

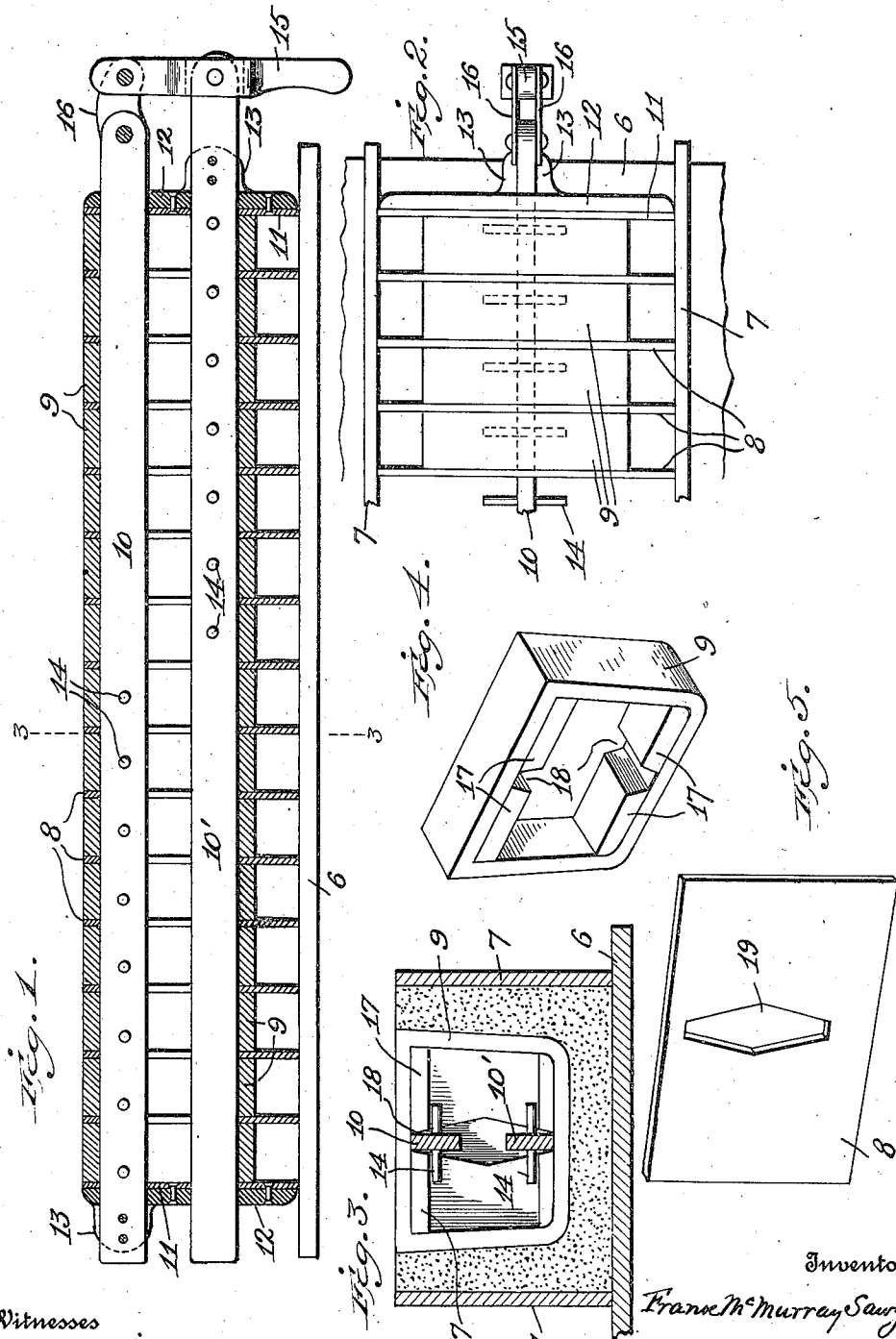
F. McM. SAWYER.

MOLD.

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1,004,693.

Patented Oct. 3, 1911.



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FRANK McMURRAY SAWYER, OF LOS ANGELES, CALIFORNIA.

MOLD.

1,004,693.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANK McM. SAWYER, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Molds, of which the following is a specification.

This invention relates to molds wherein a plurality of bricks or tiles are molded simultaneously and has for its object to provide an improved construction of the same, whereby a series of bricks or tiles may be formed in a mold, and when so formed and set may be separated from each other, whereby the ready removal of the separating plates and cores may be accomplished.

A further object is to arrange the means for separating the bricks or tiles in such manner, whereby they are separated progressively from each end at the same time.

In the accompanying drawing: Figure 1 is a central longitudinal sectional view embodying my improved construction, assembled ready to be filled. Fig. 2 a plan view of one end of said mold. Fig. 3 is a transverse sectional view taken on the line 3-3 of Fig. 1, showing the mold filled. Fig. 4 is a detail perspective view of one of the cores. Fig. 5 is a similar view of one of the separating plates.

In this type of mold the bricks or tiles are formed in rows upon a platen or base 6, and said rows are divided from each other by side-boards 7.

The improvement comprises a series of separating plates 8, and a series of cores 9, preferably separate from said plates, threaded upon a pair of longitudinal bars 10, arranged in vertical alinement and held thereon by end plates 11 which are provided with cast plates 12 riveted thereto. Each cast plate is provided with ears 13, one pair of ears for each plate, between which are secured one end of each of the bars 10 and 10'. Said bars 10 and 10' are provided with a plurality of pins 14, which project at each side thereof, extend from one end to approximately one-half their length, and are spaced apart a slightly greater distance than the width of the cores or space between the separating plates.

These bars 10 and 10' are adapted to be shifted longitudinally in opposite directions, and to accomplish this simultaneously, the adjacent ends of said bars at one end are pivotally connected to an operating lever 15 formed with a handle at its lower end. The upper end of this lever 15 is pivotally connected to the end of the upper bar 10, by links 16, for the purpose hereinafter specified, and the lower bar 10' is extended and pivoted directly to said handle.

To guide the longitudinally shifting bars and to position the cores thereon, said cores are provided with guide blocks 17 which form guiding slots 18 on the top and bottom sides thereof, the faces of said blocks also serving as guiding members for the pins 14.

The separating plates are formed with central apertures 19 which serve to position said plates, said apertures having diverging sides, as also the slots 18 in the cores, to permit a slight twisting of the bars 10 and 10', should it be necessary in positioning the parts.

In operation, the molds are assembled upon the platen, side by side and divided by the side-boards 7, and as they are positioned the operating handle 15 is drawn down to the position shown in Fig. 1. The movement of the handle downward, draws the bar 10 and the end plate at the left, which is secured thereto, to the right, and at the same time pushes the bar 10' and its end plate to the left, thereby forcing all of the separating plates and cores into close relation, and the connecting links 16 at the end of the stroke of the handle assume a locking position. After the concrete has been poured into the molds, which are adapted to form bricks of the shape shown in Fig. 3, and the concrete has set, to free the bricks from the molds, the handle is operated upwardly which pushes the bar 10 and its plate to the left and draws the bar 10' and its plate to the right, and at the same time the pins 14 on the bars progressively engage the plates and disengage them from the molded article.

It will be observed that the operation of closing and opening the parts of the mold, is accomplished simultaneously at both ends in opposite directions, and as the spacing

of the pins 14 are wider than the width of the bricks, said bricks are moved a slightly greater distance apart than when they are formed, thereby allowing of the withdrawal of the molds. The advantages of operating the molds from both ends simultaneously is, that in separating especially it is not necessary to slide the bricks a great distance over the platen, also allows of the use of a greater number of molds, furthermore, the bricks are separated easier, and does not require much force nor movement of the handle.

Having thus described the invention, what I claim and desire to secure by Letters Patent, is:—

1. A mold comprising a series of separating plates forming partitions of a plural mold and operatively spaced an equal distance from each other, and means, upon which said plates are slidably mounted, for moving said plates in opposite directions from the center of the mold, the plates upon each side of said center moving in the same direction.

2. A mold comprising a series of separating plates forming partitions of a plural mold and operatively spaced an equal distance from each other, and means, upon which said plates are slidably mounted, for moving said plates in opposite directions from the center of the mold, the plates upon each side of said center moving in the same direction, and spaced a greater distance apart than initially placed for molding.

3. A mold comprising a series of separating plates forming partitions of a plural mold and operatively spaced an equal distance from each other, and means, upon which said plates are slidably mounted, for moving said plates in opposite directions from the center of the mold and clamping them together, the plates upon each side of said center moving in the same directions.

4. A mold comprising a series of separating plates forming partitions of a plural mold and operatively spaced an equal distance from each other, and means, upon which said plates are slidably mounted, for moving said plates in opposite directions from the center of the mold and clamping them together, the plates upon each side of said center moving in the same directions, and spaced a greater distance apart than initially placed for molding.

5. A mold comprising a series of separating plates forming partitions of a plural mold and operatively spaced an equal distance from each other, means, upon which said plates are slidably mounted, for moving said plates in opposite directions from the center of the mold, the plates upon each side of said center moving in the same direction and a series of core pieces also slidably mounted on said operating means.

6. A mold, comprising a series of separating plates forming partitions of a plural mold and operatively spaced an equal distance from each other, and means, upon which said plates are slidably mounted, for operating them, said means embodying a pair of longitudinally extending bars, each provided approximately one-half their length with means for engaging said separating plates, whereby said plates are moved in opposite directions from the center of said mold, said bars adapted to be shifted in opposite directions.

7. A mold, comprising a series of separating plates forming partitions of a plural mold and operatively spaced an equal distance from each other, means, upon which said plates are slidably mounted, for operating them, said means embodying a pair of longitudinally extending bars, each provided approximately one-half their length with pins for engaging said separating plates, whereby said plates are moved in opposite directions from the center of said mold, said bars adapted to be shifted in opposite directions, and a series of core pieces also slidably mounted on said operating means.

8. A mold, comprising a series of separating plates forming partitions of a plural mold and operatively spaced an equal distance from each other, means, upon which said plates are slidably mounted, for operating them, said means embodying a pair of longitudinally extending bars, each provided approximately one-half their length with pins for engaging said separating plates, whereby said plates are moved in opposite directions from the center of said mold, said bars adapted to be shifted in opposite directions, a series of core pieces also slidably mounted on said operating means, and a lock for holding the parts in close relation.

9. A mold, comprising a series of separating plates forming partitions of a plural mold and operatively spaced an equal distance from each other, means, upon which said plates are slidably mounted, for operating them, said means embodying a pair of longitudinally extending bars, each provided approximately one-half their length with means for engaging said separating plates, whereby said plates are moved in opposite directions from the center of said mold, said bars adapted to be shifted in opposite directions, and a series of core pieces also slidably mounted on said operating means and provided with guide blocks for positioning said cores on said operating means.

10. A mold comprising a series of separating plates forming partitions of a plural mold and operatively spaced an equal distance from each other, longitudinal bars

upon which said plates are slidably mounted, means upon each of said bars for approximately one half their length for engaging said separating plates, an end plate secured to opposite ends of each longitudinal bar, and means for operating said bars in opposite directions.

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

FRANK McMURRAY SAWYER.

Witnesses:

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