

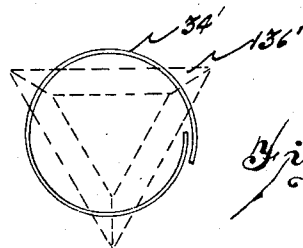
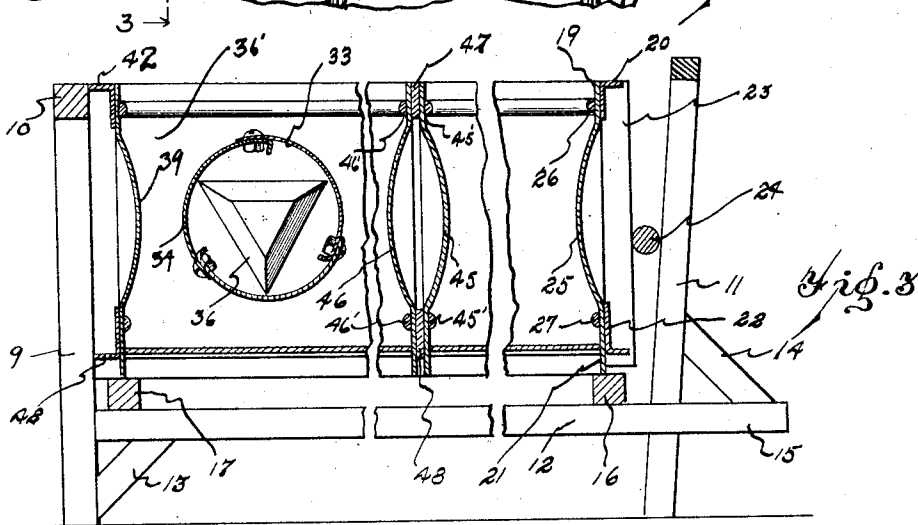
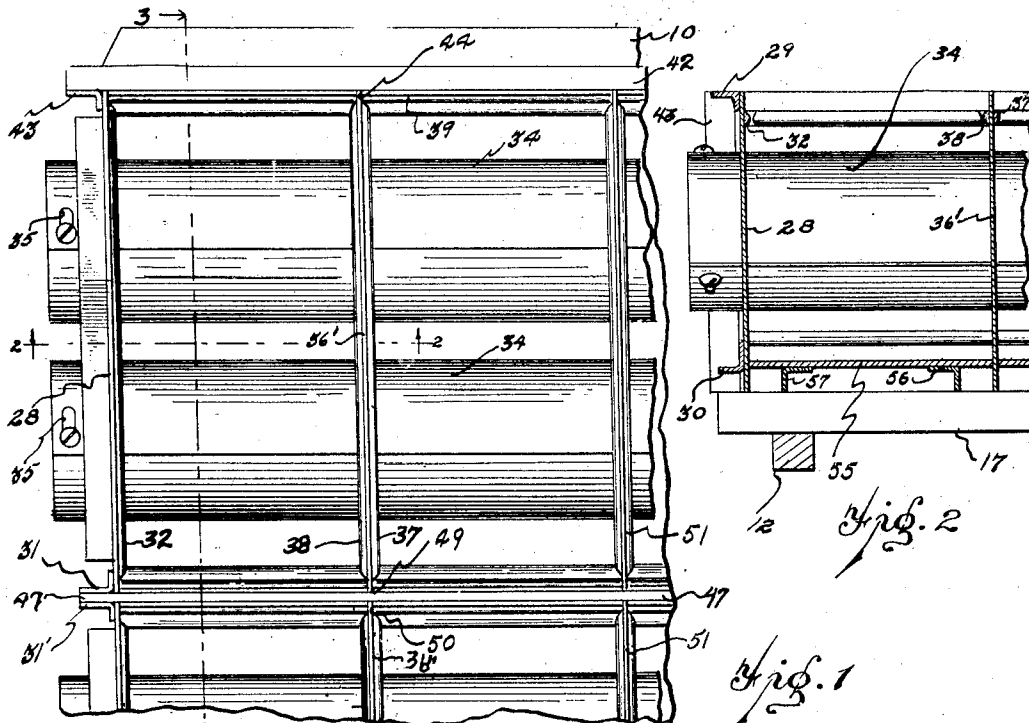
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O. P. FULLER

COMPOSITION BUILDING BLOCK MOLD

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INVENTOR.
Oliver P. Fuller

BY

Thos. Donnelly
ATTORNEY.

UNITED STATES PATENT OFFICE.

OLIVER P. FULLER, OF DETROIT, MICHIGAN.

COMPOSITION BUILDING-BLOCK MOLD.

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My invention relates to a new and useful improvement in a mold for forming composition building blocks, the molds serving to provide the form in which the composition or building material from which the block is to be formed, is poured and allowed to set, the mold serving to give to the material poured therein, the desired shape and formation. The mold shown in the invention, belongs to that class of building blocks molds in which the material is poured and allowed to set, being in this manner, distinguished from the block molds in which the material is poured therein, and then tamped or packed. The present invention relates to a sectional mold of this class, and although sectional molds have heretofore been used and are known, certain features of structure of my invention are novel and are particularly useful in application to a mold of this class.

When building blocks formed on this class of molds are used, it is quite frequently necessary for the mason, after a portion of the wall or other part of the building is constructed, to inspect the work and point up the crevices between the blocks, inasmuch as the blocks shrink away from the mortar placed between them. The present invention provides a mold for forming a building block of this class, which is provided with a bead along one edge, to form a groove in the building block, in which the mortar may engage, so that if the block shrinks slightly, after being placed in position in the building, the mortar which has entered the groove mentioned, will serve as a sealing member, so that no opening will be disclosed between the blocks and the necessity of pointing up will be eliminated.

The present invention provides a mold which is adapted to form a building block which is easily handled on account of having a curved recess on opposite sides throughout the major portion of the sides.

Another object of the invention is to provide a mold of this class adapted for the formation of a building block, having a recess along opposite sides, which, co-operating with the recess in adjacent building blocks, will provide air chambers extending throughout the thickness of the blocks.

In these sectional molds, frequently various partition members which are used, become warped and distorted out of shape, so that it is necessary that they be straightened, or replaced, before further use. The pres-

ent mold is provided with sections which are reenforced by suitable reenforcing members, angle irons being the preferred form.

Another object of the invention is the provision in a sectional mold of this class, of an end wall adapted for separating a pair of molds which are placed in co-operative relation, so as to give to the end faces of the blocks in the adjacent molds, a recessed formation.

Another object of the invention is the provision of a sectional mold of this class, which will be simple in structure, economical of manufacture, highly efficient in use, and easily assembled and dis-assembled.

Other objects will appear hereinafter.

The invention consists in the combination and arrangement of parts hereinafter claimed and described.

The invention will be best understood from a reference to the accompanying drawings, which form a part of this specification, and in which:—

Fig. 1 is a top plan view of a sectional mold embodying the invention, showing adjacent molds on two sides, in fragment.

Fig. 2 is a fragmentary sectional view taken on substantially line 2—2 of Fig. 1.

Fig. 3 is a sectional view taken on substantially line 3—3 of Fig. 1, with parts broken away.

Fig. 4 is a diagrammatic view illustrating the core forming member, and the spreader used therewith.

The invention is adapted for mounting on a suitable frame the size and structure of which may be determined by the operator using the mold. For the purpose of illustration, I have depicted a specific structure of frame, having uprights 9 connected by a cross beam 10. At the opposite side of the frame are inclined uprights 11, inclined outwardly at their upper ends, from the mold, cross beams 12, which are connected by the braces 13 to the rear uprights 9, serving to connect the uprights 11 and 9. The uprights 11 are connected to the forward end 15 of the beams 12, by means of suitable braces 14. Transversely extending cross members 16 and 17 serve to connect the oppositely positioned beams 12. The mold is made preferably from sheet metal and comprises a forwardly positioned wall, having the end 19 extending vertically and carrying a longitudinally extending reenforcing angle iron 20. The opposite end 21 of this wall is also extending vertical-

ly in alinement with the end 19. A suitable reenforcing angle iron 22 is mounted on the end 21, within the edges thereof, so that the end 21 extends considerably below the angle iron 22 and is adapted to rest upon a transversely extended cross member 16. Vertically extending angle irons 23 are mounted on this wall and project slightly outwardly from the edges of the angle irons 20 and 22, so as to form a surface for engaging the wedge roller 24, which is inserted between the inner face of the inclined uprights 11 and the edge of the angle irons 23. By forcing rollers of this class downwardly, between the uprights 11 and the edge of the angle irons 23, the wall is securely locked in position. The portion 25 of the wall between the ends 19 and 21 is bellied inwardly so as to form a convex portion of the wall to provide a recess or pocket of arcuate formation, in one face of the block which is extended within the mold enclosed at one side, with this end wall. Extending longitudinally of the end wall, at its upper and lower edges, are beads 26 and 27, which may be pressed in the material from which this wall is made. These beads serve to form a groove in the blocks when formed in the mold, the groove being positioned adjacent the outer edges of the blocks, so as to receive mortar or other joining material, which may be poured into the groove.

In the drawings shown in Fig. 1, I have shown a double set of molds with parts broken away. A single mold as arranged, is adapted for the forming of a pair of blocks and as many of these molds as desired, may be placed side to side, for the formation of a major number of blocks at the same time. The outer side wall of the mold is formed from a sheet of metal 28, having longitudinally extending angle irons 29 and 30, at its opposite edges, for reenforcing purposes, the plate 28 extending below the angle iron 30, and adapted for engaging on the cross members 17, the ends of the plate 28 engaging the inner faces of the angle irons 31 and 43. The plate 28 is also provided with a bead 32, adjacent its upper edge. These plates are provided with circular openings 33, a pair of such openings being formed in each plate. Projected through the openings 33 are arcuate cylindrical core-forming members, 34. As shown in Fig. 3, these core-forming members are preferably formed from a plurality of sections, the adjacent ends of the different sections being joined together by suitable bolts, projected through circumferentially extending slots 35. Triangular wedge-shaped spreading members 36 are adapted for insertion into the cores 34 for spreading the same into close engagement with the openings 33. After the cores are inserted in the openings, the wedges are thrust inwardly, so as to bring these cores into close engagement with these openings. After the formation of the block,

the wedge may be removed, and the cores partially collapsed to permit their removal from the block formed in the mold. A medially extending wall or partition 36' is provided on its opposite sides, adjacent the upper edge with beads 37 and 38, for the formation of grooves in the block, as already described. As clearly seen in Fig. 1, these beads terminate a slight distance inwardly from the end of the plate 36', so as to permit the end to engage in a slot formed in the end plate 39. This plate 39, is formed in the same manner, as the forwardly positioned end wall 25, the plate 39 being provided with longitudinally extending angle irons 41 and 42, which are adapted to engage against the uprights 9 and the upper angle iron 42 is adapted also to engage against the cross beam 10. Vertically extending angle irons 43 are mounted at opposite ends, for engaging, at their inner face, the outer face of the side wall 28. One end of the plate 36' engages in a slot 44, which is formed in the plate 39, this slot serving to divide the plate into two sections, and the angle irons 41 and 42 serving to bind the sections together. The beads as already described, are provided on the plate 39.

As shown in Fig. 1, a double faced partition wall is used when a pair of molds are placed side by side in co-operative relation, end to end. This double faced wall-forming plate comprises a pair of walls having the concave portion 45 and 46, which are faced toward each other. Metal spacing strips 47 and 48 are positioned between the parallel extending ends of these plates, and serve to space them apart. A slot 49 is formed on one side of the plate, to divide the plate into two sections, the spacing members 47 and 48 serving to hold these sections in co-operative position. The opposite side of the plate is also provided with a slot 50, which divides the plate 46 into two sections. The ends of the medially extending partition walls 36 project into the slots, thus formed. The upper and lower ends of these plates 45 and 46 are also provided with beads 45' and 46', these beads terminating at the end of the plate. These plates 45 and 46 do not extend to the end of the spacing members 47 and 48. Mounted upon one face of the outwardly extending ends of the spacing members 47 and 48, is the angle iron 31. Mounted upon the other face is the angle iron 31'. These angle irons are adapted to engage, at their inner faces, the outer faces of the walls 28. The wall 36 is formed in the same manner, as the wall 36'. The wall 28 is duplicated at the opposite side of the mold, the location of this wall being dependent upon the number of molds which are placed side by side. Base plates 55 are provided which are adapted to engage between the walls 36', 39, 28 and 46. These base plates are provided with a plain upper surface, and carry, at their lower sur-

faces, the angle irons 56 and 57, which rest upon the cross members 16 and 17, base plates being provided for each set of walls.

5 In the form shown in Fig. 4, I have shown the core 34', made from a single piece of material, having the ends adapted for over-lapping. The wedge spreading member 136' is of the structure already described.

10 The arrangement of the mold in sets, is believed to be apparent from the structure described, and the various features for the device, which I have set out above, are believed to be apparent from a description of the structure, as now given.

15 The walls 39 may be extended any desired distance depending upon the number of blocks to be made by the mold. The end of the wall 39 opposite to the end shown in Fig. 1 is also provided with an angle iron similarly situated and constructed as is the angle iron 43 for
20 engaging the side wall 28 which terminates the mold. Similarly the end walls 45 and 46 may be extended any desired distance and their ends opposite the ends shown in Fig. 1

are constructed as shown in Fig. 1 and the 25 plates 47 and 48 are provided with angle irons similar to the angle irons 31 and 31'.

While I have illustrated and described the preferred form of structure, I do not wish to limit myself to the precise details set forth, 30 but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters 35 Patent is:

In a sectional block mold of the class described, side walls having openings formed therein; core forming members projected through said openings transversely of said 40 walls, said core forming member being composed of a plurality of collapsible parts; and a truncated triangular pyramidal spreader for insertion into said cores for expansion of the same. 45

In testimony whereof, I have signed the foregoing specification.

OLIVER P. FULLER.