

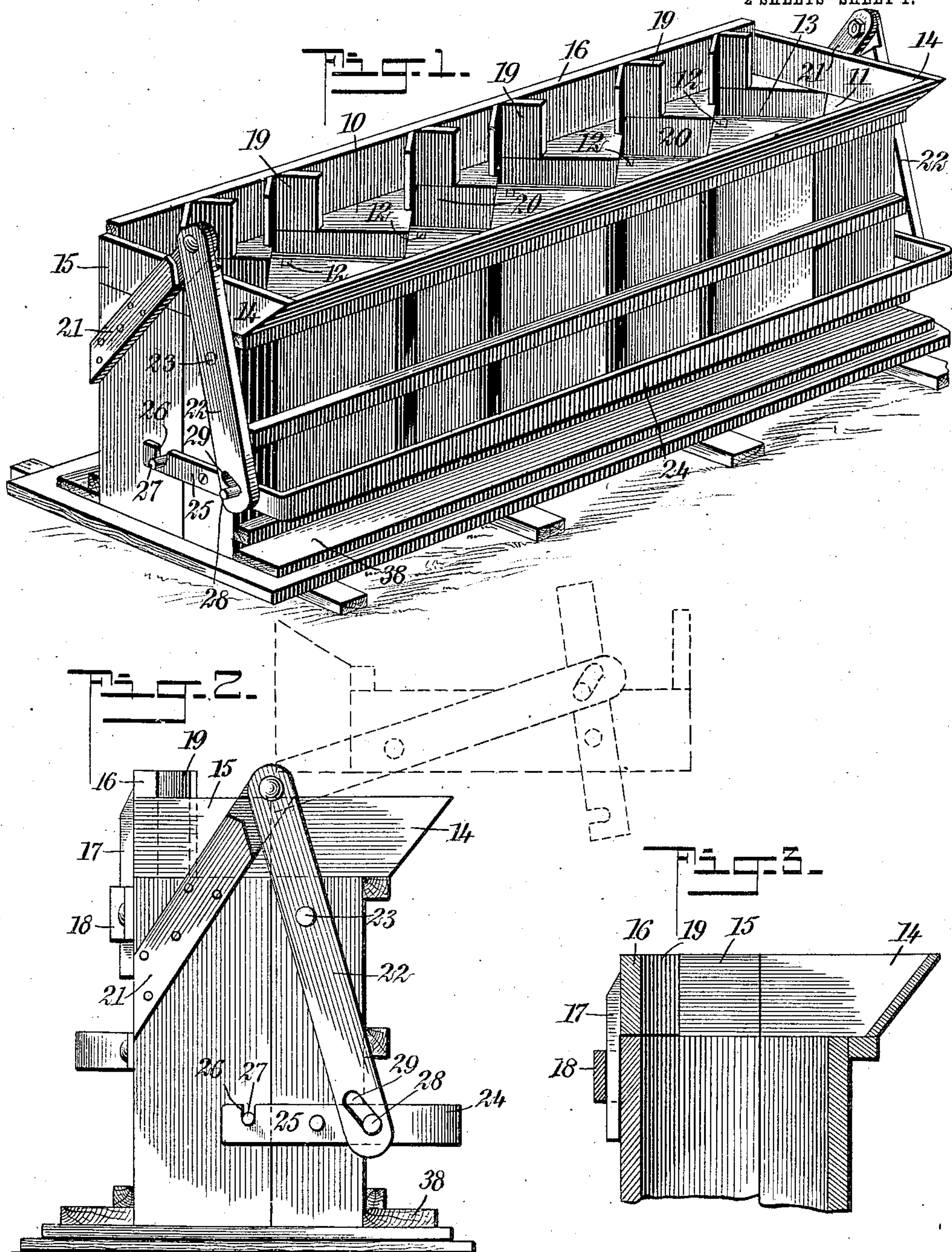
No. 844,234.

PATENTED FEB. 12, 1907.

H. BESSER.
MOLD.

APPLICATION FILED MAR. 9, 1906.

2 SHEETS—SHEET 1.



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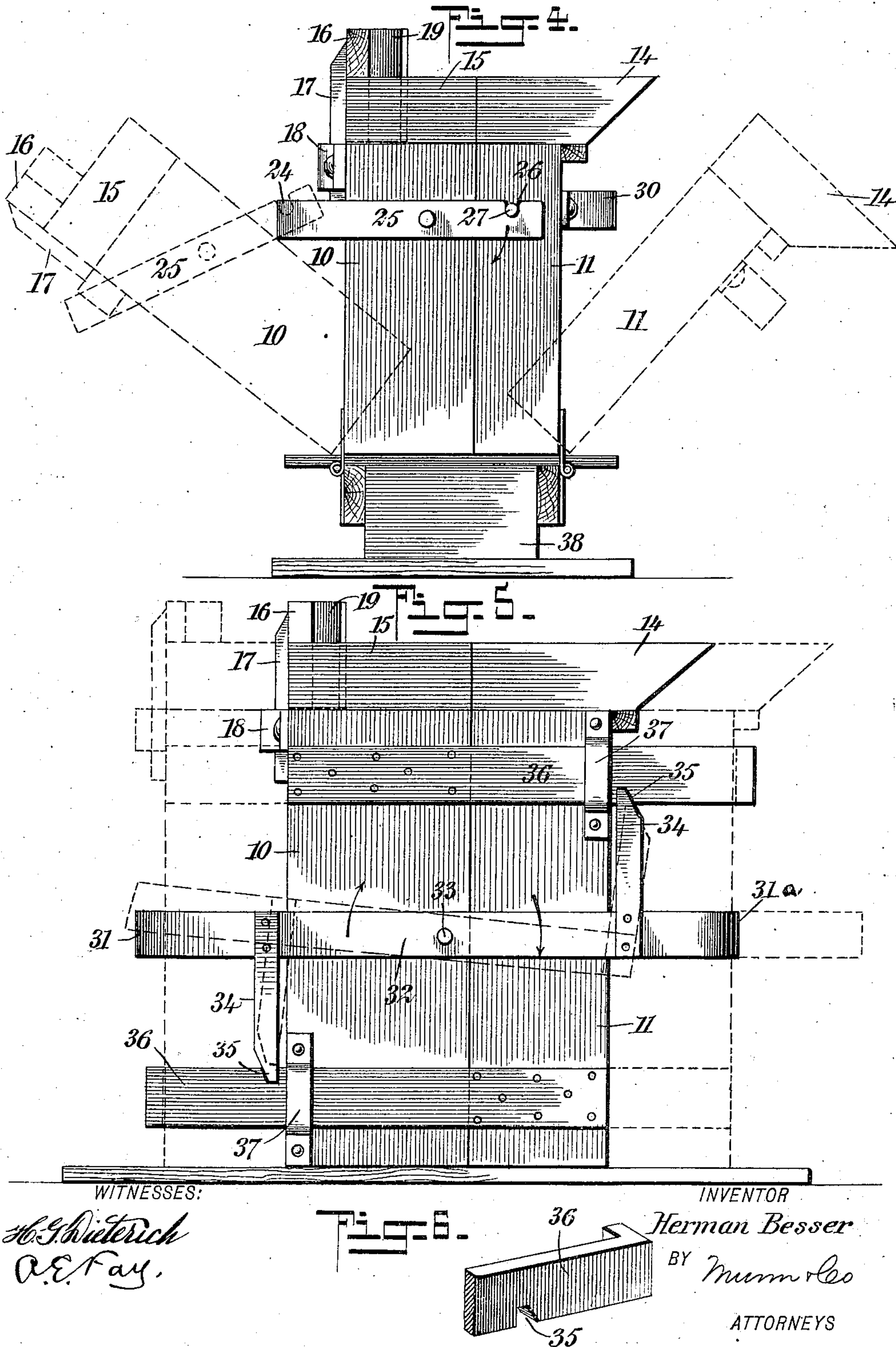
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UNITED STATES PATENT OFFICE.

HERMAN BESSER, OF ALPENA, MICHIGAN.

MOLD.

No. 844,234.

Specification of Letters Patent.

Patented Feb. 12, 1907.

Application filed March 9, 1906. Serial No. 305,082.

To all whom it may concern:

Be it known that I, HERMAN BESSER, a citizen of the United States, and a resident of Alpena, in the county of Alpena and State of Michigan, have invented a new and Improved Mold, of which the following is a full, clear, and exact description.

My invention relates to a molding device for making brick, blocks, and other articles of plastic material, the principal objects being to so arrange the several parts of the mold that they will recede from the concrete material without sticking to it or injuring the same, all parts being drawn away from the beginning of the movement thereof, also to provide means for opening, closing, and locking the mold, also to provide means for guiding the molding material into the mold and guiding a tamper-tool.

Further objects and advantages of the invention will appear below.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a mold constructed in accordance with the principle of my invention. Fig. 2 is an end view of the same. Fig. 3 is a fragmentary sectional view. Fig. 4 is an end elevation illustrating another form of the invention. Fig. 5 is an end elevation of a third form, and Fig. 6 is a perspective view of an element employed in the form shown in Fig. 5.

The mold can be constructed with mold-cavities of any desired form—for instance, square-cornered for building blocks and brick, rounded for tiles, elongated for fence-posts, and the like. I so construct it that any of these forms can be made into a two-part mold, thus doing away with half the movable elements in the ordinary four-part molds for rectangular articles. For this purpose articles of this shape are molded with their surfaces placed diagonally along a pair of mold-plates 10 and 11. The mold-plate 11 can be constructed in the form of a skeleton frame or slot and is provided with guides 12 for receiving movable mold-faces 13, which may be provided with any desired configuration in order to vary the appearance of the articles produced.

Before describing the manner in which the mold parts operate I will state that the section 11 is preferably provided with an up-

wardly-extending flange 14, serving as a hopper, and that a flange 15 of a similar character is located on the section 10. The rear of this section, however, is not provided with a flange, as a removable plate 16 takes the place of it. This plate is provided with guides 17, entering slots in brackets 18 on the section 10. On the front of the plate 16 are projections 19, which extend to mold-cavities 20 of the section 10 and register with them. These projections will of course be made in varied forms to suit the requirements, preferably being so formed as to register with the corner of each mold-cavity. The object of employing these projections is to provide means for guiding a tamper-tool, which is ordinarily used in molds of this character. It will be readily observed that on account of this construction the difficulty of filling the tops of the molds is avoided. These guides for tampers constitute a part of the hopper, and when the molds are full the plate 16 is removed and drawn across the top of the mold to level off the molding material. The mold being in two sections, it will be obvious that the separation of the mold parts is a simple matter. I have shown three ways in which it can be accomplished within the scope of my invention. In Figs. 1 and 2 the section 10, at each end thereof, is provided with an arm 21, to which is hinged a lever 22. This lever is also pivotally connected, by means of a stud or screw 23, with the section 11 of the mold. An operating-handle 24 is provided with a lever 25 at each end of the mold. These levers each having a notch 26 for receiving a pin 27 on the section 10 are oppositely and pivotally mounted on the section 11. In addition to locking and unlocking the mold the levers are each provided with a pin 28, engaging in a slot 29 in a respective lever 22. This construction provides for automatically opening the wall 11 a slight distance when the handle 24 is moved to unlock the walls from each other. The section 11 is then swung upwardly by the continued motion of the handle 24, as is indicated in dotted lines in Fig. 2. In Fig. 4 I have shown the handle 24 as being located near the top of the device and as being mounted on the other section. The section 11 in this case is provided with a stationary handle 30, and the two parts of the mold are swung outwardly from the base on hinges, as is indicated in dotted lines. In the form shown in Fig. 5 the two mold parts are slid-

ably mounted on the base. Levers 32 are pivoted on one of the mold-sections by means of a stud or the like 33 and are provided with latches 34, which are adapted to engage notches 35, formed in the bars 36. These bars 36 are fixed to one of the mold-sections and slide through ways 37, secured to the opposite mold-section. A handle 31 is mounted upon the levers 32, and a handle 31^a is fixed to the mold-section 11. The operation of this form of the invention is clearly indicated by the dotted lines in Fig. 5, which show the sections separated from each other, the levers 32 tilted so as to release the latches 34 from engagement with the notches in the bars 36, the handle 31 extending in line with the lever 32 as tilted, and the handle 31^a extending horizontally from the section 11.

It will of course be understood that any number of bricks or blocks can be molded at a time on end in machines constructed in this manner and that it is a mere matter of changing the shape of the interior of the mold to produce articles of other forms. The mold can also be used for molding articles on the side—as, for instance, fence-posts and the like—and it is not, in fact, limited to the molding of any particular shapes whatever. It will be seen that in all the forms illustrated the parts are most simply manipulated, usually with but one motion of the handle or handles, and that when the mold is set down on the pallet it will automatically close and lock. The molded articles can be made directly on smooth ground or on a pallet, if desired. Bases 38 (shown in the drawings) are intended to be made heavy enough to prevent the molds from being top-heavy. The hopper and tamper-guide are features which are of considerable practical importance. It will of course be seen that the machine can be used for making hollow articles by using the necessary cores and the like. Having thus described my invention, I claim—

1. In a mold, the combination of a pair of mold-sections, one of said sections being pivotally mounted, a lever for locking said sections together, and means connected with said lever for automatically moving one of the sections when the lever is operated to unlock them from each other.

2. In a mold, the combination of two mold-sections a lever pivotally connected with

both of said sections, said lever having a slot, and a locking-lever having a pin for engaging said slot.

3. In a mold, the combination of two mold-sections, a lever pivotally connected with both of said sections, said lever having a slot, and a locking-lever having a pin for engaging said slot, said slot being located at an angle with respect to a line drawn between the pin and the point at which the lever is pivotally connected with the opposite section.

4. In a mold, the combination of two mold-sections, a lever pivotally connected with both of said sections, said lever having a slot, and a locking-lever having a pin for engaging said slot, each of said sections having mounted thereon a flange constituting a hopper, and a removable plate having tamper-guides thereon.

5. A mold having a flange surrounding certain sides of its upper surface, a removable plate on another side of the upper surface, said flange and plate constituting a hopper, and tamper-guides connected with said movable plate.

6. A mold provided with a removable plate constituting a part of a hopper, said plate having projections constituting tamper-guides.

7. A mold having mold-cavities, and tamper-guides mounted on its upper surface, one of said guides registering with each of the mold-cavities in the mold.

8. A mold comprising two sections, each section having a triangular mold-cavity therein, which sections register with each other along a line diagonally placed with respect to the articles to be molded, a pair of levers pivotally mounted on the opposite ends of one section, each lever having a notch, and a pin mounted on each end of the other section and adapted to engage said notch, said notch being located in the opposite side of the lever, and the levers being connected together by a handle located farther from the pivot of the levers than said notch, whereby the handle will keep the mold locked by the force of gravity.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HERMAN BESSER.

Witnesses:

JOHN R. McHARG,
S. A. DAVISON.