Nov. 20, 1934. W. F. SCHMALZ 1,981,334

ARTICLE OF MANUFACTURE

Filed July 17, 1930

Fig. 1

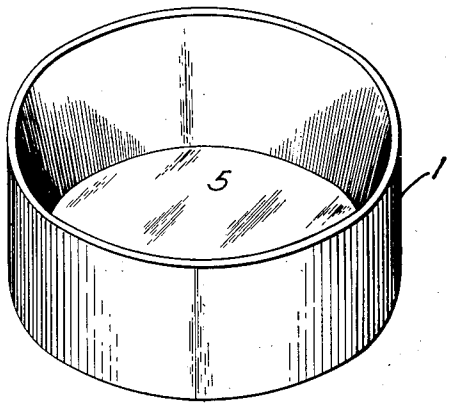


Fig. 2

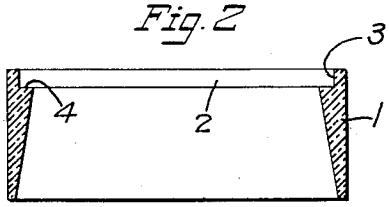
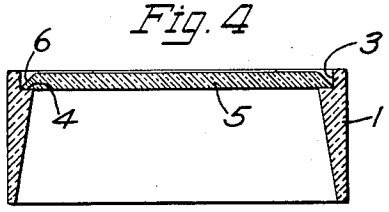


Fig. 3



Fig. 4



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1,981,334

ARTICLE OF MANUFACTURE

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Application July 17, 1930, Serial No. 468,649

1 Claim. (Cl. 18—59)

The invention relates to an article of manufacture, such as a receptacle or container, having a bottom member or end closure member which is initially separate from the body and of a different material. The body of the article is of molded material, such as an artificial resin adapted to be molded with the use of heat, and the bottom member or closure member is preferably glass to provide the advantages incident to transparency.

The principal object of the invention is to provide an improved relationship of parts, whereby the two separate parts of the article are firmly connected with each other and whereby manufacture at a low cost is made possible.

An article of manufacture embodying and constructed in accordance with the invention may be varied widely as to size, shape and details of design, and I have shown in the drawing a small relatively shallow container which is adapted to be used as an ash tray. It will be understood, however, that the drawing is intended to be merely illustrative and that the size, shape and manner of use of the article may be varied extensively without departing from the invention as set forth in the claim forming a part of this specification.

Of the drawing:

Fig. 1 is a perspective view of an article embodying the invention.

Fig. 2 is a vertical sectional view showing the body of the article in inverted position.

Fig. 3 is a vertical sectional view showing the closure member in inverted position.

Fig. 4 is a vertical sectional view showing the body and the closure member in inverted positions and in their assembled relationship.

In the drawing, 1 represents the body member of the article, this preferably being molded from an artificial resin such as a phenolic condensation compound. As already stated the body may be varied widely in shape and in design, but in order to illustrate the invention I have shown the body member 1 as being substantially circular in outline and as having its peripheral walls relatively low. One end of the body, in this case the bottom end, has a relatively large opening 2 therein and when the body member as a whole is substantially circular in outline the opening 2 is also preferably circular or substantially so. The opening 2 is entirely surrounded by an inward facing wall 3 which is substantially perpendicular to the corresponding end face of the body, being in this case substantially perpendicular to the bottom of the body. In addition to the wall 3 the body is preferably provided with a shoulder 4 which extends entirely around the opening and which faces toward the corresponding end of the body, that is in this case toward the bottom.

For closing the opening 2 in the end or in the bottom of the body, I provide a closure member 5 which is preferably of a material different from that of the body. Ordinarily the closure member 5 is formed of glass so as to make the bottom of the article transparent. The closure member 5 is preferably relatively thin and is of such size and shape that, when the body is hot, the said closure member can be placed within the opening with its periphery approximately fitting the inward facing wall 3. Preferably the closure member 5 is beveled at its periphery as indicated at 6 so as to provide a sharp edge adjacent the wall 3 of the body.

The body member 1 is shown separately in Fig. 2 and the closure member 5 is shown separately in Fig. 3. While the body member 1 is hot the closure member 5 is placed in the opening 2 thereof as clearly shown in Fig. 4. The shoulder 4 of the body member serves to support the closure member and to determine the relative position thereof. With the parts in the relative positions shown in Fig. 4 the body member 1 is allowed to cool. The said member contracts as it cools and the opening 2 becomes slightly smaller in diameter; and the wall 3, by reason of the contractile action of the body, is forced into firm engagement with the periphery of the closure member 5. The closure member is thus firmly gripped and held in place. The holding of the closure member is facilitated by the beveling of the periphery thereof at 6 to provide a relatively sharp edge as already described. By reason of the before mentioned contractile action of the body the said sharp edge of the closure member may embed itself in the wall 3 to a slight extent. When the body 1 finally becomes cool, the closure member 5 is firmly secured in place and there is no possibility of its becoming dislodged.

It will be understood that I prefer to utilize the initial molding heat of the body 1 and that the closure member 5 is preferably put in place, as shown in Fig. 4, immediately upon the removal of the body from the mold and while it is still hot from the molding operation. Thus the closure member 5 is secured to the body 1 without any expense whatsoever; it is only necessary to put the closure member in place, the

attachment thereof taking place automatically as the result of the normal cooling action of the body.

What I claim is:

An article of manufacture comprising in combination, an open-ended body of molded material having at its open end an inward facing peripheral wall perpendicular to the end face and also having a shoulder projecting inward from the peripheral wall and facing endwise toward the said end face, and a relatively thin closure member for the opening initially entirely separate from the body engaging the endwise facing shoulder, the said closure member engaging at its periphery with the said inward facing wall and being beveled at its periphery to provide a sharp edge whereby it is held in place entirely by reason of inward pressure exerted as the result of the contraction of the body in cooling from a relatively high temperature.

WILLIAM F. SCHMALZ.