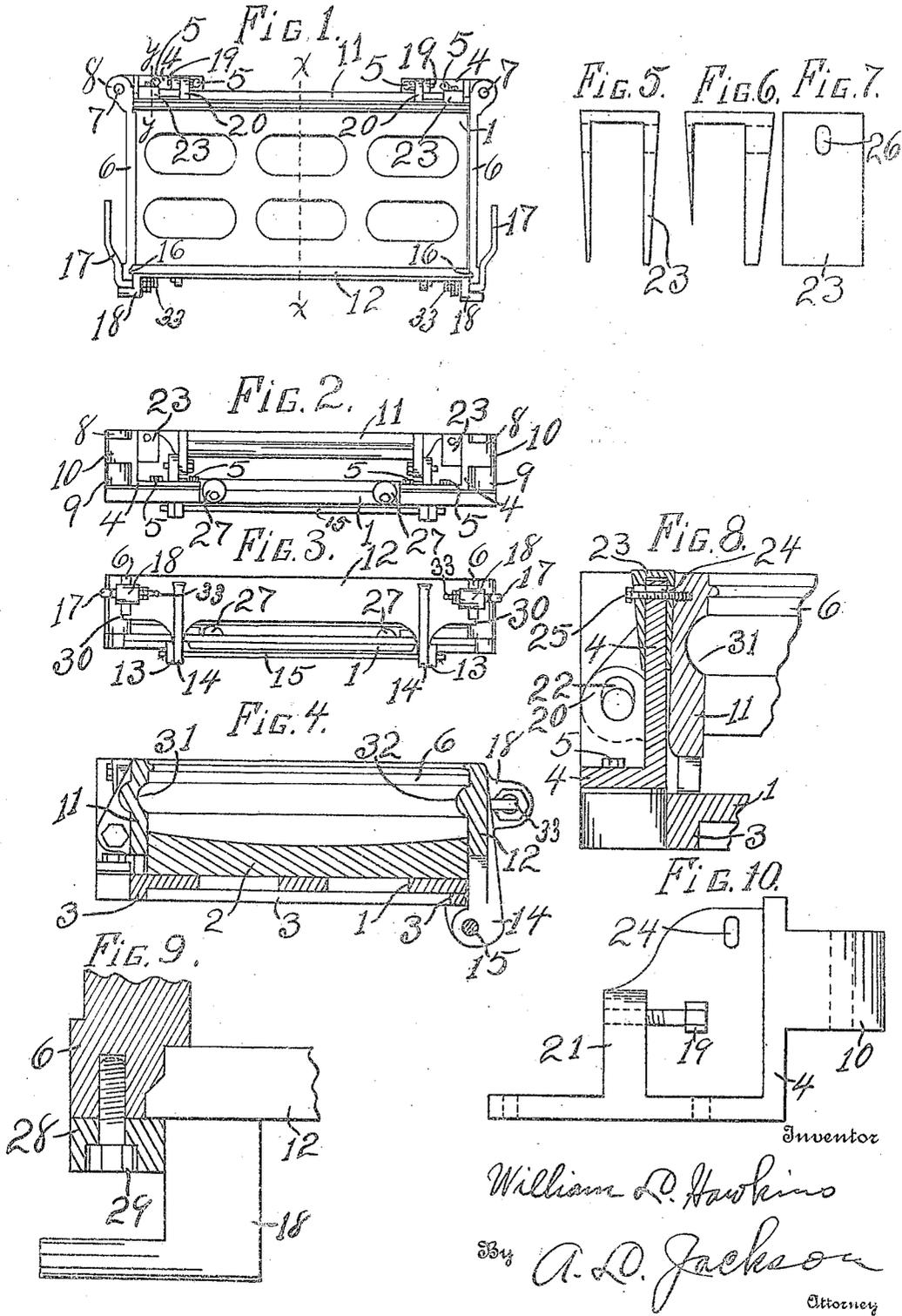


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 MOLD FOR MAKING BLOCKS OF PLASTIC MATERIAL.
 APPLICATION FILED DEC. 29, 1916.

1,236,559.

Patented Aug. 14, 1917.



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WILLIAM L. HAWKINS, OF FORT WORTH, TEXAS.

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To all whom it may concern:

Be it known that I, WILLIAM L. HAWKINS, a citizen of the United States, residing at Fort Worth, in the county of Tarrant and State of Texas, have invented certain new and useful Improvements in Molds for Making Blocks of Plastic Material, of which the following is a specification.

My invention relates to molds for forming blocks of plastic material, and the object is to provide simple molds for forming blocks for building purposes and more particularly to form blocks for constructing cylindrical silos and the like. One object is to provide molds which are adjustable for the purpose of making the desired bevel on the vertical edges of blocks so that in cylindrical structures the bevel can be made to conform to the requirements of structures having radii of different lengths. Another object is to provide molds which will be rigid and strong so that the material can be pressed firmly into the molds. Other objects and advantages will be fully explained in the following description and the invention will be more particularly pointed out in the claims.

Reference is had to the accompanying drawings which form a part of this application.

Figure 1 is a plan view of the molds with the pallet omitted. Fig. 2 is a side elevation, showing the side at the upper side of Fig. 1. Fig. 3 is a side elevation, showing the side at the lower side of Fig. 1. Fig. 4 is a vertical cross-section, taken on the line $x-x$ of Fig. 1. Fig. 5 is an edge view of one of the gages. Fig. 6 is an edge of a gage of a different size from that shown in Fig. 5. Fig. 7 is a side view of one of the gages. Fig. 8 is a broken vertical section, taken substantially on the line $y-y$ of Fig. 1. Fig. 9 is a detail view, showing the manner of adjusting the swinging end pieces. Fig. 10 is an enlarged view of the bearing casting or bracket for the adjustable side member.

Similar characters of reference are used to indicate the same parts throughout the several views.

The lower part 1 of the structure constitutes a frame on which is mounted a pallet 2. The frame 1 has a downwardly projecting flange 3. A bearing casting 4 is secured to the frame 1 by bolts 5. The end mold pieces 6 are hinged to the castings 4

by means of bolts 7 which extend through lugs 8 and 9 formed on the end pieces and through bearing lugs 10 formed on the castings 4. The end pieces 6 close against the side pieces 11 and 12. The side piece 12 is hingedly connected to the frame 1 by bearing lugs 13 which are integral with the frame 1 and by bearing lugs 14 which are integral with the side 12 and by a pivot bolt 15 which runs through all the lugs 13 and 14. The free ends of the end pieces 6 have vertical grooves therein to receive the ends 16 of the side 12. This is done in order that the side 12 and the ends 6 may be rigid when the ends 6 are clamped on the ends 16, as below explained. The side 12 is swung outwardly and downwardly to open the mold. The ends 6 are swung horizontally to open the mold. The ends 6 are clamped against the ends 16 of side 12 by pivoted levers 17 which are fulcrumed in lugs 18 formed integral with the side 12 and these lugs are L-shaped for forming sufficient braces for the levers.

The principal adjustments for varying the bevel on the ends of the molded blocks are accomplished by use of the side 11. The side 11 is attached to the brackets 4 and hingedly connected thereto by hinge bolts 19 which pass through lugs 20 on the side 11 and screw into the lugs 21 on the brackets 4. The openings 22 in the lugs 20 are elongated for movement of the bolts 19 for adjusting the side piece 11, so that the side 11 may be clamped to the lugs 21 by bolts at different adjustments. The side 11 is held at different adjustments by gages 23 which are fitted down on the brackets 4 and the variations in the adjustments are accomplished by differences in the sides of the gages 23 which are reversible, the gages having one side thicker than the other and different gages being used where greater variations in the adjustments are required. See Fig. 6 for a variation in the gages. The thin side or the thick side of the gage may be turned next to the side 11 and thus hold the side 11 closer to or farther from the brackets 4. The openings 24 in the brackets 4 for the set screws 25 are elongated and the openings 26 in the gages 23 are elongated so that the screw bolts 25 may be screwed into the side 11 at the different adjustments thereof. Cams 27 may be mounted on the frame 1 for supporting the side 11 in the different vertical adjustments.

With such adjustments the upper part of side 11 may be inclined inwardly more or less to change the bevel on the sides of blocks formed in the molds to meet the requirements of blocks for building cylindrical structures of different diameters.

The ends of the end pieces 6 may have adjustable sections 28 for the purpose of adjusting the side member 12. Bolts 29 are countersunk in the detachable sections for the purpose of adjusting the sections to make provision for adjusting the side 12. In order to prevent any sagging of the swinging ends of the end pieces 6, lugs 30 are formed on the lower parts of the ends of the side 12 to support the end pieces 6 in their normal positions.

The pallet is curved as the case may be. If the structure to be built has a large curvature or circumference, the curve will be greater on the concave side of the pallet. Two of the edges of the blocks require grooves therein and the other two edges require ribs to conform to the grooves in the adjacent block. The ribs are formed on the blocks by making grooves 31 in sides of the molding members and the grooves in the blocks are formed by ribs 32 formed on the sides of the molding members. Various changes may be made in the sizes, proportions, and structure of the various parts without departing from my invention and the several parts may be reversed without changing the manner of operating. In order to hold the levers 17 in line so that they will not strike the end pieces 6, studs 33 are inserted in side 12 to prevent the ends of the levers from moving out of place.

What I claim, is,—

1. A mold for forming blocks comprising a frame, a side member hinged thereto, levers fulcrumed on said side member, brackets attached to the other side of said frame, a side member adjustably mounted on said brackets, a pallet placed on said frame, and end members hingedly connected to said brackets and bearing against said side members, and held in place by said levers.

2. A mold for forming blocks of plastic material comprising a frame, a side member hinged to one side of said frame, brackets mounted on the other side of said frame, a side member adjustably mounted on said brackets, means cooperating with said brackets for varying the inclination of the last mentioned side member, and end members hingedly connected to said brackets and

bearing against the ends of said side members.

3. A mold for forming blocks of plastic material comprising a frame, a pallet mounted on said frame, a side member hinged to one side of said frame, brackets attached to the other side of said frame, a side member pivotally connected to said brackets, end members hingedly connected to said brackets and bearing against the ends of said side members, and clamping levers fulcrumed on the first mentioned side member for clamping said end members against the end of said side members.

4. A mold for forming blocks of plastic material comprising a frame, a pallet mounted on said frame, a side member hinged to one side of said frame, brackets mounted on the other side of said frame, a side member pivotally connected to said brackets, means for inclining the last mentioned side member consisting of reversible gages having sides of different thicknesses mounted on said brackets and bearing against said side-member connected to said brackets, and end members hingedly connected to said brackets and bearing against the ends of said side members.

5. A mold for forming blocks of plastic material comprising a frame, a pallet mounted on said frame, a side member hinged to one side of said frame, brackets mounted on the other side of said frame, a side member pivotally connected to said brackets and means cooperating with said brackets to hold said brackets at different inclines, cams for supporting said inclined side member at different adjustments, and end members hinged to said brackets and bearing against said side members.

6. A mold for forming blocks of plastic material comprising a frame, a pallet on said frame, a side member hinged to one side of said frame and having lugs projecting from the ends thereof, brackets mounted on the other side of said frame, a side member pivotally connected to said brackets, gages mounted on said brackets and cooperating with said brackets for holding the side member connected to said brackets at different inclines, and end members hinged to said brackets and bearing against the ends of said side members and supported on said lugs.

In testimony whereof, I set my hand, this 15th day of November, 1916.

WILLIAM L. HAWKINS.