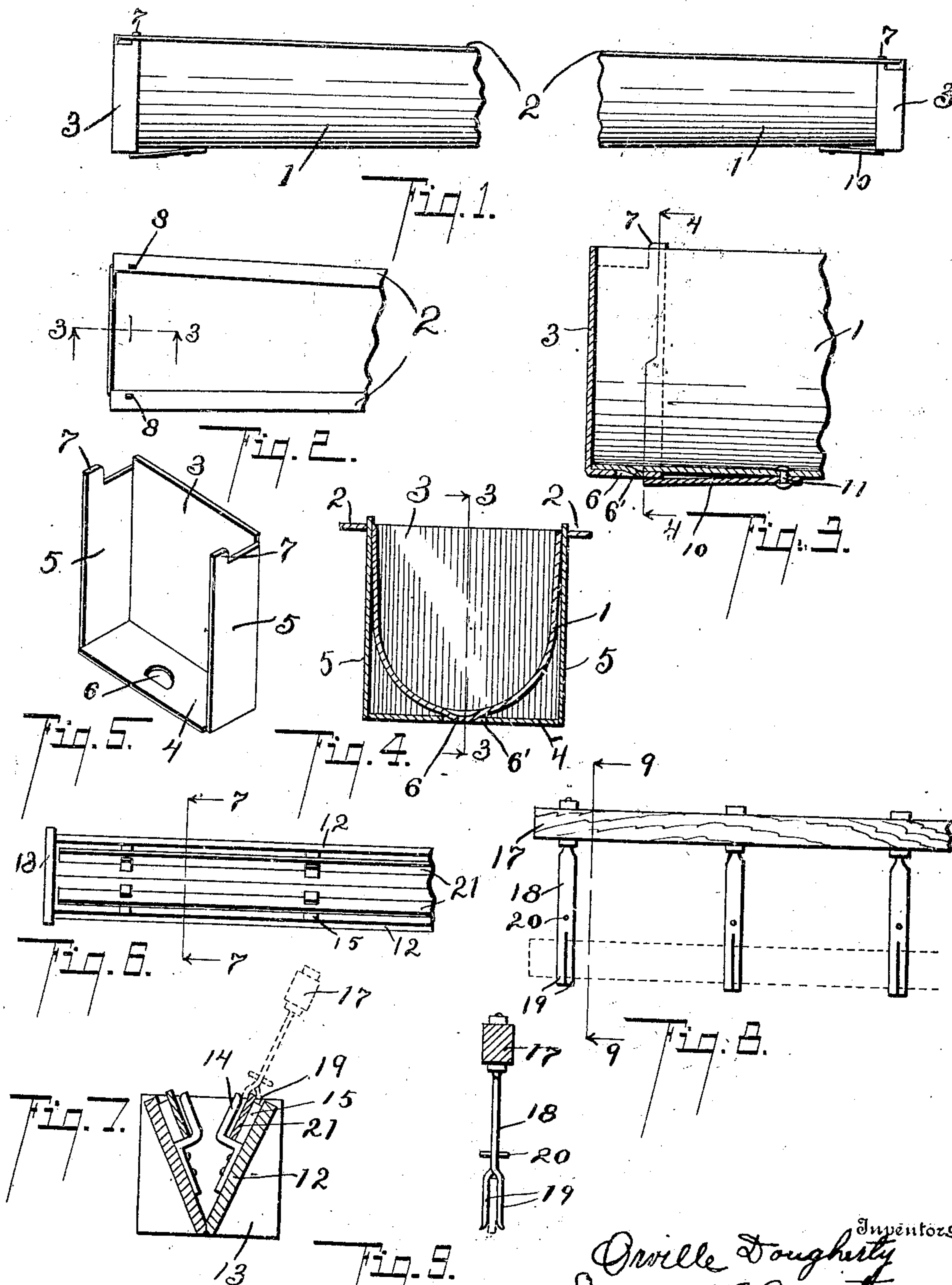


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MOLD FOR ARTIFICIAL STONE OR CONCRETE POSTS.

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UNITED STATES PATENT OFFICE.

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MOLD FOR ARTIFICIAL-STONE OR CONCRETE POSTS.

No. 912,367.

Specification of Letters Patent.

Patented Feb. 16, 1909.

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To all whom it may concern:

Be it known that we, ORVILLE DOUGHERTY, JAMES W. ARMSTRONG, and ADAM E. ARMSTRONG, citizens of the United States, residing at the city of Three Rivers, county of St. Joseph, and State of Michigan, have invented certain new and useful Improvements in Molds for Artificial-Stone or Concrete Posts, of which the following is a specification.

This invention relates to improvements in molds for artificial stone or concrete posts.

The main objects of this invention are: first: to provide an improved mold for artificial stone or concrete posts by the aid of which posts may be very readily manufactured; second: to provide an improved mold for artificial stone or concrete posts which may be readily removed from the post after the post has been allowed to "set" or harden, or to partially set or harden; and third: to provide an improved device for inserting metal cores or binding-strips into the post during the molding operation.

Further objects, and objects relating to structural details, will definitely appear from the detailed description to follow.

We accomplish the objects of our invention by the devices and means described in the following specification.

The invention is clearly defined and pointed out in the claims.

A structure embodying the features of our invention is clearly illustrated in the accompanying drawing forming a part of this specification, in which:

Figure 1 is a detail side elevation of our improved mold; Fig. 2 is a detail plan thereof, one end only being shown; Fig. 3 is an enlarged detail longitudinal section taken on a line corresponding to line 3—3 of Fig. 2; Fig. 4 is a transverse section taken on a line corresponding to line 4—4 of Fig. 3; Fig. 5 is an inside perspective of one of the end-plates; Fig. 6 is a detail plan of the supporting trough for the binding-strips or cores for molding them in proper position to be engaged by the placing-device; Fig. 7 is an enlarged cross-section taken on a line corresponding to line 7—7 of Fig. 6; Fig. 8 is a detail side elevation of our improved placing-device, a binding-strip being indicated in position therein by means of dotted lines;

and Fig. 9 is a cross-section of the placing-device, taken on a line corresponding to line 9—9 of Fig. 8.

Referring to the drawing, the body 1 of our improved mold is formed of sheet metal and is preferably U-shaped in cross-section, having a rounded bottom and sides flaring slightly outward. The side walls of the trough are provided with outwardly-projecting flanges 2. The molds are preferably tapered to secure a suitable taper to the posts. The end-plates 3 are provided with intumed flanges 4 at the bottom and the side flanges 5 being preferably formed of a single piece of sheet metal. The bottom flanges 4 are provided with holes 6 adapted to receive the downwardly-projecting lugs 6' on the body of the trough. These lugs are preferably formed by slitting the body and punching down the metal, as clearly appears in Figs. 3 and 4.

The side flanges 5 of the end-plates are provided with upwardly-projecting lugs 7 adapted to be inserted through holes 8 provided therefor in the flanges of the body when the end-plates are in position thereon.

The end-plates are preferably secured in position by the buttons 10 which are pivoted to the body at 11 and adapted to swing under the end-plates after they are placed in position. The end-plates are preferably rectangular so that they provide a suitable brace for holding the molds in an upright position when placed upon the floor or ground. The end-plates not only serve to form ends for the mold but support the side walls thereof, and, when it is desired to remove the mold from a post molded therein, by removing the end-plates the side walls yield or swing outwardly slightly, so that the mold may be readily lifted from the post.

In practice, the molds are filled and the material allowed to "set" at least sufficiently to keep its form, and the molds are inverted over a level surface, preferably of loose earth, as they harden more perfectly when so supported. The end-plates are then removed, when the mold may be readily lifted from the post. This may be done without any danger of breaking or disturbing the post material, as the walls of the body yield sufficiently to release the post at all points,

and, at the same time the walls are effectively supported by the end-plates so that the posts molded therein are uniform in size.

As a convenient means for inserting the binding-strips or cores into the posts, we provide an inserting device, preferably comprising a bar 17 which is substantially the same length as the core or the binding-strip to be inserted, and this bar is provided with a plurality of fingers 18, the fingers having forks 19 thereon, adapted to receive the core-strips 21. These fingers are preferably formed from flat bars, slitted at their lower ends, and the slit portions bent in opposite directions to form forks, as clearly appears in Fig. 9. With the binding-strips thus supported throughout their length, they may be pushed into the material in the mold after it has been filled. This avoids the necessity of supporting the binding-cores during the filling of the mold, and, as the material readily fills in around the core, after the placing device has been withdrawn the binding-strips are entirely inclosed.

We preferably provide the fingers 18 with gage-pins 20 so that the position of the binding-core and the concrete material may be determined by the user.

To aid in readily picking up the binding-strips by the placing-device, we provide a V-shaped trough 12, the same preferably consisting of side walls and rectangular end-plates, whereby it is supported in an upright position.

On the inner walls of the side-plates are rests 14 adapted to receive the binding-strips and support them throughout the length thereof. The binding-strips are held up from the side-walls 12 by means of the blocks 15 so that the placing device may be readily placed over the same (see Fig. 7). By this

means, even though the binding-strips may be of flexible material, they may be quickly picked up and placed in the plastic material and held as described.

Having thus described our invention; what we claim as new and desire to secure by Letters Patent, is:

1. In a mold, the combination of a trough-like sheet metal body U-shaped in cross-section, having outwardly projecting flanges at the top; end-plates for said body, having inturned flanges at their sides and bottoms, adapted to embrace said body, the bottom flanges of said end-plates having holes therein and the side flanges having upwardly projecting lugs thereon, the flanges of said body having holes therein adapted to receive said lugs, said body having lugs on the bottom thereof adapted to engage said holes in the bottom flanges of said end-plates.

2. In a mold, the combination of a trough-like sheet metal body having outwardly projecting perforated portions at the top; an end plate for said body having inturned flanges at the sides thereof to embrace the sides of the body, said flanges having outwardly projecting lugs thereon adapted to engage the perforations in said projecting members on said trough, and a button on said body adapted to engage said end plate for securing it in position on said body.

In witness whereof, we have hereunto set our hands and seals in the presence of two witnesses.

ORVILLE DOUGHERTY. [L. S.]
JAMES W. ARMSTRONG. [L. S.]
ADAM E. ARMSTRONG. [L. S.]

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