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J. SUNSHINE

3,214,010

WAX BOWL RING

Filed April 30, 1962

FIG. 1

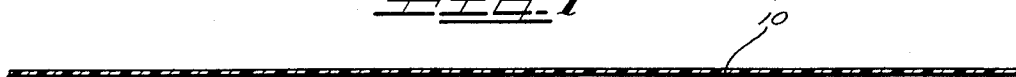


FIG. 2

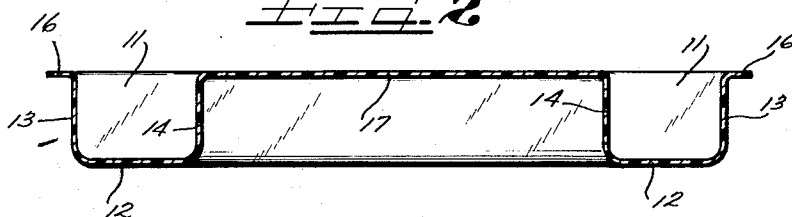


FIG. 3

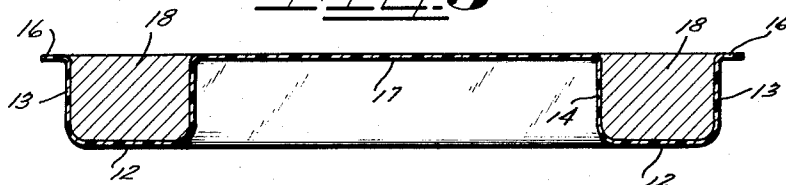


FIG. 4

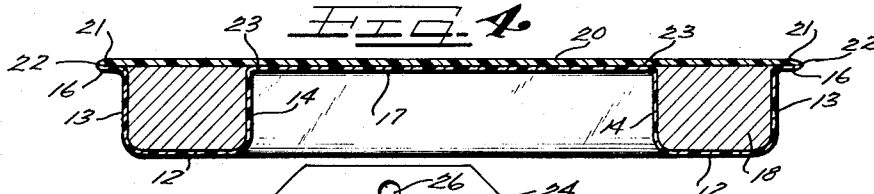


FIG. 5

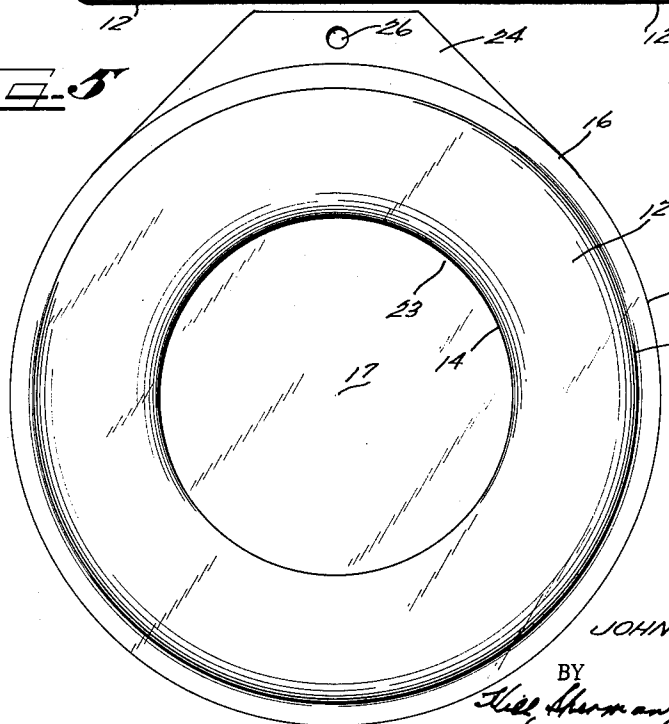
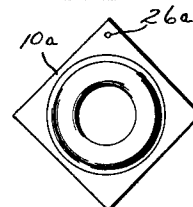


FIG. 6



INVENTOR
JOHN SUNSHINE

BY
Lee, Sherman, Merriam,
Chase & Criffor
ATTORNEYS

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3,214,010

WAX BOWL RING

John Sunshine, Prospect Heights, Ill., assignor to John Sunshine Chemical Co. Inc., Chicago, Ill., a corporation of Illinois

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2 Claims. (Cl. 206—46)

This invention relates generally to a plumber's wax gasket for setting closet bowls and more particularly relates to a unitary mold and package for a plumber's wax bowl ring wherein the wax gasket is integrated in its own mold and distribution package.

In accordance with prior art procedures, plumber's wax gaskets for setting closet bowls were preformed in permanent metal molds. The wax gaskets were then removed from the mold and separately packaged in boxes. In shipment and in handling, the gasket or ring was sometimes damaged and consequently the purchaser would be required to unpackage the device in order to determine whether or not the nature and quality of the ring was satisfactory for usage.

In accordance with the principles of the present invention, a novel method of molding and packaging is contemplated wherein a sheet form packaging material is preformed to form a packaging article having an annular trough corresponding in size and shape with a plumber's wax bowl ring. The trough is then filled with a settable wax, whereupon the wax is set in the trough to form a wax bowl ring integrated in its own mold and distribution package.

It is further contemplated by the present invention that the sheet form packaging material be integrated, for example, by thermoplastic bonding with a sheet form cover member. Thus, at least one of the members can be provided with a suspension tab by means of which the unitized package may be displayed. Further, a transparent packaging material may be employed to visibly display the nature and quality of the wax bowl ring. The portions of the package inwardly of the ring on one side of the unit and the entire planar surface on the opposite side of the unit can be advantageously utilized for setting forth suitable instruction indicia or other words and symbols.

It is an object of the present invention, therefore, to provide an improved method of making and packaging plumber's wax gaskets.

Yet another object of the present invention is to provide an improved unitary mold and package for a plumber's wax gasket.

Many other advantages, features and additional objects of the present invention will become manifest to those versed in the art upon making reference to the detailed description which follows and the accompanying sheet of drawings in which a preferred structural embodiment of the present invention is shown by way of illustrative example and by means of which the improved methods of the present invention may be advantageously practiced.

On the drawings:

FIGURE 1 is a cross-sectional view of a sheet form packaging material made out of a thermoplastic resin which may be transparent and which is capable of being preformed and shaped;

FIGURE 2 is a cross-sectional view of the packaging material of FIGURE 1 after it has been shaped to form an annular trough;

FIGURE 3 is a cross-sectional view of the article shown in FIGURE 2 after the trough has been filled with a settable molten wax;

FIGURE 4 is the article of FIGURE 3 but with the trough closed by a closure cover;

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FIGURE 5 is a front elevational view of the packaged article of FIGURE 4; and

FIGURE 6 is a reduced view of an alternative form of the invention.

As shown on the drawings:

Although other packaging materials are of utility, it is contemplated in accordance with the principles of the present invention to utilize a sheet form packaging material made of a thermoplastic resin, for example, a transparent sheet form plastic member shown at 10 in FIGURE 1. Suitable alternatives would include other "throw-away" materials such as aluminum foil or the like.

The sheet form member 10 is preshaped or preformed to provide an annular trough 11 having a bottom wall 12, an outer side wall 13 and an inner side wall 14. The outer side wall 13 has a radially outwardly extending flange 16 and the inner side walls 14 are joined by an upper wall 17 which, in effect, forms a radial flange on the inner side walls 14.

The dimensional size and shape of the trough 11 corresponds to the dimensional size and shape of a wax bowl ring used as a plumber's wax gasket for setting closet bowls.

Accordingly, as shown in FIGURE 3, a suitable composition of wax material in molten condition is poured into the trough 11 and is permitted to set, thereby forming a wax bowl ring 18. The article thus formed can, if desired, be boxed for sale.

As shown in FIGURE 4, the trough 11 filled with the wax ring 18 may be suitably covered by a closure. In accordance with the principles of the present invention, the closure member comprises a second sheet form member made of packaging material which is shown at 20. If thermoplastic resin materials are employed the sheet form member 20 and the sheet form member 10 can be integrally bonded thermoplastically to form joints at the peripheral portions of the trough 11 or wax bowl ring 18. For example, the sheet form member 20 has an outer peripheral edge 21 which may be bonded with the flange 16, thereby to form a joint 22. The sheet form member 20 may also be heat bonded with the wall 17, thereby to form a joint 23 at the inner peripheral portions of the trough 11. If metal foil material is employed the material may be crimped together.

At least one of the sheet form members 10 or 20 may be provided with an outwardly extending tab 24. For example, as shown in FIGURE 5, the sheet form member 20 has a suspension tab 24 extending laterally outwardly and a suitable aperture 26 is formed therein by means of which the tab 24 may be suspended on a hook. Another convenient form would be to use a rectangular or square blank 10a as shown in FIGURE 6, to form the mold part and a suitable aperture 26a could be punched in one cover.

By making at least one of the sheet form members 10 or 20 of a transparent material, the wax bowl ring 18 is visibly displayed, thereby permitting the prospective plumber purchaser the opportunity of inspecting the nature and quality of the ring 18 at the time of purchase.

The wall 17 inwardly of the trough 11 or the ring 18 could be entirely removed, but if retained may be advantageously utilized for setting forth instruction indicia or other words and symbols desired to be used by the manufacturer. In this regard, the entire upper surface of the sheet form member 20 also forms a desirable display surface on which instruction indicia may be placed.

In usage, the packaging material may be readily removed from the ring.

After the packaging material is removed from the wax ring, the wax bowl ring is pressed around the horn or outlet of the closet bowl. The bowl is then set and with a slight twisting or rocking action the bowl sets the ring,

whereupon the flange bolts may be tightened and a gas, odor and waterproof seal is effected which makes a tight permanent setting for the closet bowl which will not harden, dry out or crack.

There has thus been provided in accordance with the principles of the present invention a unitary mold and package for a plumber's wax gasket and an improved method of making and packaging plumber's wax bowl rings which overcomes the deficiencies of the prior art.

Although minor modifications might be suggested by those versed in the art, it should be understood that I wish to embody within the scope of the patent warranted hereon all such modifications as reasonably and properly come within the scope of my contribution to the art.

I claim as my invention:

1. A unitary pouring mold and distributing package for making and selling a preformed plumbers' wax bowl ring comprising

first and second sheet form members made of a preformable thermoplastic resin material,

said first sheet form member being preformed and shaped to form an annular trough having a bottom wall,

an outer side wall having a radially outwardly extending flange at the upper end thereof, an inner side wall having a central opening corresponding in size to the horn or outlet of a closet bowl and

an upper wall extending across the center opening prescribed by said inner wall, the dimensional size and shape of said annular trough and its center opening corresponding to the dimensional size and shape of a wax bowl ring used as a plumbers' wax gasket for setting closet bowls,

and a wax ring poured in said annular trough and set to form a stable solid wax article comprising a wax bowl ring integrated into its own mold and distribution package,

said second sheet form member overlying said trough, said first and second sheet form members being bonded thermoplastically at said flange to form joints at the peripheral portions of said trough,

at least one of said sheet form members having a laterally outwardly extending suspension tab formed with a suitable aperture for suspension from a hook, and at least one of said sheet form members being transparent to display the wax ring visibly.

2. A unitary pouring mold and distributing package

for making and selling a preformed plumbers' wax bowl ring comprising,

first and second sheet form members,

said first sheet form member being made of a metal foil preformed in shape to form an annular trough having a bottom wall, an outer side wall and inner side wall, and an upper wall extending across the center of the trough,

said outer side wall having a radially outwardly extending flange at the upper edge thereof,

said inner side wall having a diameter corresponding in size to the horn or outlet of a closet bowl,

and a wax ring poured in said annular trough and set to form a stable solid wax article comprising a wax bowl ring integrated into its own mold and distribution package,

said second sheet form member overlying said trough and being crimped together with said first sheet form member at said flange to form a joint at the peripheral portion of said trough, at least one of said sheet form members having a laterally outwardly extending suspension tab formed with a suitable aperture for suspension from a hook.

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50 THERON E. CONDON, *Primary Examiner*.

ALEXANDER H. BRODMERKEL, *Examiner*.