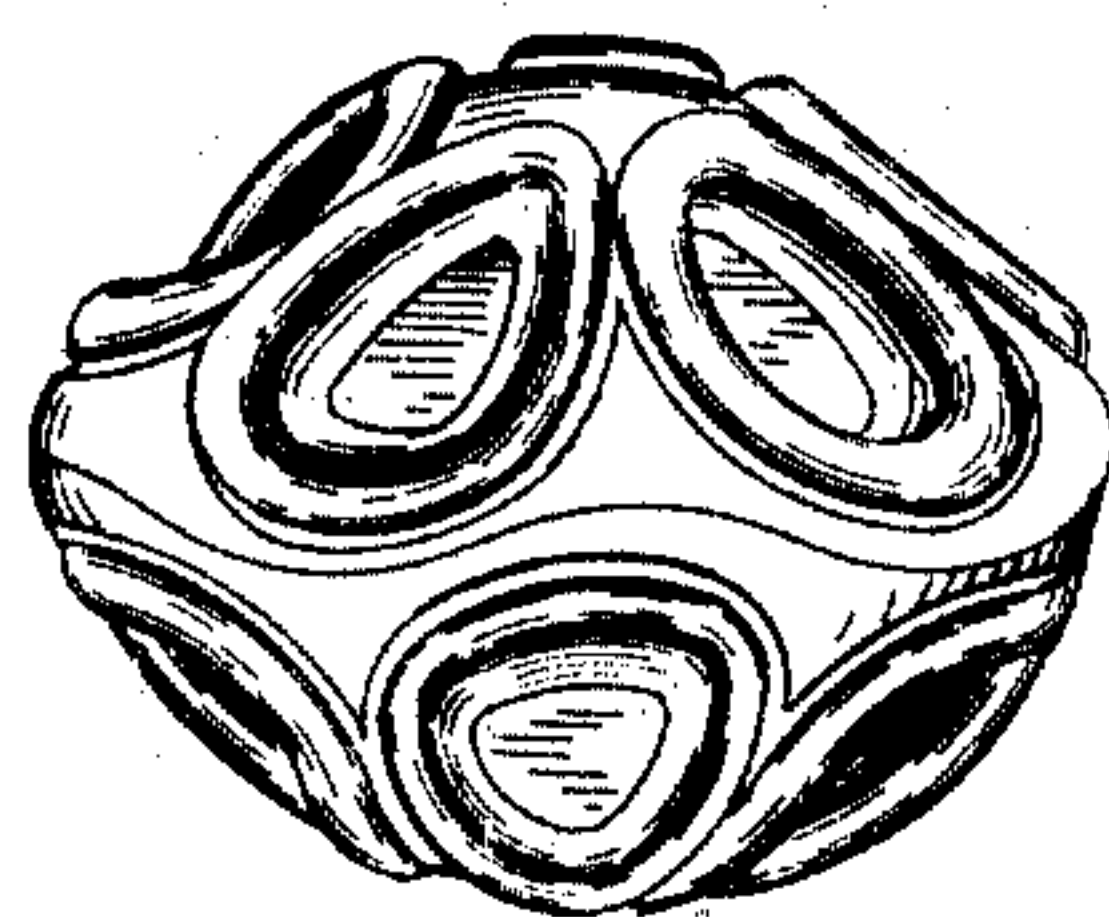
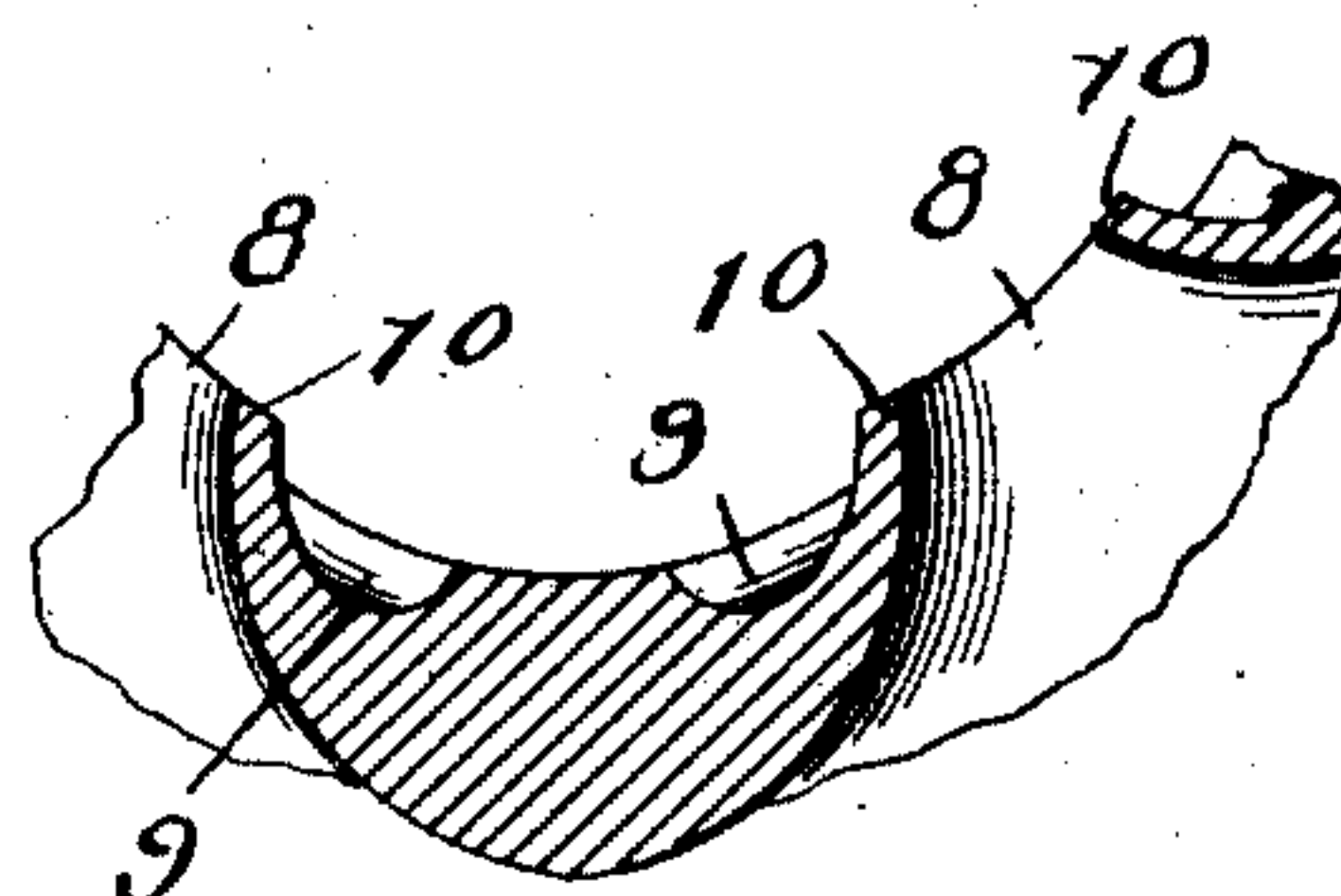
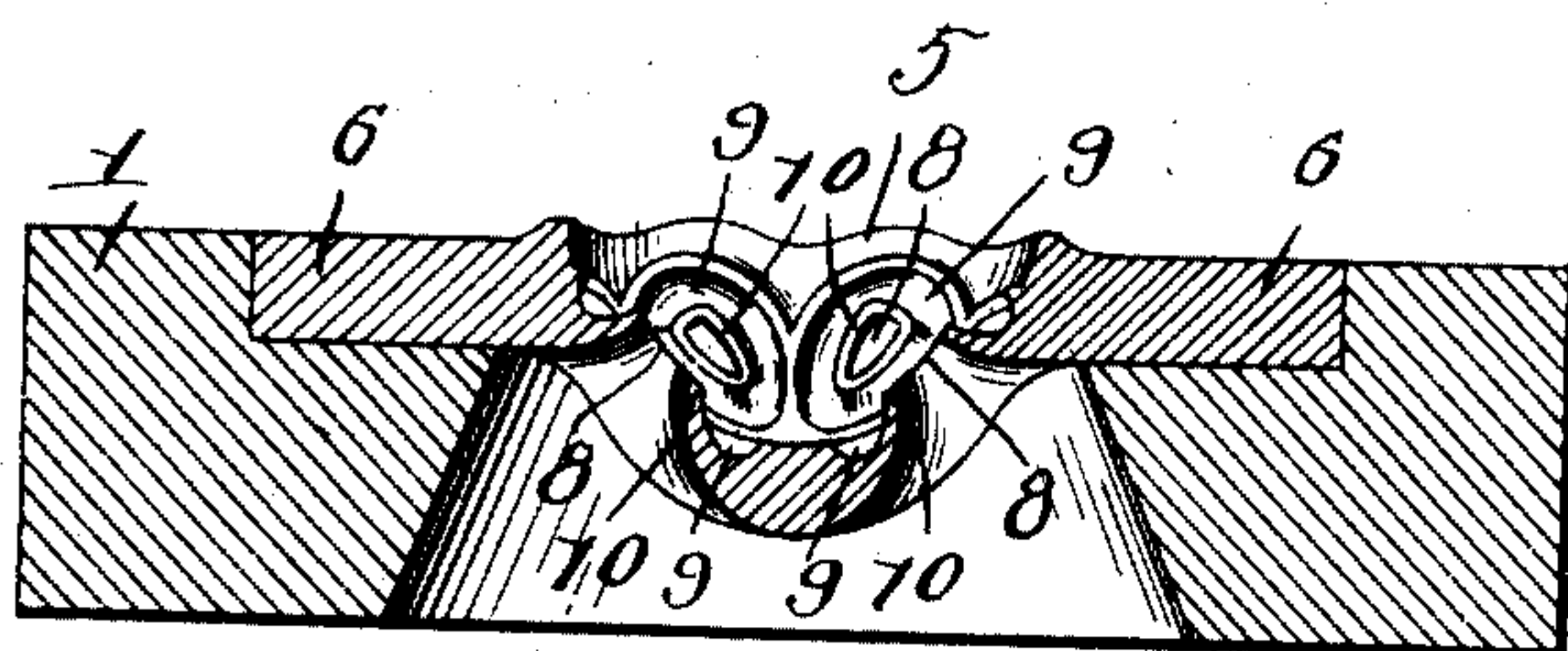
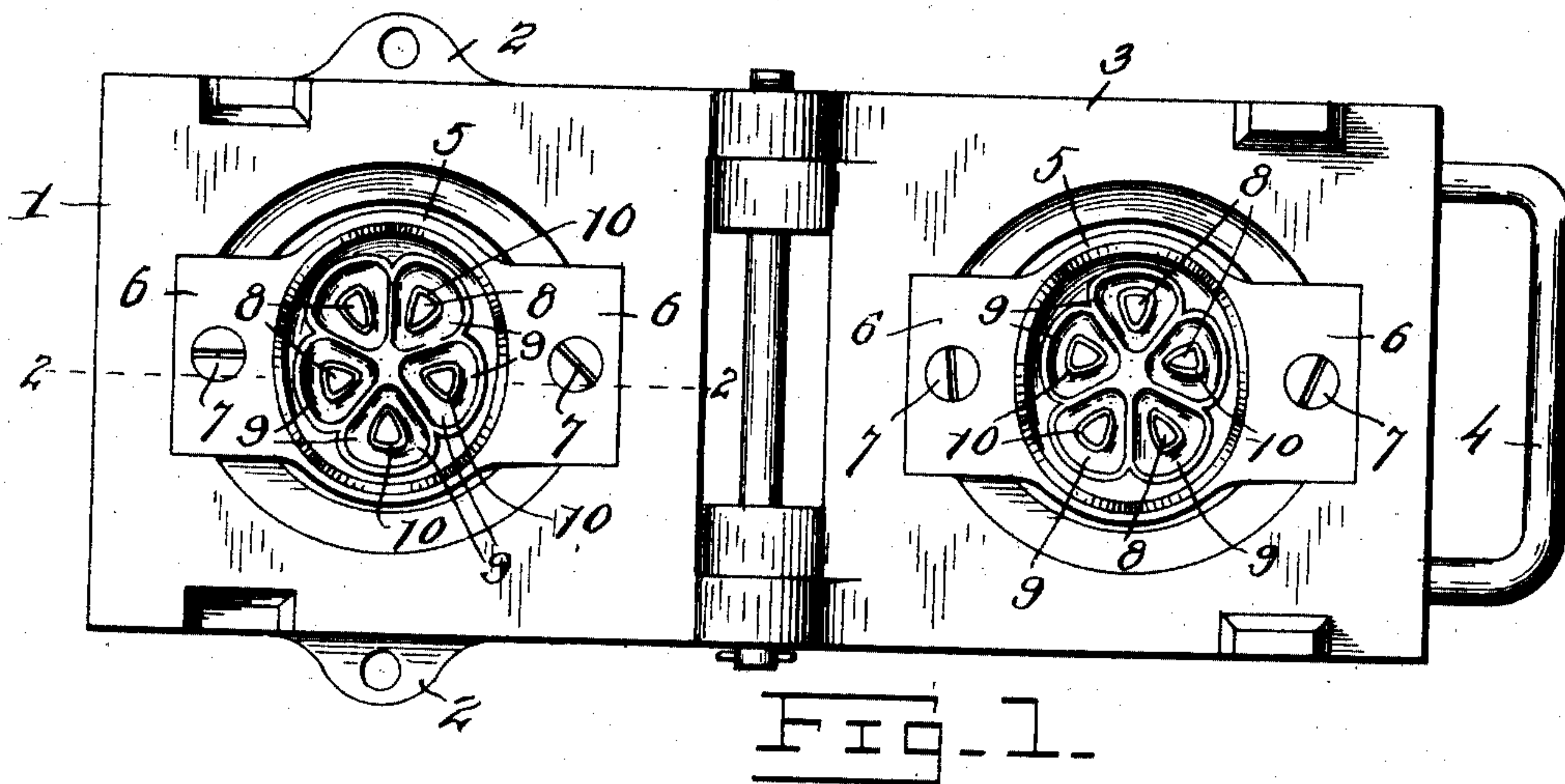


No. 864,582.

PATENTED AUG. 27, 1907.

J. A. WILLIAMS.
MOLD FOR FORMING HOLLOW ARTICLES.

APPLICATION FILED FEB. 5, 1907.



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JAMES A. WILLIAMS, OF IRONTON, OHIO.

MOLD FOR FORMING HOLLOW ARTICLES.

No. 864,582.

Specification of Letters Patent.

Patented Aug. 27, 1907.

Application filed February 5, 1907. Serial No. 355,939.

To all whom it may concern:

Be it known that I, JAMES A. WILLIAMS, a citizen of Great Britain, residing at Ironton, in the county of Lawrence, State of Ohio, have invented certain new and useful Improvements in Molds for Forming Hollow Articles, of which the following is a specification.

My invention relates to molds generally but more specifically to that type of molds wherein the two members or sections of the mold are mounted upon a suitable base and cover respectively, said base and cover being connected by a hinged joint.

It relates further to that type of mold wherein the material to be molded is pressed into the mold by hand and the two molded sections of the article to be produced are joined by bringing the said sections together, the material being in a plastic state whereby they adhere to each other and on swinging back the cover the molded article may be readily removed from the mold.

In the drawing, Figure 1 is a plan view of the mold open. Fig. 2 is a detail section of one of the mold members. Fig. 3 is a perspective view of the product. Fig. 4 is an enlarged detail vertical section view through one of the cup-shaped sections.

1 represents the base piece which, by means of the perforated lugs 2 may be readily secured rigidly to a suitable support or base.

3 is the hinged cover having a suitable operating handle 4.

In view of the fact that the mold sections proper are identical in construction, I will for the purpose of this application describe only one of them.

5 is one section of the mold proper provided with extensions 6 perforated whereby said section may be secured by means of screws 7 (or other fastening means) in suitable depressions formed in the top and base of the mold. The mold proper has a central depression of suitable size and shape, there being formed around this depression a wall or edge of irregular shape, that is to say, said edge or wall is given an undulating top surface. The opposite member of the mold proper is provided with a similar wall or edge which also has an undulating top face but is arranged so that the edges of both sections of the mold proper will have a close, snug fit when brought together.

The depression in the mold section is provided with openings 8, around which are grooves 9. 10 are walls or ribs formed around the openings 8 and project inwardly in said recess. It will be noticed from the top plan view that the grooves 9 around the group of openings in the mold section proper are separated by means of a rib, thus forming a clear line of demarcation, in the finished product between the ribs which are formed on said product by said grooves. The top of the walls 10 are ground down sharp so that the edge around the opening 8 forms cutting edges. The material of which

the mold is formed immediately surrounding the opening 8 on the back of the mold is sloped away from the top edge of the wall 10. That is to say, the face of the wall 10 within the opening is a diverging one whereby a clearance is given the material which is pressed through said opening.

It will be noticed that the opening in the top and bottom sections of the mold proper are positioned relative to each other so that the corresponding openings in the product are located alternately, thereby giving much greater strength to the product to enable it to withstand handling before and after being burned. Another object of so locating these openings in the finished product is that said alternate arrangement compels the gas to take an irregular course through the product whereby the product retains the gas for a comparatively longer period which results in more quickly heating the product.

It will be noted that the number of openings in each half of the product is five, corresponding to the number of fingers on one hand thus making it more convenient to lift the product from the mold.

The ribs or beads formed in the product by means of the grooves 9 serve as strengthening ribs to the finished product.

The depression or cup of each mold section proper, the grooves 9 and the walls 10 have a general angle toward a common center to prevent binding of the product in the mold, whereby the product may be readily lifted off the mold.

The mold is operated as follows: The attendant first greases the inside of the two cups or depressions of the mold with a brush in order to keep the clay from sticking to the mold. The operator then places a lump of clay in one cup of the mold and with his fingers presses it down to the thickness of the finished product which is determined by the height of the wall 10. In this connection I would say that in the finished product, of various sizes, the walls vary from three-sixteenths to one-quarter of an inch in thickness. The attendant then, with his fingers, presses holes through the clay, as seen in the finished product, and, said clay is pushed through the openings 8. The other section of the mold is filled with clay in a like manner. The operator then brings the top section of the mold down, with considerable force, onto the lower section and the clay, being in a plastic state, of both sections is firmly united producing, in the design shown an egg-shaped product. The upper half or cover of the mold is then thrown open on the hinge leaving the product in the lower mold section in a plastic state like the finished product, except that it has not been dried. The product is then carefully lifted from the mold by inserting the four fingers and the thumb of the hand in the five openings and conveyed to a suitable burning kiln.

As will be seen in Fig. 3, the undulating top face of

the wall of the mold section proper forms an undulating line in the finished product while the grooves 9 form corresponding beads or ribs in the finished product.

5 What I claim as new is:

1. A mold for forming hollow articles of plastic material comprising two cup-shaped separable sections with openings in the bottom of each, said sections having undulating meeting edges.
- 10 2. A mold for forming hollow articles comprising two cup-shaped sections, having openings in the bottom, and walls surrounding said openings and projecting within the mold section.
- 15 3. A mold for forming hollow articles comprising two cup-shaped sections having openings in the bottom, walls surrounding said openings and projecting within the mold sections, and grooves in the bottom of said sections surrounding said walls.
- 20 4. A mold for forming hollow articles comprising two cup-shaped sections having openings in the bottom, walls

surrounding said openings and projecting within the mold sections, a cutting edge formed on the upper face of said walls, and diverging walls leading rearwardly from said cutting edge to form a clearance space under said cutting edge.

5. A mold for forming hollow articles comprising two cup-shaped sections having openings in the bottom, and undulating meeting edges, walls surrounding said openings and projecting within the mold sections, a cutting edge 25 formed on the upper face of said walls, diverging walls leading rearwardly from said cutting edge to form a clearance under said edge, and grooves within the cup-shaped sections surrounding the walls around said openings. 30

The foregoing specification signed at Ironton, Ohio, this 35 17th day of December, 1906.

JAMES A. WILLIAMS.

In presence of two witnesses—

C. A. THOMPSON,
MADGE SHIPMAN.