No. 810,494. PATENTED JAN. 23, 1906.

J. C. MILLER.

BLOCK MOLD.

APPLICATION FILED JULY 20, 1905.

2 SHEETS—SHEET 1.

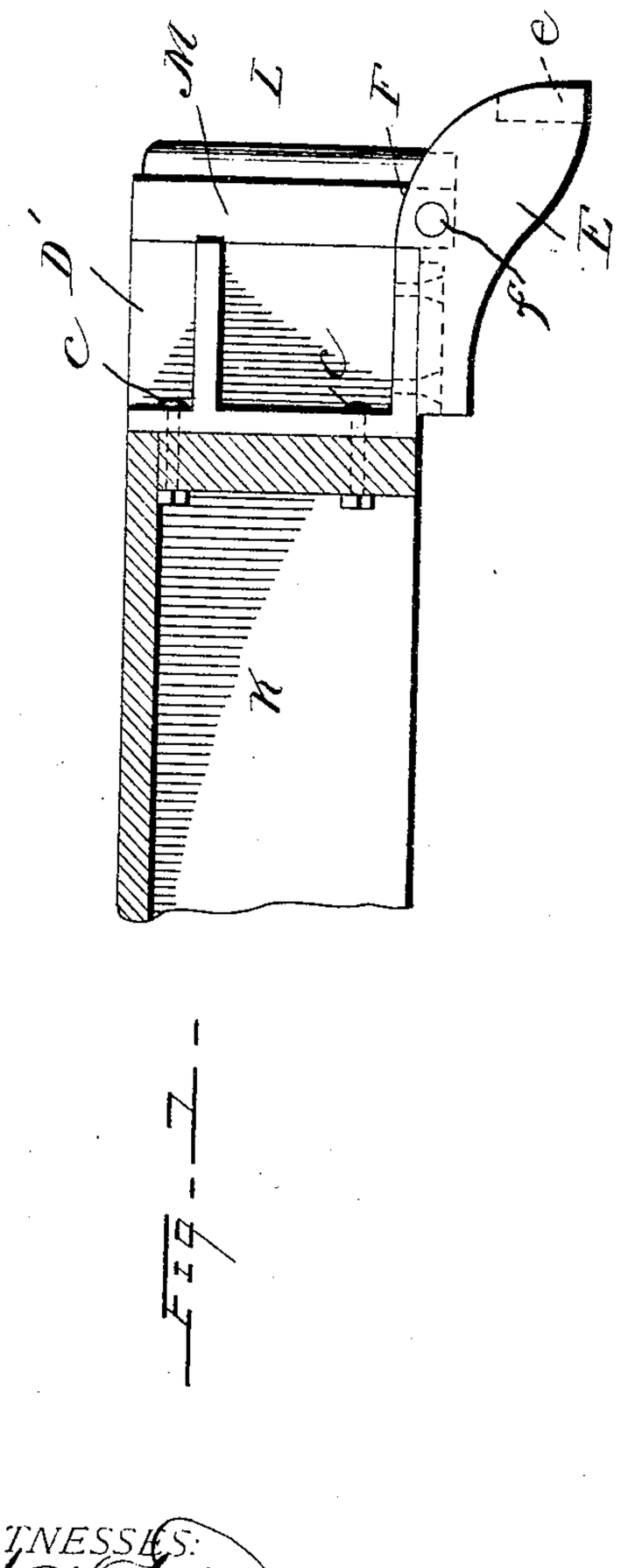

FIG. 2.

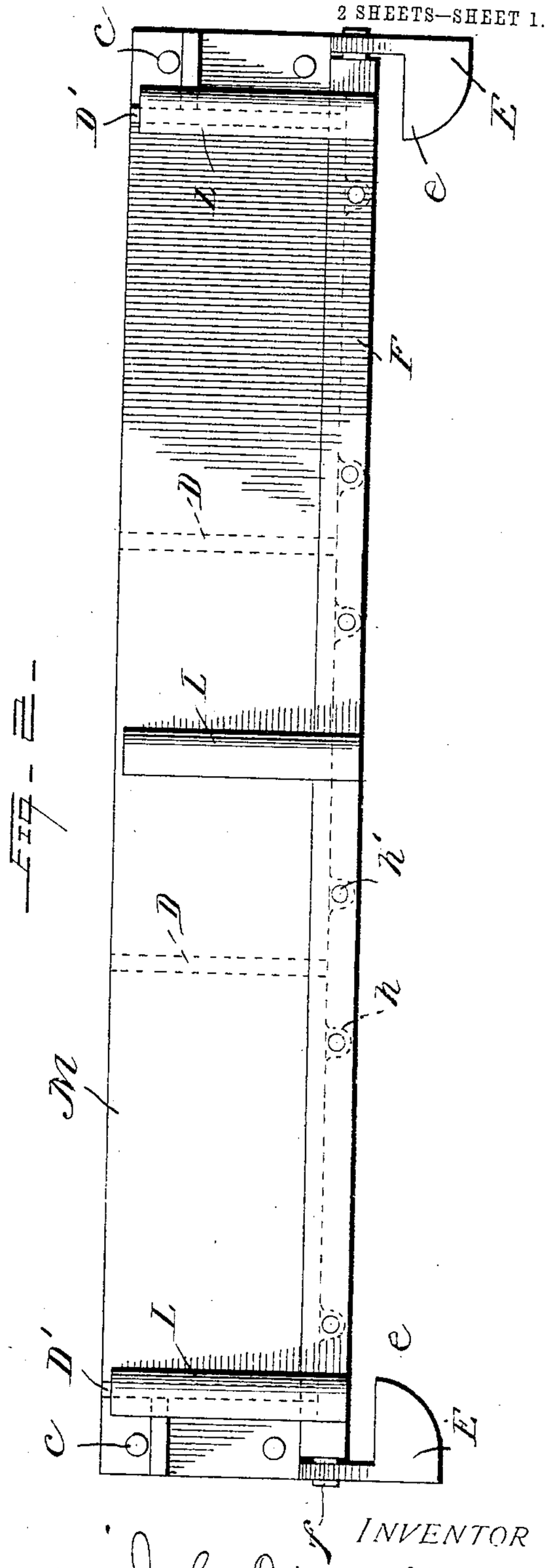

FIG. 1.

FIG. 3.

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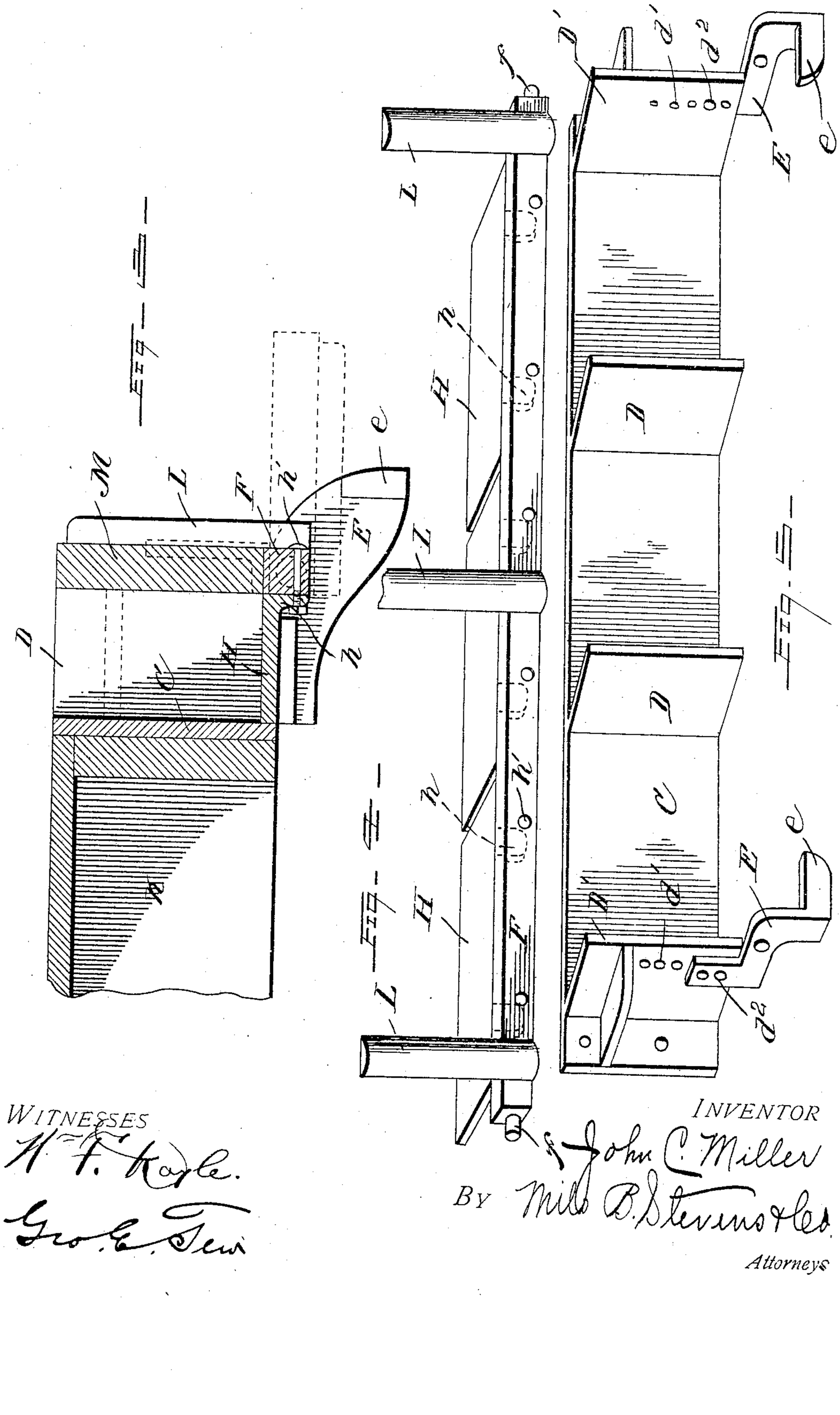

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BLOCK-MOLD.

No. 810,494. Specification of Letters Patent. Patented Jan. 23, 1906.

Application filed July 20, 1905. Serial No. 270,503.

To all whom it may concern:

Be it known that I, JOHN C. MILLER, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented new and useful Improvements in Block-Molds, of which the following is a specification.

This invention is a simple and efficient mold or molding-machine for making plastic blocks, especially building-blocks, and comprising a mold having a tilting side and bottom, which may be opened or closed to perform the molding operations, as more fully described hereinafter.

The device is illustrated in the accompanying drawings.

Figure 1 is an end view of the mold shown bolted to the work-bench, which is shown in section. Fig. 2 is a front view of the mold closed ready to receive the material. Fig. 3 is an enlarged sectional view showing the mold closed in full lines and open in dotted lines. Fig. 4 is a detail in perspective, showing the turning bar which carries the tilting bottom and side. Fig. 5 is a detail in perspective, showing the back and division plates of the mold and the lugs which support the turning bar and also showing a modification in the means for attaching the lugs to the back plate, whereby the lugs may be adjusted to make blocks of various sizes.

In the use of the device a number of blocks are preferably molded at the same time, although the machine may be made to mold one or a greater number of blocks, as desired. The blocks are molded face down, and then the side and bottom are tilted to withdraw the blocks from the mold and deposit the same upon the pallet-board, which forms the side of the mold and upon which they can be removed and a new pallet substituted for the next operation.

Referring specifically to the drawings, C indicates the back plate of the mold. This has projecting therefrom two end plates D′ and a desired number of division-plates D, which may be varied according to the number of blocks to be molded. The back plate is bolted, as at *c*, to the front side of the bench or table K and preferably with the upper edge of the plate flush with the top of the table, so that material upon the bench may be swept off into the mold and worked smooth and even therein.

At each end of the back plate is an arm E, having an inwardly-projecting lug *e*. This arm is dropped to bring the lug *e* in proper position to support the tilting side of the mold when it is swung out and down. The arms E may be cast integral with the back plate, as shown in Figs. 1, 2, and 3, or they may be bolted thereon, as shown in Fig. 5. In the latter construction a series of holes *d′* are made in the end plates D′, and the arms may be raised and lowered by changing the bolts d^2 to the different holes. This adjustment will raise or lower the face-plate of the mold, as will appear hereinafter.

F indicates a turning bar upon which the face and side plates are supported. This bar has trunnions *f*, which fit in bearing-holes in the arms E, so that the bar may be turned therein. The bar is located at the lower front corner of the mold and is preferably made rectangular in cross-section. It has several upwardly-projecting fingers L, which are preferably cast integral therewith. These fingers support the pallet-board M, which backs against the same and rests at its lower edge upon the top of the turning bar F.

The bottom or face plates of the mold are indicated at H and have depending lugs *h*, whereby they are bolted to the inner side of the turning bar by bolts *h′*. These face-plates may be of any desired design or configuration to form the face of the block. They may be curved and indented or otherwise shaped as necessity or fancy may dictate. Since they are detachably bolted on, one set of plates may be removed and another substituted whenever desired. They correspond in number to the number of the mold-spaces, and their ends are spaced apart so that they will work between the division-plates D, which extend into the spaces therebetween. As shown and described, the pallet-board and face-plates, which form, respectively, the side and bottom of the mold, are carried upon the turning bar F.

In operation the mold is closed by turning said parts in and up. The material may then be swept from the table into the mold and may be tamped as hard as you please, since pressure on the bottom H tends to hold the side M the tighter. After this the side is tilted open until the end fingers L strike and rest upon the lugs *e*, which brings the pallet M to a horizontal position and the face-plates H to a vertical position. The pallet is then pulled out forwardly to withdraw the blocks from any irregularities or ornamental in-

dentations in the face-plates and carried off and set by to dry. Another pallet is then put in place and the mold is ready for the next operation.

What I claim as new, and desire to secure by Letters Patent, is—

1. A mold comprising a back plate and ends, a turning bar pivotally supported at the lower front corner of the mold and having spaced fingers extending therefrom, a removable pallet supported on the bar against the fingers, and forming the front side of the mold, and a face-plate secured to the bar and swinging between the ends and forming the bottom of the mold.

2. A mold comprising a back plate and ends, arms projecting forwardly from the ends and adjustable thereon, and having inwardly-projecting lugs, and a tilting front side and bottom pivoted between the arms and arranged to swing between the ends and down and out upon the lugs.

3. A multiple mold having a fixed back side and ends, division-plates projecting from the back between the ends, arms extending at the ends, and having inwardly-projecting lugs, a turning bar pivoted between the arms at the lower front corner of the mold and having projecting arms arranged to strike the lugs, a removable pallet supported upon the said projecting arms and forming the side of the mold, and a plurality of spaced face-plates secured to the bar and forming the bottom of the mold.

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

JOHN C. MILLER.

Witnesses:

ADOLPHUS E. HEWETT,

EVA M. BLAKEMAN.