

APPLICATION FILED SEPT. 18, 1912.

2 SHEETS—SHEET 1.

FIG. 1

FIG. 2

FIG. 3

WITNESSES
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1,186,348.

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CEMENT MOLD.

APPLICATION FILED SEPT. 18, 1912.

Patented June 6, 1916.

2 SHEETS—SHEET 2.

FIG. 5

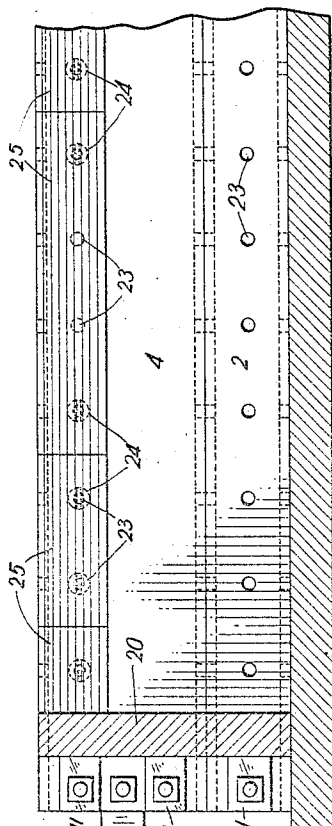
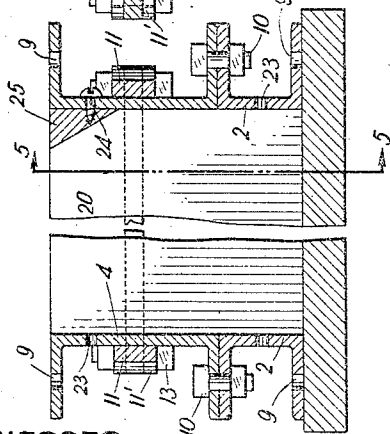


FIG. 4



WITNESSES

Ella McConnell
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FIG. 7

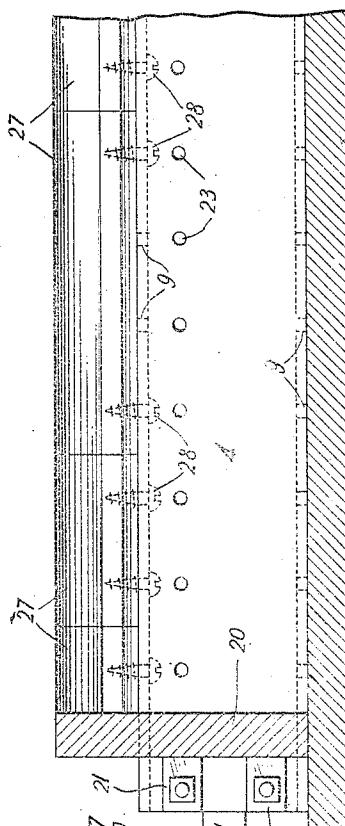
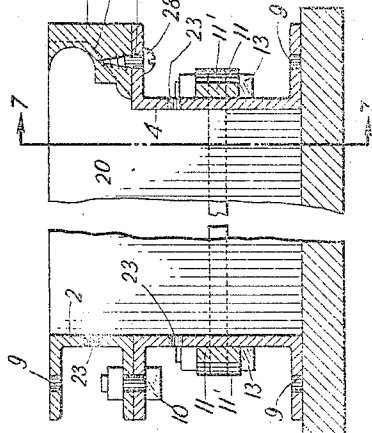


FIG. 6



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UNITED STATES PATENT OFFICE.

CHARLES STRAYER, OF JOHNSTOWN, PENNSYLVANIA.

CEMENT-MOLD.

1,186,348.

Specification of Letters Patent.

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Application filed September 18, 1912. Serial No. 721,041.

To all whom it may concern:

Be it known that I, CHARLES STRAYER, a resident of Johnstown, in the county of Cambria and State of Pennsylvania, have invented certain new and useful Improvements in Cement-Molds, of which the following is a specification.

The object of this invention is to provide a mold which is adapted for universal use in the manufacture of cement or concrete blocks of various shapes and forms.

It has been customary heretofore to provide a separate mold for each shape, making it necessary for a manufacturer of cement blocks to provide himself with a large number of individual molds. The mold of the present invention takes the place of many of the separate molds heretofore necessary, the same being formed in sections which are adapted to be variously assembled for forming molds of a diversity of sizes and shapes.

A characteristic of the invention is the provision of mold wall sections of varying depth, the several sections being preferably multiples of the smallest or shallowest section, and with the sections fitting together interchangeably they may be assembled to mold a shape of any desired depth or thickness.

The invention also includes provision for shaping an edge or corner of the block, as in the molding of window sills, shapes for steps, etc.

In the accompanying drawings, Figure 1 is a top plan of the improved mold, and Fig. 2 is a vertical longitudinal section. Fig. 3 is a vertical cross section on line 3—3 of Fig. 2. Fig. 4 is a cross section of an adaptation of the mold provided with a corner former, and Fig. 5 is an elevation of an inner side wall of the mold equipped with the former of Fig. 4, the section being on line 5—5 of Fig. 4. Figs. 6 and 7 are views similar to Figs. 4 and 5, respectively, illustrating another type of edge former.

Referring to the drawings, a plurality of wall sections is employed in the formation of each of the opposite side walls of the mold, in the adaptation here shown four sections 1, 2, 4 and 8 being provided which may, respectively, be one, two, four and eight inches deep. The sections may be advantageously formed of rolled channels

with their flanges apertured at 9 to receive bolts 10 which fasten together the superposed sections.

Sections 2, 4 and 8 are preferably multiples of the shallowest section 1, a desirable arrangement being to have section 4 double the depth of section 2, and section 8 double the depth of section 4. With the sections adapted to be connected together interchangeably, with any section either above or below any other section, it will be seen that a mold of any desired depth may be provided by utilizing one, two, or any desired combination of sections to secure the required depth. For very deep molds two or more of the deeper sections of like depth may be combined.

The several sections are provided with end extensions to which the devices connect for tying together the opposite side walls of the mold. For the wider sections, as 4 and 8, a bar 11 is secured to the outer face thereof with its ends projecting from the section extremities, one end 11' forming a hinge eye to which hinge bar 12 is secured by bolt 13, and the opposite end 14 of bar 11 is formed with an opening to receive hook 15 for adjustably securing tie chain 16. For the shallower sections, as 1 and 2, the channel flange may be extended at one end as indicated at 17 to receive the hinge bar 12, and at the opposite end the web of the channel is extended as shown at 18 to receive the tie chain and hook. Hinge bars 12 are each formed with a series of openings for bolts 13 so that the width of the mold may be varied as desired, at the opposite end of the mold such variations being taken care of by the hooks and chain as will be understood.

The end walls 20 of the mold may consist of boards or plates cut to the requisite length and width, one of the mold end walls bearing against stops 21 bolted to the inner sides of the mold sections. The opposite end wall bears against stops 22 with securing bolts 22' thereof adapted to pass through two of the evenly spaced bolt apertures 23 in the side wall sections, whereby the length of the molding cavity may be varied according to requirements of the work in hand. With the apertures 23 evenly spaced apart in inches or fractions thereof a very accurate adjustment is ob-

tained. Stops 22 are preferably of angular form with one leg longer than the other so that where the depth of a mold section permits the longer leg may be arranged to receive the end wall, as at the bottom of Fig. 2, while for the narrower section 4 the shorter leg is arranged to engage the wall with the longer leg disposed longitudinally of the mold.

10 As before noted, the wall section may be arranged with any one of the sections uppermost, and in the adaptation shown in Figs. 4 and 5 the uppermost section of one side of the mold carries a strip-like form 25 for shaping the molded block with a beveled edge or corner such as is frequently desired for window sills, etc. The form sections 25 are preferably in unit lengths or multiples of the unit, as shown in Fig. 5, so that any of the several sections may be combined to provide a form of a length corresponding to the mold cavity and without interfering with the end walls 20. Bolt apertures 23 are utilized for passing screws 25 or bolts 24 which secure form 25 and with the space between the apertures of uniform length, the unit length sections of form 25 may be combined as required, with each section securely fastened.

30 In Figs. 6 and 7, an adaptation is shown for molding the front of a stair or step block. The form 27 in this instance is also in unit sections or multiples of the unit and secured to a flange of one of the wall sections, the securing means 28 therefor extending into form 27. The configuration of the inner face of form 27 corresponds to the front upper portion of the stair or step. Form 27 corresponds in depth 40 to one of the side wall sections, or to a combination of two or more of them, so that the wall opposite form 27 may be of usual sectional form. Forms or shapes 25 and 27 are simply examples of a great variety of 45 forms that may be utilized, an infinite variety of forms being possible, as will be understood.

The sectional outfit herein proposed may be utilized for forming molds of various 50 lengths, depths and widths, and adapted for either plain or shaped surfaces, as de-

sired, with many individual molds of different sizes heretofore required.

I claim:—

1. The combination with a cement mold, 55 having side walls and end walls, one of the latter being adjustable longitudinally of the mold, of a forming device having its direction of length extending lengthwise of a wall of the mold, said device being formed 60 in sections varying in length, all of the sections longer than the shortest section being multiples of the latter, the sections adapted to be secured together interchangeably to said wall. 65

2. A cement mold having side walls and end walls, one of the latter being adjustable longitudinally of the mold, the side walls formed with series of apertures evenly spaced apart, end-wall holding devices bolt- 70 ed to the side walls and said apertures, and a sectional forming strip adapted to form a continuous face extending lengthwise of a wall, said strip having the sections fitting together interchangeably and bolted to said 75 side wall at said apertures.

3. A cement mold having a wall provided with a series of openings evenly spaced apart, a forming device having its direction of length extending lengthwise of a 80 wall of the mold, said device being formed in sections of varying length adapted to abut end to end in forming the device, and securing devices for the sections adapted to extend through said openings, said sections 85 being adapted to receive the securing devices at one or more predetermined points, said points being spaced from the ends of the section with the spacing of similar ends of the sections similar in the several sec- 90 tions, the total spacing of opposite ends of a section being equal to the distance between openings, whereby a section may be positioned at any desired point in the length of the device without affecting the continuity 95 of the device.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES STRAYER.

Witnesses:

J. A. OVERDORFF,

E. WALLACE ROGER.