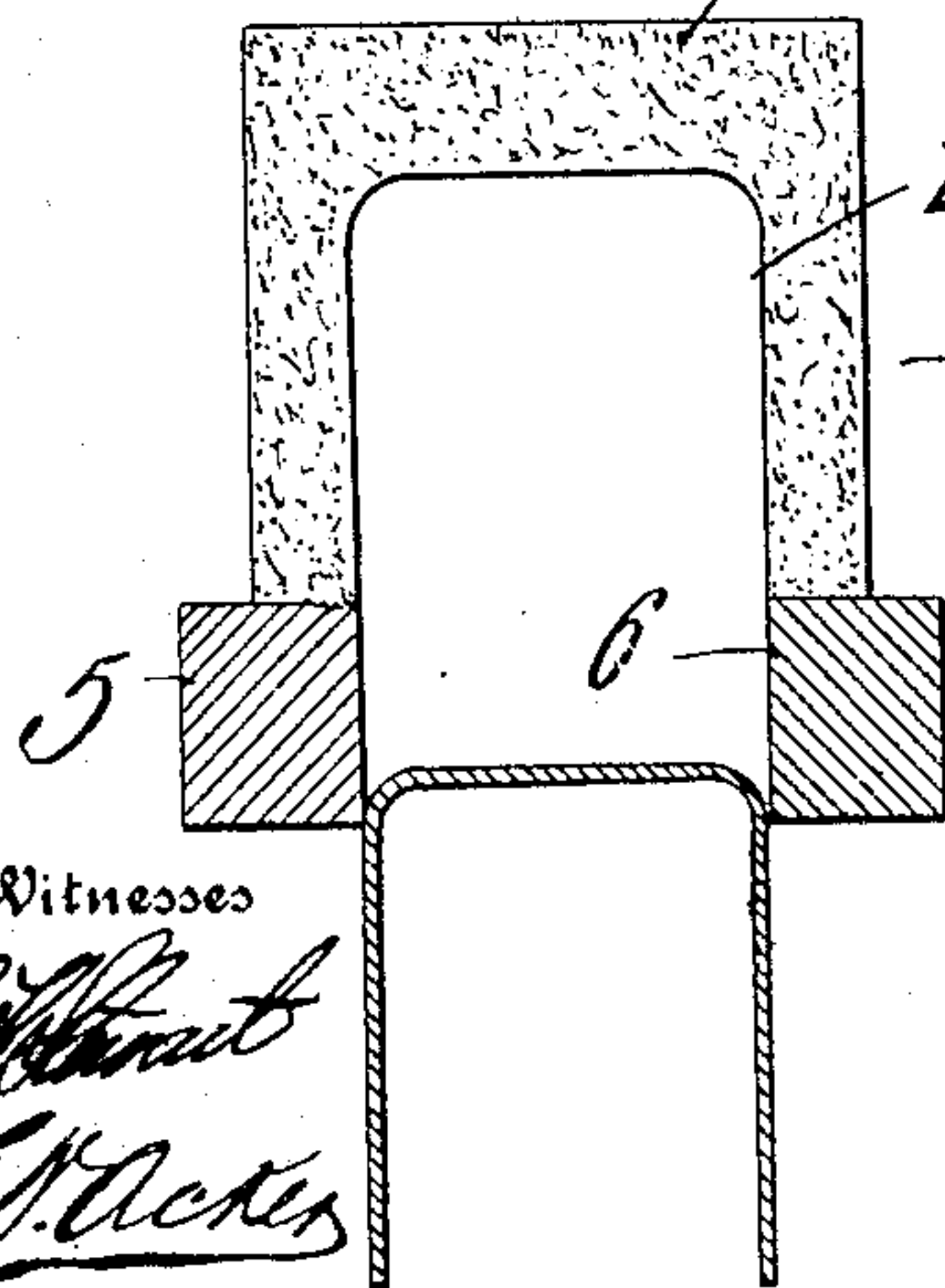


Fig. 3.

Fig. 5.



Witnesses

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BRICK AND BLOCK MOLD.

No. 887,398.

Specification of Letters Patent.

Patented May 12, 1908.

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To all whom it may concern:

Be it known that I, CHARLES W. JONES, a citizen of the United States, residing at Charlotte, in the county of Mecklenburg and State of North Carolina, have invented a new and useful Brick and Block Mold, of which the following is a specification.

This invention relates to molds for making bricks or blocks from cement, concrete or other plastic material and has for its object to provide a strong, durable and thoroughly efficient device of this character by means of which hollow building blocks or bricks may be conveniently and expeditiously manufactured.

A further object of the invention is to provide a mold including a continuous core member having a plurality of spaced slots formed therein for the reception of transverse division plates, the latter forming individual molding compartments so as to permit the formation of a plurality of bricks or blocks at one operation of the mold.

A further object is to provide one or more sectional division plates having their outer ends secured to the side walls of the mold and their inner ends interposed between the adjacent transverse plates for interlocking engagement with the core member, thus dispensing with the employment of braces and similar devices for retaining the side walls in position during the molding operation.

A further object is to provide means for locking the core member in engagement with the supporting sills of the mold, and means for withdrawing the core member to permit the removal of the molded brick or block.

A still further object of the invention is to generally improve this class of devices so as to increase their utility, durability and efficiency as well as to reduce the cost of manufacture.

Further objects and advantages will appear in the following description, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

In the accompanying drawings forming a part of this specification: Figure 1 is a perspective view partly in section of a brick or block mold constructed in accordance with my invention. Fig. 2 is a transverse sectional view of the same. Fig. 3 is a detail

perspective view of a portion of the side plate 55 or walls of the mold showing the sectional division plates secured thereto. Fig. 4 is a perspective view of one of the continuous transverse division plates. Fig. 5 is a transverse sectional view showing the side walls or plates of the mold removed and the core member withdrawn to permit the removal of the molded brick or block.

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

The improved mold forming the subject matter of the present invention includes spaced longitudinally disposed supporting sills 5 and 6 preferably angular in cross section and formed of wood or other suitable material. Mounted on the upper faces of the longitudinal sills are flat metal plates 7 and 8 which constitute the side walls of the mold and preferably extend the entire length of the sills, as shown. Interposed between the longitudinal sills 5 and 6 is a substantially U shaped core member 9 preferably stamped, cast or otherwise formed of a single piece of metal and having its upper or closed end formed with a plurality of spaced transversely disposed slots 10 for the reception of the division plates 11 and 12.

The division plates 11 and 12 are each provided with vertically disposed slots 13 spaced inwardly from the opposite vertical edges of the plates and defining an intermediate tongue 14, said plates being adapted to engage the core member with the tongues 14 extending within said core member and with the opposite vertical edges of the plates bearing against the side walls 7 and 8 thereby to form a plurality of independent molding compartments 15.

Interposed between the continuous division plates 11 and 12 of each molding compartment are sectional division plates or locking members, one section 16 of each of which is secured to the side wall 8 while the opposite section 17 is secured to the side wall 7 of the mold.

The sections 16 and 17 of the locking members are each provided with a vertically disposed slot or recess 18 similar in construction to the slots 13 in the division plates 11 and 12 and adapted to receive the adjacent side wall of the core member thereby to lock the side walls of the mold in position on the

longitudinal sills without the employment of braces, cleats and similar auxiliary fastening devices.

The lower edges of the continuous and sectional plates of the mold are seated in aligned transverse grooves 19 formed in the upper faces of the longitudinal sills 5 and 6 thereby to prevent accidental displacement of the lower ends of the plates when tamping the cement, concrete or other plastic material forming the body of the brick or block 20.

As a means for locking the hollow core member 9 in position on the mold there are provided spaced filling strips 21 which bear against the lower longitudinal edges of the core member 9 and are locked in engagement with said edges by means of a pair of longitudinal wedges 22 interposed between the filling strips, as shown.

Pivotaly mounted on the interior walls of the core member 9 at each end thereof is a cam or eccentric 23 adapted to bear against the adjacent filling strip 21 for elevating the core member and forcing the latter in engagement with the transverse division plates, said eccentrics being provided with terminal operating handles 24 by means of which the eccentrics may be forced downwardly in engagement with the filling strips.

In operation the core member is placed in position between the longitudinal sills and locked in engagement therewith by means of the wedges 22 after which the side walls 7 and 8 are placed in position on the upper edges of the sills with the walls of the vertical slots 18 engaging the adjacent walls of the core member thus locking the side walls in position on the longitudinal sills. The transverse division plates 11 and 12 are then introduced in the slots 10 and forced downwardly until the lower edges thereof engage the transverse grooves 19 after which the operating handles 24 of the eccentrics are pressed downwardly so as to force the closed end of the mold against the transverse division plates. When the mold is thus assembled the cement, concrete or other plastic material is introduced in the molding compartment 15 and thoroughly tamped so as to form a homogeneous block having a hollow face or air flue 25, as best shown in Fig. 5 of the drawing.

In order to detach the brick or block from the mold it is merely necessary to remove the wedges 21 when the filling strips 21 may be readily detached and the core member 9 withdrawn through the bottom of the mold. After the core member has been removed the side walls carrying the sectional division plates are grasped with a suitable tool and moved to elevated position thus permitting the adjacent transverse division plates 11 and 12 to be pressed together in the spaces formerly occupied by the intermediate sectional plates of the locking member and then

withdrawn vertically from the mold so as to expose the several bricks or blocks, as best shown in Fig. 5 of the drawing.

If desired the sectional division plates may be extended a short distance above the continuous division plates 11 and 12 so as to permit the same to be readily grasped with the hand when removing said plates from the mold.

While it is preferred to form the longitudinal sills with transverse seating grooves it is obvious that the upper faces of the sills may be formed with smooth unobstructed bearing surfaces. It will also be understood that other suitable means may be employed for lifting or elevating the core member in place of the cam or eccentric and if desired the lifting means may be entirely dispensed with.

The transverse division plates may be made in different lengths and spaced at different distances apart so as to permit the formation of blocks of different sizes.

From the foregoing description it is thought that the construction and operation of the device will be readily understood by those skilled in the art and further description thereof is deemed unnecessary.

Having thus described the invention what is claimed is:

1. A mold including spaced side walls, a core member interposed between the side walls and provided with spaced slots, and division plates seated in said slots and engaging the side walls, said plates forming a plurality of independent molding compartments surrounding the sides and top of the core.

2. A mold including spaced side walls, a core member interposed between the side walls and provided with spaced transverse slots, division plates seated in said slots and bearing against the side walls, and sectional plates carried by the side walls and interposed between the adjacent transverse plates.

3. A mold including longitudinally disposed sills, side walls supported by the sills, a core member interposed between the side walls and removable from the bottom of the mold, said core member being provided with spaced transverse slots, division plates seated in said slots and bearing against the side walls, and means for locking the core member in operative position.

4. A mold including spaced side walls, a core member interposed between the side walls and provided with spaced transverse slots, and division plates seated in said slots and engaging the interior and exterior walls of the core member.

5. A mold including spaced side walls, a core member interposed between the side walls, a plurality of sets of spaced division plates extending transversely of the core member and forming independent molding

compartments, and sectional division plates carried by the side walls and interposed between the transverse plates.

6. A mold including spaced side walls, a core member interposed between the side walls and provided with spaced transverse slots, division plates seated in said slots and forming independent molding compartments surrounding the sides and top of the core, and means carried by the side walls and engaging the core member for locking the side walls against lateral displacement.

7. A mold including spaced side walls, a substantially U shaped core member interposed between the side walls and having a plurality of spaced slots formed in the closed end thereof, division plates seated in said slots and forming independent molding compartments, and means carried by the side walls and engaging the core member for locking the side walls against lateral displacement.

8. A mold including spaced side walls, a U shaped core member interposed between the side walls and provided with spaced transverse slots, and division plates having depending tongues extending through the slots, said division plates forming independent molding compartments surrounding the sides and top of the core.

9. A mold including spaced side walls, a hollow core member interposed between the side walls and provided with spaced transverse slots, and division plates having vertical slots formed therein and defining intermediate tongues extending through the slots of the core member.

10. A mold including spaced side walls, a substantially U shaped core member interposed between the side walls and having its closed end formed with spaced transverse slots, a plurality of sets of division plates each having an intermediate depending tongue adapted to engage the walls of the slots in the core member, and sectional plates carried by the side walls of the mold and interposed between the adjacent sets of division plates, said sectional plates being provided with means for interlocking engagement with the core member.

11. A mold including spaced longitudinal sills having transversely aligned guiding grooves formed therein, side walls mounted on the sills, a core member interposed between the sills and spaced from the side walls, said core member being provided with a plurality of transversely disposed slots, and division plates seated in the guiding grooves and provided with intermediate tongues extending through the slots in the core member.

12. A mold including spaced longitudinal sills, side walls mounted on the sills, an inverted substantially U shaped core member interposed between the sills and provided with transverse slots, division plates seated in said slots and forming independent molding compartments, and means for locking the core member in engagement with the sills.

13. A mold including longitudinal disposed sills, side walls mounted on the sills, a core member interposed between the sills, removable plates extending transversely of the core member and forming independent molding compartments, filling blocks bearing against the adjacent longitudinal edges of the core member and wedges interposed between the filling blocks for locking the core member in engagement with the sills.

14. A mold including longitudinal sills, side walls mounted on the sills, a substantially U shaped core member interposed between the sills and having its closed end provided with spaced transverse slots, removable division plates having intermediate depending tongues adapted to engage the slots in the core member, filling strips bearing against the lower edges of the core member, wedges interposed between the filling blocks, and cams mounted on the interior walls of the core member and adapted to bear against the adjacent filling strips for elevating the core member.

15. A mold including spaced side walls, a core member interposed between the side walls, a plurality of sets of division plates extending transversely of the core member, and sectional plates carried by the side walls and interposed between the adjacent sets of division plates, said sectional plates and core member being provided with interlocking parts.

16. A mold including spaced side walls, a core member interposed between the side walls, a plurality of sets of division plates intersecting the core member and defining a series of molding compartments surrounding the top and sides of said core member, and sectional plates carried by the side walls and interposed between the adjacent sets of division plates, said sectional plates and core member being provided with interlocking parts.

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

CHARLES W. JONES.

Witnesses:

W. W. WOOD,
T. E. HEMBY.