June 17, 1958 I. H. THEIS 2,838,791

MOLDS FOR FORMING PLAQUES

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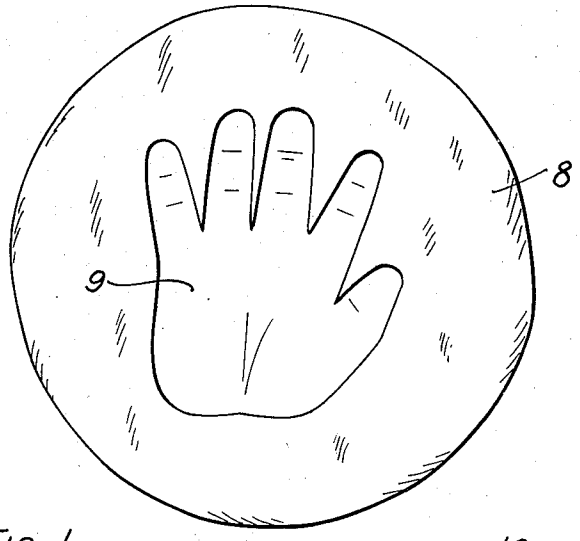


FIG. 1.

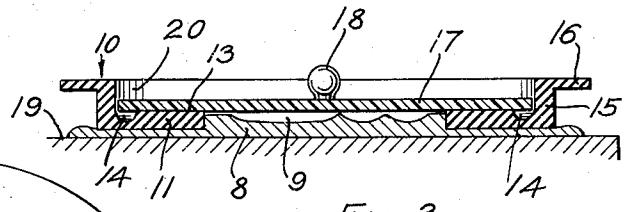


FIG. 3.

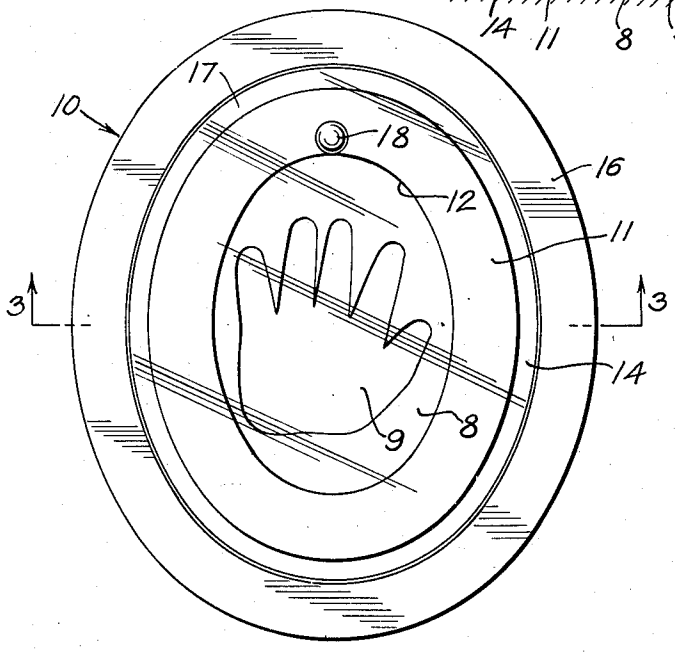


FIG. 2.

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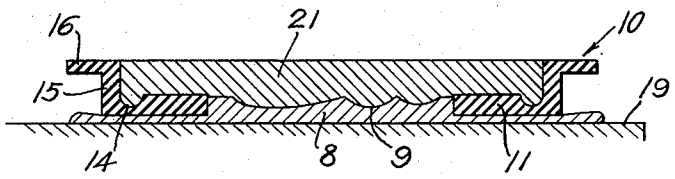


FIG. 4.

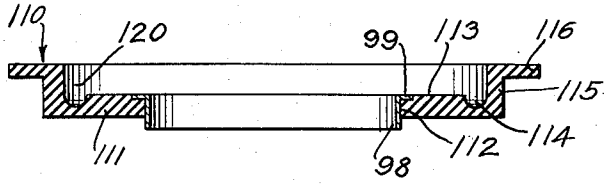


FIG. 5.

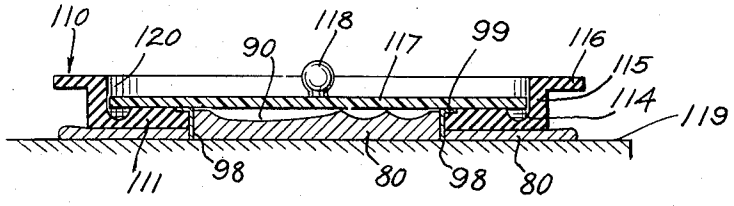


FIG. 6.

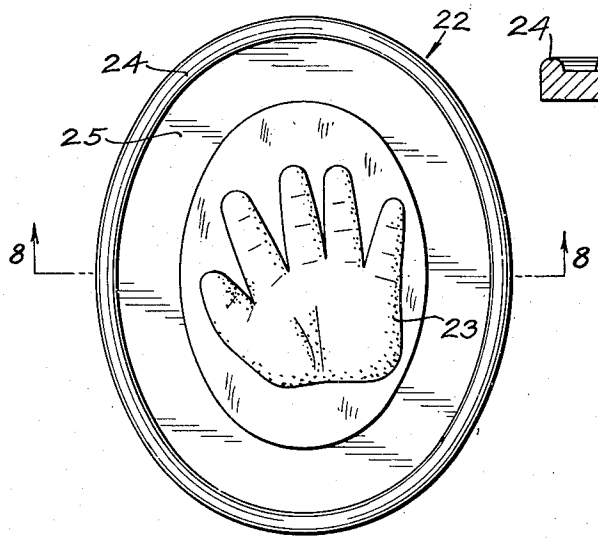


FIG. 7.

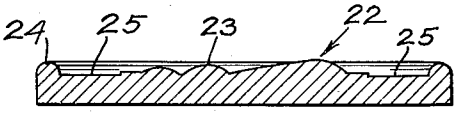


FIG. 8.

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MOLDS FOR FORMING PLAQUES

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Application June 15, 1954, Serial No. 436,768

6 Claims. (Cl. 18—5.1)

My present invention relates to molds for forming plaques and especially, although not exclusively, to molds for making ornamental keepsake plaques embodying replicas of childrens' hands and/or feet. The invention herein represents an improvement upon my prior United States Letters Patent No. 2,611,170, granted September 23, 1952.

One of the objects of my invention is to provide a mold for producing plaques as aforesaid in a new and efficient manner; another and important object being to produce a mold which is of simple construction, inexpensive to produce, and one which is easy to use.

The foregoing and other objects and advantages of the invention will appear from the following description and appended claims when considered in conjunction with the accompanying drawings forming a part of this specification wherein like reference characters designate corresponding parts in the several views.

In said drawings:

Fig. 1 is a top plan view of an impression of a child's hand in intaglio in a piece of slow drying plastic material, such as molding clay.

Fig. 2 is a top plan view of one form of mold embodying the present invention with the impression shown in Fig. 1 in the mold.

Fig. 3 is a transverse vertical section taken substantially along the line 3—3 of Fig. 2, looking in the direction of the arrows, and illustrating one of the steps of the method.

Fig. 4 is a view similar to Fig. 3 and illustrating another step in the method.

Fig. 5 is a transverse vertical section through another form of mold embodying the invention.

Fig. 6 is a view similar to Fig. 5 and illustrating a step in the method of forming a plaque.

Fig. 7 is a top plan view of the completed plaque; and

Fig. 8 is a section through the plaque, taken substantially along the line 8—8 of Fig. 7, looking in the direction of the arrows.

Before explaining in detail the present invention it is to be understood that the invention is not limited in its application to the details of construction and arrangement of parts illustrated in the accompanying drawing, since the invention is capable of other embodiments and of being practiced or carried out in various ways. It is to be understood also that the phraseology or terminology employed herein is for the purpose of description and not of limitation, and it is not intended to limit the invention claimed herein beyond the requirements of the prior art.

Referring now particularly to Figs. 2, 3 and 4 of the drawings, one form of mold embodying the invention is shown. The mold is employed to convert the impressed piece of modling clay of Fig. 1 into the finished plaque of Figs. 7 and 8.

With particular reference to Figs. 2 and 3, the mold comprises, as shown, a substantially oval-shaped member

or body portion, shown as a whole at **10**, which is preferably formed from relatively stiff yet pliable plastic, rubber, rubber composition, or other suitable material having a relatively large and generally oval-shaped opening **12** formed in its base or bottom **11**. The base has a flat top surface **13** and a continuous groove or depression **14** at the juncture of the base and the surrounding upstanding wall **15**. The wall **15** has an out-turned horizontal surrounding stiffening flange **16**. A removable preferably translucent plastic oval-shaped disk or plate **17** having a finger piece or knob **18** is provided as a cooperating mold member which is removably associated with the frame or base portion **10** of the mold.

In Fig. 1 there is shown a piece of plastic material **8**, such as molding clay, in which there has been impressed in intaglio, a child's hand, indicated at **9**. This duly impressed piece of plastic **8** seen in Fig. 1 is now placed upon a flat surface **19**, see Fig. 3, which may be a table. The mold base or member **10** is now placed over the impressed piece of clay **8** with the opening **12** surrounding or framing the impresison **9**. The pressure-applying plastic plate or member **17** is then placed in the mold cavity **20** and hand pressure is applied to the top surface of the plate to force the mold downwardly into the clay until, for example, the clay has been compressed to take the shape or form shown in Fig. 3. It will be understood that as pressure is applied in a downwardly direction to the disk or pressure plate **17**, the edges surrounding the opening **12** in base portion **11** will be pressed into and virtually cut the clay or other plastic material **8** until the plate or cover **17** comes into contact with the top flat surface **13** of the mold.

The disk or pressure-applying plate **17** is now removed from the mold by means of the knob **18**. The impressed clay **8** is now in readiness to receive a batch of quick drying cement from which the plaque of Figs. 7 and 8 is formed.

With reference now to Fig. 4, it will be seen that the mold member **10** has had its cavity filled with a quantity of quick drying cement, as indicated at **21**. This body of cement **21** fills the impression **9** in the plastic material and also the entire mold cavity **20**. The cement **21** is allowed to set sufficiently to permit the removal of the rubber or other pliable material mold member **10** from it. The flanges **16** of the mold member are grasped by the hands and moved outwardly and downwardly away from each other to flex the mold wall **15** and flange **16** to free the plaque, shown as a whole at **22** in Figs. 7 and 8, from the mold. The plaque may be provided with a ring or loop (not shown) which is placed in its back during the molding operation, to permit it to be hung on a wall or other upright surface. After removal of the plaque **22**, a certain amount of sculping is performed on the plaque to bring the hand, or the foot as the case may be, in full relief. It may then be electroplated or bronzed, as desirable, to produce a finished product of great durability.

As viewed in Figs. 7 and 8, the impression **9** in the body **8** of clay of Fig. 1 becomes the hand **23** of the finished plaque. The cement which filled the surrounding groove or depression **14** provides a surrounding molding or border **24** for the finished plaque, whereas the inner flat surface **13** of the base portion **11** of the mold provides a flat band-like surrounding or framing oval-shaped area **25** of the finished plaque.

Referring now particularly to Figs. 5 and 6 of the drawings, a somewhat modified form of mold embodying the present invention is shown. As in the preceding views, the mold of this form comprises a main member or portion, shown as a whole at **110**, having a flat base **111** provided with an oval-shaped opening **112**. The

top surface **113** of the base **111** is flat as in the preceding form and the member has an upstanding surrounding wall **115** and an out-turned flange **116**. The base portion **111** is provided with a continuous oval-shaped groove or depression **114** which is disposed at the juncture of the base **111** and wall **115**.

To assist in the method of forming a plaque with the mold, the main mold member **110** is provided with an oval-shaped metal cutter member **98** having a top flange **99**. This member is inserted in the oval-shaped opening **112** and as shown in Figs. 5 and 6, the flange **99** rests in a recess in the flat base **111** and may be held in place in any suitable and desirable manner so as to become a part of the mold member.

As seen in Fig. 6, the mold is provided with a pressure-applying preferably translucent plastic plate or disk **117** having a finger piece, handle, or knob **118**. This member **117** is preferably cut to a size to fit snugly within the cavity **120** of the mold member.

In view of the fact that the sequence of steps of the method performed when employing the mold of Figs. 5 and 6 are substantially the same as those set forth above in connection with the mold of Fig. 3, I have illustrated only the second step of my method, as depicted in Fig. 6. It will be understood that a piece of plastic material **80**, such as molding clay, having an impression **90** of a hand, or the like, formed therein as in Fig. 1, is placed on a flat surface **119**, such as a table, whereupon the mold member **110** is brought into contact with the clay and with the cutter **98** in position so as to surround the impression **90** formed in the body of clay. The plate **117** is now inserted into the mold cavity **120** and brought into contact with the flat top surface **113** and the flange **99** of the cutter member. Pressure is now applied in a downward direction to force the cutter portion **98** to cut through the plastic material **80**, as shown in Fig. 6. Thereafter, the cover **117** is removed, and the cavity **120** filled to the level of the top surface of flange **116** with some suitable quick drying cement. The top surface of the cement is smoothed off or flattened and the cement (not shown) is allowed to set. When now it becomes desirable to remove the newly-formed plaque (not shown) from mold **110**, it is merely necessary to flex the walls **115** and flanges **116** to release it from mold member **110**. As in the preceding form, and before it sets, a ring or loop (not shown) may be placed in the top surface of the cement which forms the plaque to provide means for supporting the finished plaque upon a wall. After the plaque has been removed from the mold, or the mold removed from the plaque, the plaque may be finished in any suitable manner, by sculping and by electro-plating or bronzing to produce a plaque having long-lasting qualities. If desirable, the finished plaque instead of being electro-plated, may be subjected to tinting and glazing operations.

From the foregoing it will be seen that I have provided two forms of molds for producing plaques in accordance with my invention and have described and illustrated the several steps of my complete method as practiced with the mold of Fig. 3, as well as the second step of my method, as practiced with the mold of Figs. 5 and 6. Since the other steps as practiced with this particular form of mold are identical with those described above in connection with the first form of mold, it is deemed unnecessary to illustrate these duplicated steps in the drawings.

I claim:

1. A mold for forming plaques, comprising a body formed from relatively stiff but pliable plastic providing a cavity for the mold and having an apertured base, an upright surrounding wall terminating in a continuous out-turned flange, said base having a continuous groove formed therein at substantially the juncture of the upright wall and base, and a removable pressure-applying plate in said cavity engaging said base and overlying the aperture therein, said plate having a relatively snug fit in said cavity and having a knob for removing it from the mold cavity.

2. A mold according to claim 1, wherein the body is of substantially oval shape, wherein the aperture in the base is oval in shape, wherein the groove is of semi-circular cross section, and wherein the plate is formed from translucent plastic.

3. A mold according to claim 1, wherein an oval-shaped knife frames the aperture in the base and depends below said base.

4. A mold for forming plaques, comprising a body formed from relatively stiff but pliable material providing a cavity for the mold and having a base provided with an enlarged opening, an upright surrounding wall extending from the base, said base having a continuous depression formed therein adjacent the inner face of the surrounding wall, and a removable plate formed from non-metallic material disposed in said cavity engaging said base and overlying the enlarged opening, said plate providing means for the reception of hand pressure when moldable material is disposed beneath the base, whereby to permit the continuous edge of the base surrounding the enlarged opening to be pressed into and encompass a portion of the moldable material until the plate contacts the upper surface of the encompassed material.

5. A mold according to claim 4, wherein the base of the mold body carries a depending knife-like member surrounding the enlarged opening in said base, wherein the plate has a relatively snug fit in the mold cavity, and wherein the outer surface of the plate is provided with means to facilitate applying it to and lifting it from the mold cavity.

6. A mold for forming plaques, comprising a body formed from relatively stiff but pliable rubber providing a cavity for the mold, said body having a base provided with an enlarged opening, an upright surrounding wall extending from said base and having an out-turned flange at its upper edge, and a removable pressure-applying plate in said cavity engaging said base and overlying the enlarged opening, said plate having a knob for finger engagement to facilitate removal of the plate from the mold cavity.

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