

E. T. ALLEN.
MOLD FOR VAULTS.
APPLICATION FILED AUG. 1, 1910.

1,014,360.

Patented Jan. 9, 1912.

2 SHEETS—SHEET 1.

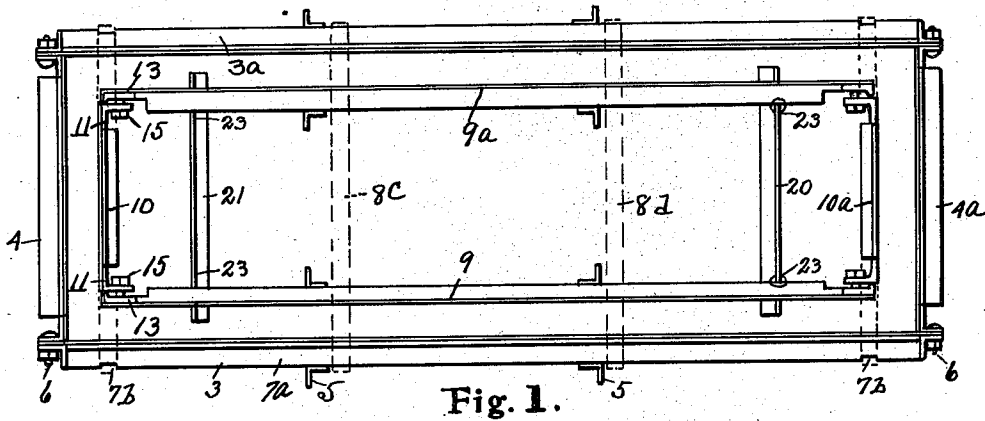


Fig. 1.

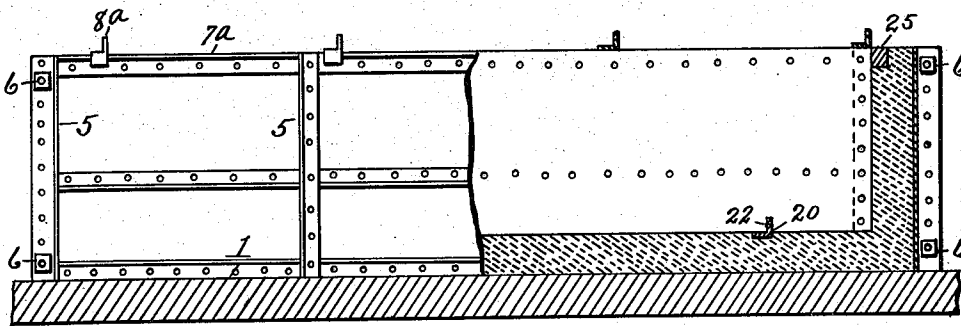


Fig. 2.

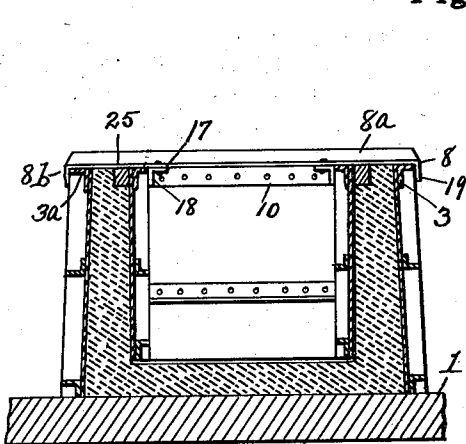


Fig. 3.

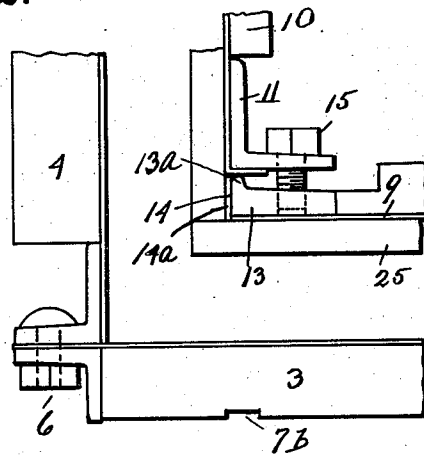


Fig. 4.

Witnesses

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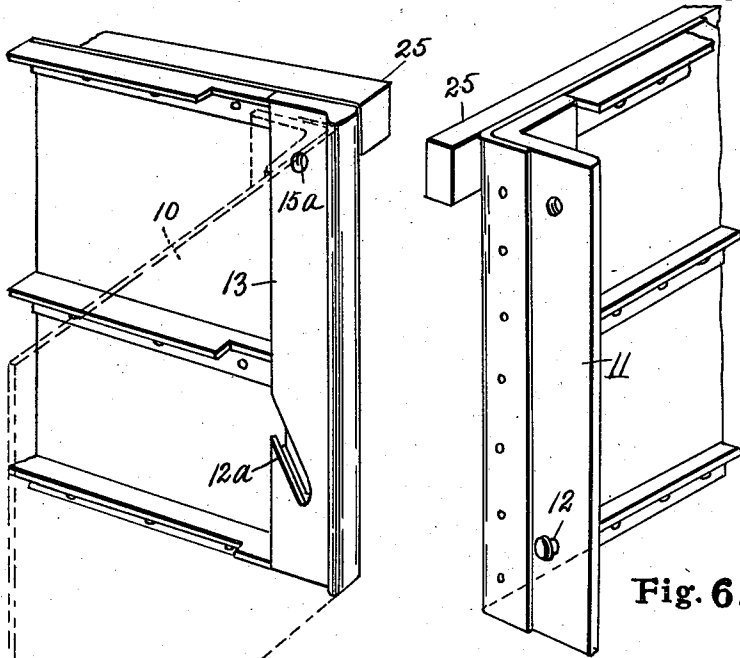


Fig. 5.

Fig. 6.

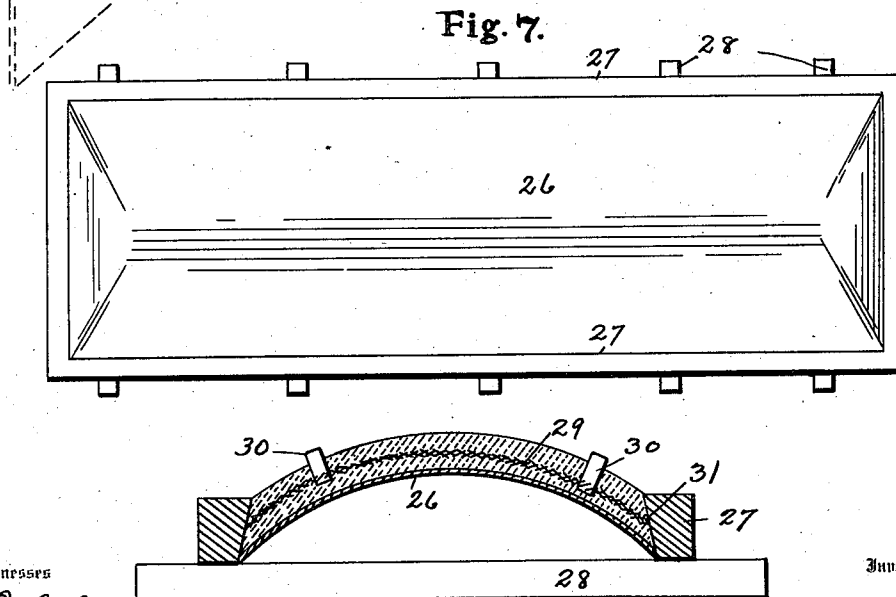


Fig. 7.

Fig. 8.

Witnesses

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UNITED STATES PATENT OFFICE.

EDWIN T. ALLEN, OF DETROIT, MICHIGAN.

MOLD FOR VAULTS.

1,014,360.

Specification of Letters Patent.

Patented Jan. 9, 1912.

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To all whom it may concern:

Be it known that I, EDWIN T. ALLEN, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Molds for Vaults, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to molds for vaults; it has for its object an improved mold adapted to be arranged for the inner and outer surfaces of a vault manufactured from cement or artificial stone material. It comprises the side and end forms for both the outside and the inside of the receptacle, the bottom surface, both the outside and the inside surfaces are made without molds other than the floor upon which the outer forms rest, and the inner surfaces are made by simply troweling or striking off the cement.

In the drawings:—Figure 1, is a plan view, Fig. 2, is a side elevation partly in section, Fig. 3, is a cross section, Fig. 4, is a plan view of a corner joint on a larger scale, Fig. 5, is a perspective showing the inner surface of a side form, Fig. 6, is a perspective of an end of an end form, Fig. 7, is a plan of a mold used to form a cover, and Fig. 8, is a cross section of a mold used to form the cover.

The mold is set up on any flat surface, as a wooden floor, shown at 1 in Fig. 2; it comprises two side pieces 3 and 3^a, two end pieces 4 and 4^a which are made from sheet metal secured to frame bars 5 of angle iron; the ends of side and end pieces are arranged to interlock and are provided with bolt holes through which holding bolts 6 are inserted. This part of the form being a rectangular bottomless box, is easily assembled and disassembled when desired.

The angle iron 3 which runs along the top edge of the side member is provided with a notch 7^b near each end in which notches engage the downturned ends 8, 8^b of a cross bar 8^a, that is secured to the end piece of the inner form. The two ends 8 and 8^b of the cross bar 8^a are properly spaced to hold the inner form in its proper position. The inner form also consists of four members, 9, 9^a, 10 and 10^a, of which the members 9 and 9^a form the sides of the mold and the members

10 and 10^a form the ends of the mold; each end member is provided at its ends with an angle iron 11 to which the sheet metal which forms the main surface of the side is riveted or otherwise secured, and on that face of the angle iron 11 which is intended to lie toward the side piece 9 or 9^a, as the case may be, is a projecting headed lug 12 with a neck between the head and the main surface of the angle iron 11 of a length sufficient to engage in a notch 12^a that is cut on an incline in the frame piece 13 of the side member 9 or 9^a. The walls of the notch 12^a are undercut to allow the head of the bolt 12 to engage in the undercut portion of the notch with the neck engaging through the notch itself.

The frame member 13 terminates with its face 14 short of the outside plane of the end member 10 leaving a narrow space 14^a; the inner face of the frame member is provided with a projecting rib 13^a, that at the extreme front edge or surface 14 of the frame member 13 projects beyond the general surface of the inner face of the frame member 13, (by inner face is meant that face that lies toward the frame member 11 of the piece 10,) so that the two pieces 10 and 13 when in engagement are held spaced throughout the most part of their adjacent faces and in contact only through a very narrow line bearing along the rib 13^a and the turned in end of the sheet metal which forms the main surface of the end member. The adjacent parts are secured together in the assembled structure at the top of the mold by a bolt 15 which engages through a suitable hole in the frame member 11 and in a suitable threaded hole in the frame member 13. The slip joint made between the bolt 12 and the notch 12^a and the screw joint made by the bolt 15 inserted in the threaded screw hole 15^a form a coupling that is easily assembled and disassembled by the loosening of a single screw bolt. The bearing along the rib 13^a allows the top edge of the end member to swing in when the mold is being disassembled until the ends become free and can be easily lifted out leaving the two side pieces free. The four joints are alike.

The inner part of the form is suspended within the outer part of the form by means of the cross beams 8^a which are provided with brackets 17 that properly space the core part of the mold from the outside part. In constructing the burial vault in this frame, two angle irons 20 and 21 are laid

across under the inner member with their ends projecting into the space between the two parts of the form; they engage in notches 22 cut into the side members of the inner form and are temporarily held in place by short pieces of wire 23 which engage through holes in the angle bars 20 and 21 and hang the bars to the frame. By their engagement with the side pieces 9 and 10 of the frame while these are under strain, due to the presence of the plastic cement along their length, they serve to reinforce the side pieces against undesired bending; though, as each vault box is made, a new set of bars 20 and 21 must be furnished, since these bars are left in place in the finished burial vault and are utilized as rests for the coffin which rests upon them and is held above the floor of the stone structure, and they are also used for the purpose of handling the stone structure by means of hooks and cables or chains, of which the hooks engage through holes occupied by the wires 23. Wooden bars 25 are secured along the upper edge of the inner member and are suitably shaped to produce in the finished structure a rabbet in which the cover engages; the cover shown in Figs. 7 and 8, is made upon a form covered on that side which forms the under side of the cover by a sheet metal surface 26 between wooden bars 27 temporarily placed and held on the base 28. The cover is preferably reinforced with woven mesh 29 in which at proper spaces are inserted metal rings or loops 30; these loops project to the outside of the finished structure and furnish holding rings by which the cover may be handled. The edges 31 of the cover are inclined to the cross axis of the cover so that when the cover is in place, there remains an open groove between the cover and the body of the burial vault which open groove is filled with cement in the final finishing of the structure after the cover has been placed thereon.

In using the mold, the parts are set up on a level surface with the outer form resting on the surfaces and the inner form hanging from the cross bars 8^a; cement is then placed along the bottom and that surface of the bottom which is within the inner form is smoothed over with a trowel, the

side walls are built up between the parts of the form all at the one operation.

What I claim is:—

1. A mold for a burial vault having in combination, outer form members secured together at the corners, inner form members of which the side members are secured to the end members by a sliding pivot joint at the bottom and a bolt joint at the top, the end pieces of said inner form members being shorter than the longitudinal distance between the side members and the side members being provided with corner bearings adapted to engage against the outer inturned corners of the end members, substantially as described.

2. In a collapsible mold, a core member composed of a pair of side members and a pair of end members, the end portions of the side members being provided with inwardly extending corner bearings which terminate relatively pointedly, said side members being slightly shorter than the internal lengthwise measurement of the plastic article whose manufacture is intended, and the terminal portions of the end members being inturned for engagement against the pointed ends of the side members, and bolts engaging through the terminals of said end members and into the adjacent portions of said side members, substantially as described.

3. In a mold for burial vaults, a corner coupling for the inner member of said mold, having in combination a slip joint connection at the bottom and a bolt connection at the top, the interlocking members being provided with bearing parts only near each upper corner, the end members being shorter than the distance across between the side members at all parts except the bearing corners of the side members, and the side members being shorter than the distance between the inner surfaces of the ends of the finished vault at all parts, substantially as described.

In testimony whereof, I sign this specification in the presence of two witnesses.

EDWIN T. ALLEN.

Witnesses:

LOTTA LEE BRAY,
CHARLES F. BURTON.