No. 854,692. PATENTED MAY 21, 1907.

W. J. FAULKNER.

MOLD FOR HOLLOW BUILDING BLOCKS.

APPLICATION FILED JULY 26, 1906.

2 SHEETS—SHEET 1.

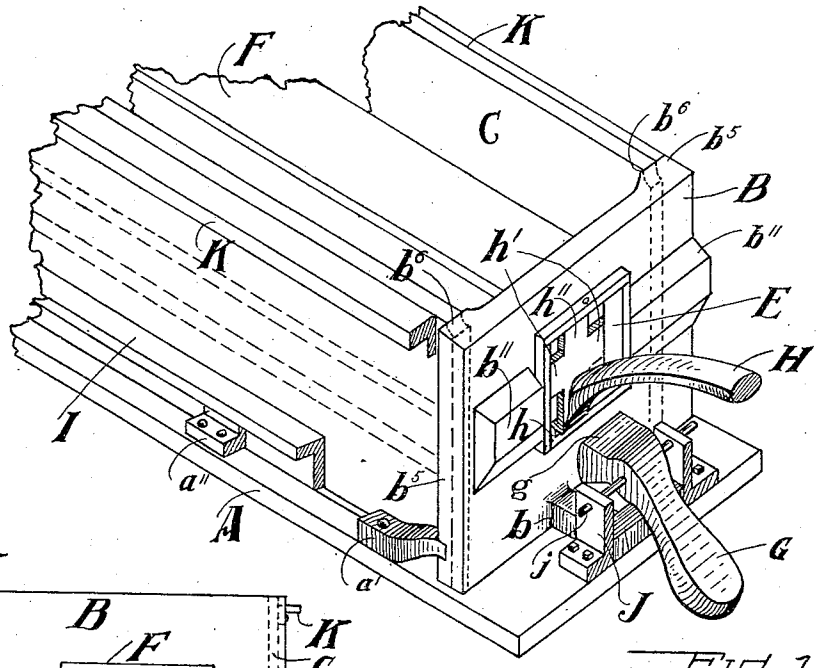

Fig. 1

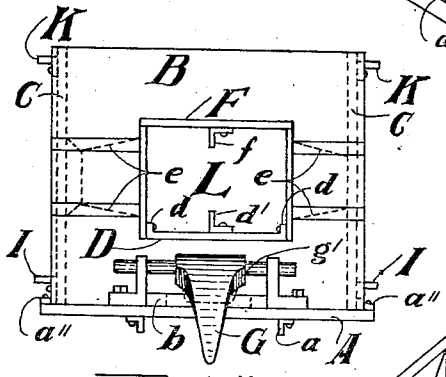

Fig. 5

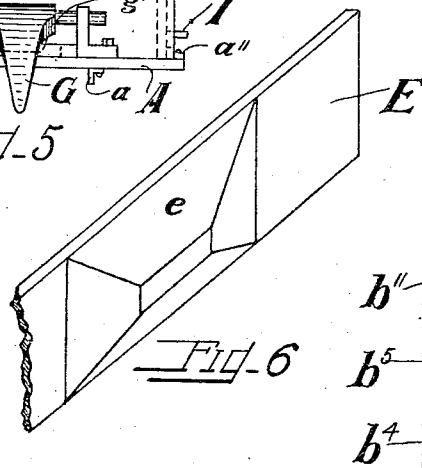

Fig. 6

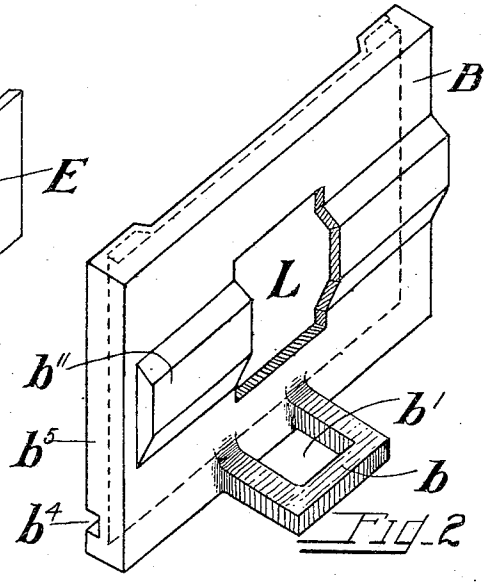

Fig. 2

Witnesses.
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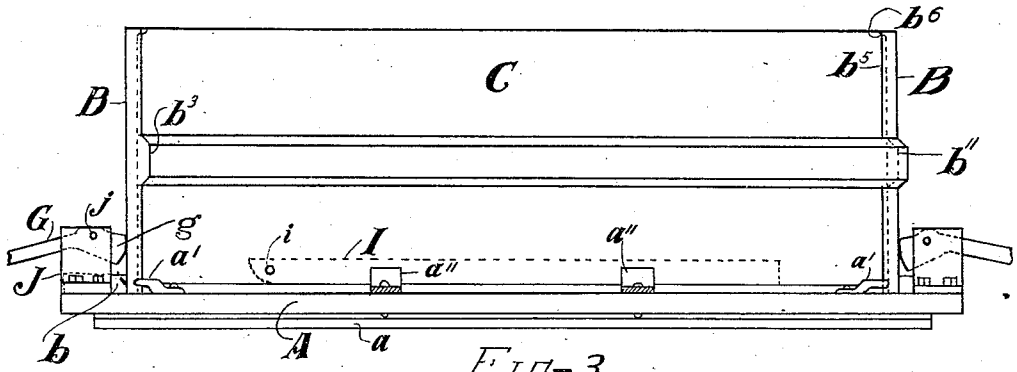

Fig-3

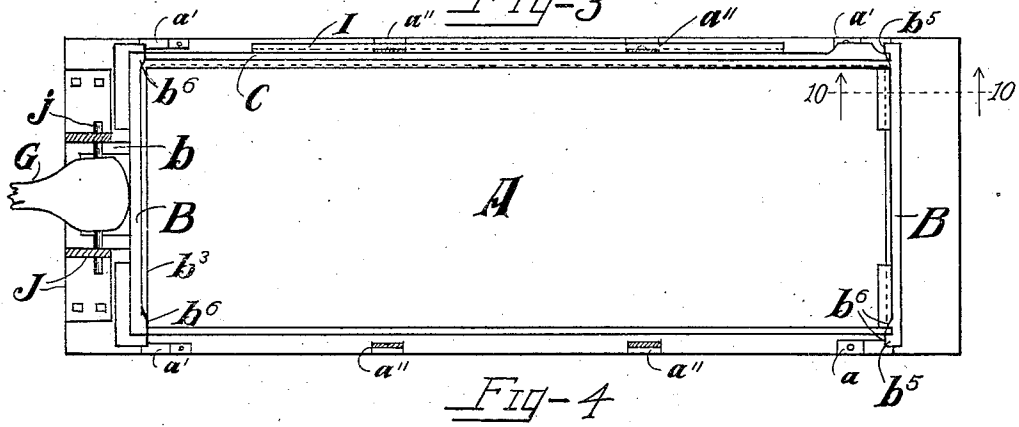

Fig-4

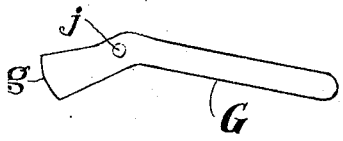

Fig-9

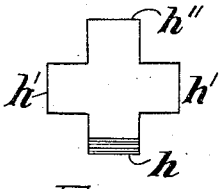

Fig-8

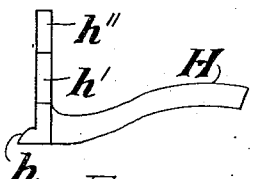

Fig-7

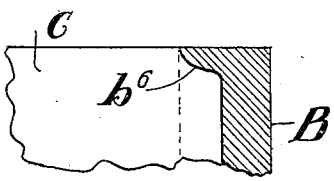

Fig-10

Witnesses.
W. C. DeLonge,
C. A. Adams.

Inventor:
William J. Faulkner,
per
Charles Turner Brown.
Attorney.

UNITED STATES PATENT OFFICE.

WILLIAM J. FAULKNER, OF CHICAGO, ILLINOIS, ASSIGNOR TO ROBERT P. FAULKNER, OF CHICAGO, ILLINOIS.

MOLD FOR HOLLOW BUILDING-BLOCKS.

No. 854,692. Specification of Letters Patent. Patented May 21, 1907.

Application filed July 26, 1906. Serial No. 327,879.

To all whom it may concern:

Be it known that I, WILLIAM J. FAULKNER, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Molds for Hollow Building-Blocks, of which the following, when taken in connection with the drawings accompanying and forming a part hereof, is a full and complete description, sufficient to enable those skilled in the art to which it pertains to understand, make, and use the same.

The primary object of this invention is to obtain a mold for the making of hollow building blocks which may be repeatedly and rapidly knocked down (when a block is contained therein), and built up (when no block is contained therein) and which when built up will be rigid and adapted to make duplicate blocks.

A further object of this invention is to obtain a mold of the character named which is simple in construction, durable, not liable to get out of order, readily taken down when a block is therein, easily cleaned and quickly set up for use again.

I have illustrated a mold embodying my invention in the drawings herein before referred to in which

Figure 1 is a perspective of one end of a mold. Fig. 2 is a perspective of the end piece of the mold removed from the remainder thereof. Fig. 3 is a side elevation of a mold with one of the sides and the inside parts thereof removed. Fig. 4 is a top plan view of the parts illustrated in Fig. 3, showing the bottom, ends and one side of the mold but with the operating lever and standard at one end removed. Fig. 5 is an elevation of one end of the mold. Fig. 6 is a perspective of one end of one of the inside parts or pieces of the mold, forming elements in the collapsible core of the mold. Duplicates of this part are placed in each mold. Fig. 7 is a side elevation of a combined lever and handle, duplicates whereof are used, one at each end of the mold, to hold the parts or pieces of the collapsible core in place when a block is being made. Fig. 8 is a front elevation of the combined lever and handle illustrated in Fig. 7. Fig. 9 is a side elevation of a combined lever and handle controlling the position of the end of the mold, and Fig. 10 is a detail of a lip at the upper corners of the ends of the mold.

A reference letter applied to designate a given part is used to indicate such part throughout the several figures of the drawings wherever the same appears.

The parts of this mold comprise bottom A, ends B, B, sides C, C, the inside parts D, E, E, and F forming a collapsible core, and latches or locking levers G, G, H, H, and I, I, with the several movable or strengthening parts and connections hereinafter specifically referred to and described.

The bottom A is provided with the stiffening angle iron a secured to the under side thereof and with the lugs or projections a', a'', secured to the upper side thereof adjacent to the side edges. The ends B, B, are respectively movable toward and from each other on the bottom A. In their retracted position they are not in contact with the ends of the sides C, C, and such sides can be removed to take a block from the mold. The position of the ends B, B, respectively, on the bottom A is determined by the movement of combined lever and handle G.

J, J, are standards on the bottom A and j is a rod or shaft on which the combined lever and handle G is fulcrumed. g is the end of the combined lever and handle G which comes in contact with the face of the ends B, B, of the mold to force such ends respectively forward in contact with the ends of the sides C, C, and such end g also engaging with the projection b of the ends B, B, respectively (see Figs. 2 and 3) by extending into the aperture b' with which the projection b is provided.

To prevent the ends of the sides C, C, from being forced outward by the material forming the block in the mold the ends B, B, are respectively provided with flanges b^5, b^5, (Figs. 1, 3 and 4) and to prevent the possible raising of such sides from the bottom A such sides are provided with the projecting lips b^6, and the sides C, C, are cut away on the upper corners thereof to extend under such projecting lips, as shown in Fig. 10.

The upward movement of the handle of the combined lever and handle G retracts the end B (Fig. 1) by engagement of the end g, in aperture b' with projection b, and the lowering of such handle advances such end B, by engagement of end g with the face of such end.

A ridge or rib on the end of the block cast

in this mold is obtained by the end being recessed as at b'' (Figs. 1, 2 and 3) and a groove in the opposite end of the block is obtained by projection b^3, (Fig. 3).

The mechanism by which end B is advanced and retracted is the same at both ends of the mold as the above described mechanism.

To prevent raising of the ends B, B, respectively, when the same are forced forward in the manner last above described I secure the latch a' to the bottom A and provide a recess b^4 (Fig. 2) in the ends B, B, respectively, in which such latch a' enters to engage therewith when the end is nearly advanced. The sides C, C, respectively, are provided with the strengthening angle iron rib K at the upper outside edge thereof (see Figs. 1 and 5). This rib is not shown in Fig. 4, so that lugs a' and a'' will be exposed to view with latch I. The latch I on the sides may be pivoted at one end to the sides C, C, respectively as by pivot i (Fig. 3) and when the ends B, B, are retracted as herein above described it is simply necessary to turn the latches I, I, up out of engagement with projections a'', a'', on bottom A to permit removal of the sides.

The latch I may be made of angle iron and when forced down into place between the projection a'' and such sides C, as illustrated in Figs. 1, 4 and 5 of the drawings, constitutes a strengthening rib as well as a latch, to prevent yielding or buckling of the sides.

The mold constructed as already described and without the use of part D, E, E, and F permits the making of a solid block therein from properly mixed materials and to obtain a hollow block, I provide such parts to constitute a collapsible core, and provide aperture L, in the ends B, B, respectively to permit the insertion in the mold of such parts.

Part D consists of a plate having upturned edges d, d, and the strengthening rib d' preferably of angle iron riveted thereto.

The parts E, E, are duplicates and are provided respectively with the projections e, e, which extend, respectively, outward from the face of the body part thereof a sufficient distance to come in contact with the inner faces of the sides of the mold.

The part F may be constructed of a plate, and may have a strengthening rib f secured on the under side thereof.

To assemble the several parts forming this mold for use in making a hollow block the sides C, C, are placed on the bottom A and latches I, I, are closed. The ends B, B, are advanced by the handle of the combined lever and handle G being forced downward as hereinbefore described.

Parts E, E, and plate F are then inserted with the ends thereof extending into the aperture L of the ends B, B. Parts D, E, E, and F are then forced into place and to make sure that no displacement of these parts occurs the combined lever and handle H is forced into the aperture L with projections h, h', and h'' in contact with such parts.

The part of the combined lever and handle H which is provided with projections h, h', h'', thus forms a locking block preventing the displacement by flotation of the bottom D and the turning of the sides E, E, inwardly as the material to form the building block is put into the mold.

After the material forming the block is sufficiently hardened or solidified to permit the removal of the mold therefrom the combined lever and handle is removed from both ends of the mold and the collapsible core is removed by the removal separately of parts D, E, and F constituting such collapsible core, and end latches I are then loosened and end B, B, retracted. The sides may then be removed and the building block lifted or turned from the bottom. The mold may again be set up and the operation of making a hollow building block and removing the mold therefrom repeated.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is;—

1. The combination in a mold for hollow building blocks, of a bottom, movable ends, provided respectively with flanges on the sides thereof, and with over-lapping lips on the upper edge thereof adjacent to the flanges, means to advance and retract the ends, means to hold the ends to the bottom when such ends are advanced, sides, latches on the sides, such sides held in place by the over-lapping lips and the flanges and latches, such ends respectively provided with an aperture therein, and a collapsible core consisting of a bottom, a top, and side pieces arranged to be inserted in and withdrawn from the aperture in the ends, and means to secure such bottom, top and sides of the collapsible core in place; substantially as described.

2. The combination in a mold for hollow building blocks, of a bottom, movable ends, provided respectively with flanges on the sides thereof, and provided with over-lapping lips on the upper edge thereof adjacent to the flanges, and provided with an aperture therethrough, means to advance and retract the ends, sides, means to latch the sides to the bottom, such sides held in place by the flanges on the ends, the over-lapping lips and the latches, and a collapsible core consisting of a bottom, a top and side pieces, each thereof arranged to be independently inserted in and withdrawn from the aperture in the ends, and means to secure such bottom, top and sides in place; substantially as described.

3. In a mold for hollow building blocks, a bottom, movable ends, provided respectively with flanges on the sides thereof, with over-lapping lips on the top adjacent to the

flanges, and with an aperture therethrough, and such flanges provided with recesses adjacent to the bottom of the mold, projections on such bottom arranged to engage with the recesses on the flanges when the ends are advanced to hold the ends to the bottom, means to advance and retract the ends, sides, latches pivoted on the sides and projections on the bottom with which the latches engage, such sides held in place by the latches, the flanges on the ends, and the overlapping lips, in combination with a collapsible core consisting of a bottom, a top, and side pieces arranged to be inserted in the aperture in the ends of the mold, and a combined handle and lever arranged to secure such bottom, top and sides in place; substantially as described.

4. The combination in a mold for hollow building blocks, of a bottom provided with a bead molding against which the sides and ends of the mold may abut, movable ends, provided respectively with flanges on the sides thereof and with over-lapping lips on the upper edges adjacent to the flanges, such flanges provided with recesses, and an abutment on the respective ends adjacent to the bottom of the mold, standards on the bottom, a combined handle and lever mounted in the standards to engage with the end and with the abutment thereon adjacent to the bottom to advance and retract such ends, sides, and means to latch the sides to the bottom, such sides extending under the over-lapping lips and held in place by such lips, the flanges on the ends and the latches, an abutment on the bottom arranged to engage with the recess in the flanges of the ends to hold such ends to the bottom, and such ends provided with an aperture therein, and a collapsible core consisting of a bottom, a top, and side pieces arranged respectively to be inserted in and withdrawn from the aperture in the ends, and means to secure such bottom, top and sides in place; substantially as described.

5. The combination in a mold for hollow building blocks, of a bottom provided with a bead molding against which the sides and ends of the mold may be forced to abut, movable ends provided with flanges on the sides thereof and with over-lapping lips on the upper edges adjacent to the flanges, such flanges provided with recesses near the ends thereof adjacent to the bottom of the mold, an abutment of the ends, respectively, such abutment provided with an aperture or recess therein, standards on the bottom, and a combined handle and lever mounted in the standards to engage with the face of the end adjacent thereto and to extend into the aperture or recess in the abutment on such end to engage therewith, to advance and retract such end, sides, latches pivotally attached to the sides, abutments on the bottom with which the latches are engageable, such sides extending under the over-lapping lips of and in contact with the flanges on the ends, and such ends provided with an aperture therethrough, and a collapsible core consisting of a bottom provided with upturned edges, a top, and side pieces, such bottom, top and side pieces arranged to be inserted in the aperture in the ends, and a combined lever and handle arranged to be inserted in the end of the collapsible core to constitute a locking block to secure the parts of the core in place; substantially as described.

WILLIAM J. FAULKNER.

In the presence of—
CHARLES TURNER BROWN,
CORA A. ADAMS.