

[54] **BURIAL URN**

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[58] Field of Search27/1; 220/67, 60, 59, 66, 24 A,
220/24.5, 27; 150/5

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Primary Examiner—Charles F. Rosenbaum

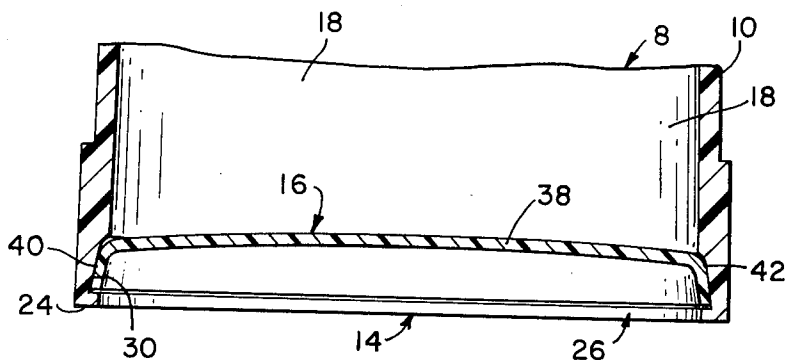
Assistant Examiner—G. F. Dunne

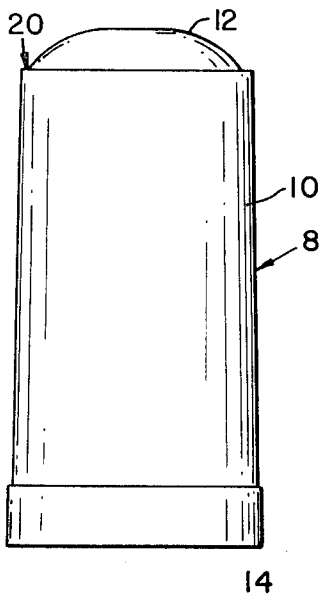
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[57] **ABSTRACT**

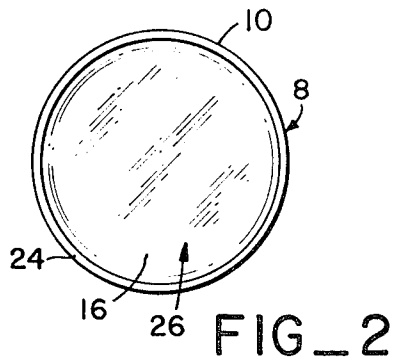
A rigid burial urn constructed of a thermosetting material which has a flat end face for supporting the urn in an upright position and a circular access opening extending through the end face. An interior wall of the container adjacent the end face includes a groove into which a resilient cover constructed of a thermoplastic material and having a frustoconical skirt is snapped to seal the interior of the container.

1 Claim, 5 Drawing Figures

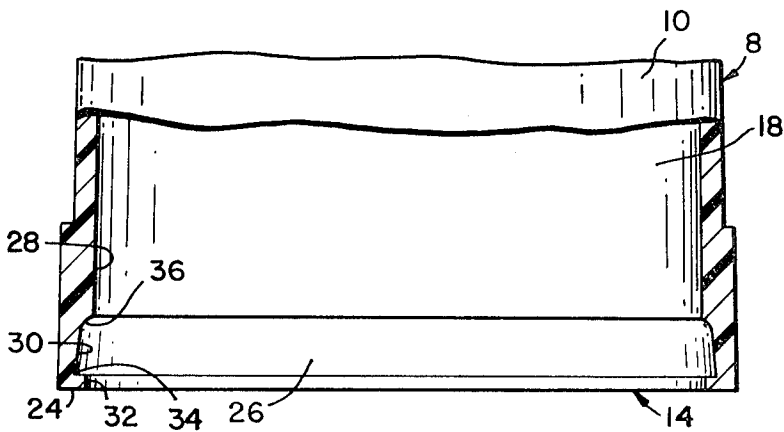




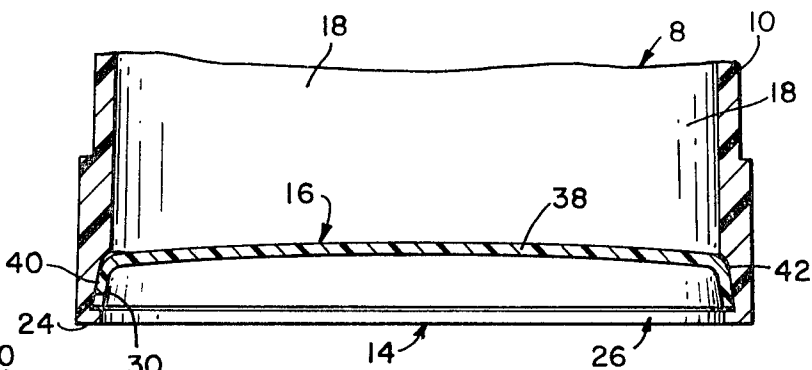
FIG_1



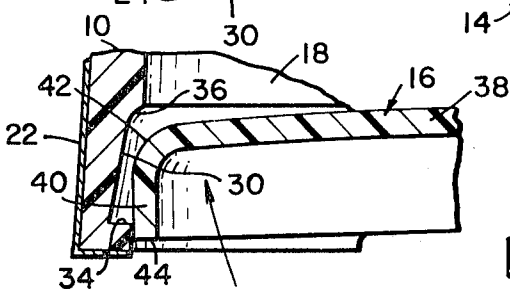
FIG_2



FIG_3



FIG_4



FIG_5

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BURIAL URN

BACKGROUND OF THE INVENTION

Presently urns are extensively used for retaining the cremated remains of humans in appropriate burial vaults. The urns are constructed of metal, usually cast, and include relatively elaborately fastened closures. Aesthetically more pleasing urns are fabricated, or cast of massive and very expensive bronze. Lower cost urns are constructed of cheaper cast materials, such as aluminum or cast iron which, thereafter, are plated with bronze or brass to give them the desired outward appearance.

The use of expensive and increasingly scarce material as well as the elaborate construction of the urn closure make presently available burial urns expensive, frequently beyond the reach of the poorer segments of society. Since the urns are usually cast their surface finish is poor and they require additional finishing operations such as barrel finishing or polishing, particularly when constructed of cast iron or aluminum which, thereafter, must be bronze plated. This further increases the costs of burial urns. Lastly, cast metal urns frequently exhibit gas inclusions which extend to the surface, initially or after surface finishing of the urn, which requires extensive, time consuming and expensive repair of the discarding of the urn.

SUMMARY OF THE INVENTION

The present invention provides a low cost urn adapted to receive various exterior ornamental designs and which is molded from low cost plastic materials. Briefly, the urn comprises a container having a closed and an open end and being constructed of a relatively thin walled plastic material. A cover constructed of a relatively thin and resilient plastic material is provided for closing the open end of the container. The cover includes a skirt of a frustoconical configuration. The opening and the skirt are constructed so that the skirt is biased into engagement with a container wall defining the opening to retain solid particles within the container and permit air flow past the cover and the skirt for equilibrating the air pressure in the container interior with the air pressure surrounding the container. Means are further provided for locking the cover to the container.

In the preferred embodiment of the invention the container is constructed of a rigid thermosetting material while the cover is constructed of a relatively resilient thermoplastic material to facilitate the locking of the cover in the groove. While the cover seals the interior of the container to retain the contents therein it permits air flow between the interior and the exterior. Pressure build-ups in the container from temperature variations or when the container is being shipped in its closed position by air, which could burst the container and/or its closure unless constructed to have sufficient strength, are thereby prevented.

Moreover, the burial urn of the present invention can be constructed of mass producible, low cost plastics which exhibit excellent surface finishes so that subsequent operations are not necessary. Additionally, the urns of the present invention can be metal coated, say with a layer of bronze, to provide them with the desired metallic-bronze outward appearance. Their costs, however, are a bare fraction of the costs of the massive metallic prior art burial urns. The use of urns, which is preferred by many people for personal reasons and which, moreover, is to be encouraged since available burial land is limited, becomes economically feasible for the less affluent segment of society by virtue of the present invention.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a front elevational view of a burial urn constructed in accordance with the present invention;

FIG. 2 is a bottom end view of the urn illustrated in FIG. 1;

FIG. 3 is a fragmentary, enlarged front elevational view, partially in section, illustrating the lower end of the urn;

FIG. 4 is a fragmentary view, in section, similar to FIG. 3 and illustrates the end cover locked to the urn for sealing the urn interior; and

FIG. 5 is a fragmentary enlarged cross sectional view of the lower urn end and illustrates the deflection of the skirt portion of the cover during insertion into the container.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the drawings, a burial urn 8 constructed in accordance with the present invention comprises an upright, tubular container 10 having a closed upper end 12 and an open lower end 14. A dished cover is placed across the open lower end of the container for retaining the contents of the urn in interior 18 of the container.

The container is constructed of a relatively rigid thermosetting plastic material and is preferably molded in a suitable mold (not shown) from the base material comprising polyester, nylon and diatomaceous earth in a conventional manner. Other materials can be substituted if desired. The exterior of the container may be cylindrical, or slightly tapered as illustrated in FIG. 1, and may include ornamental shapes, as illustrated at 20 in FIG. 1, and has a smooth, high quality exterior surface finish. No additional finishing operations are thus required.

The urn may be colored by the inclusion of suitable dyes in the base material or, alternatively, it may be painted or metal plated to give it the outward appearance of a solid metallic urn. The application of a metallic film or layer 22 to plastic materials is known and is therefore not separately described herein. The film may extend over all exterior and interior surfaces of the container but, preferably, extends only over the exterior surfaces to reduce the metal consumption of the plating process and thus the overall cost of the urn.

The lower container end 14 is defined by an annular, flat end face 24 which supports the container in an upright position. A circular opening 26 provides access to interior 18 of the container and is defined by an interior wall 28 in which a groove 30 is formed. The groove is axially spaced from end face 24 to define a radially inwardly extending annular lip 32 and has an axial extent, in the direction of the axis of the container, which substantially exceeds its depth. The groove tapers inwardly from a maximum diameter, sharp lower end 34 to a reduced diameter upper end 36 that includes a curved shoulder.

Cover 16 is preferably molded from a thermoplastic, e.g. styrene, sheet that provides the cover with the desired resiliency. The cover is defined by a dished-in circular center portion of disk 38 from which a frustconically shaped skirt 40 depends. The cover includes a radiused transition 42 between the disk and the skirt and the skirt terminated in an end 44 that has a maximum diameter. When the cover is in a relaxed position, that is when it is not engaged in groove 30 of container 10, the diameter of the outermost skirt end 34 exceeds the diameter of groove 30 at lower end 34.

The container is closed by placing cover 16 across opening 26, with skirt 40 trailing center portion 38, and pushing the cover inwardly until skirt end 44 moves past lip 32. At that point skirt 40 and particularly the lower skirt end 44 snaps outwardly into groove 30 so that lower skirt end 44 engages lower groove end 34 and thereby seals the contents of interior container space 18 and locks the cover to the container and, more particularly, to groove 30.

For generally used burial urns, an opening 26 diameter of about 4 to 5 inches is sufficient. With an outermost groove diameter of between about 4 $\frac{1}{4}$ and 4 $\frac{3}{4}$ inches for such urns best results have been obtained by constructing cover 16 of one-eighth inch thickness sheet material and reducing the wall thickness of skirt 40 to about one thirty-second inches during the molding of the cover. With such a cover the outermost diameter of lower skirt end 44 is maintained about 0.020 inch greater than the outermost diameter of lower groove end 34. This provides for sufficient interference to establish the desired seal retaining the urn contents in the container interior and provides a snap-in lock of the cover to the groove and lip of the container.

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After the contents have been placed into the container and opening 26 has been closed with cover 16 pressure differentials between the exterior and interior of the container due to temperature rises of the cover and/or temperature drops on the exterior of the container, as encountered when the container is being shipped in non-pressurized areas of high flying aircraft, can be equilibrated since air passage past the interengaging portions of skirt 40 and groove 30 is possible. Embarrassing rupture of the container or blowout of the cover is thereby prevented without the need for constructing the cover of relatively high strength material and/or providing it with heavy wall thickness and without the need for providing high strength, expensive means for securing the cover to the container. A burial urn of attractive appearance, which includes metallic surfaces, is thus provided at costs substantially below those attainable with prior art burial urn constructions.

I claim:

1. A relatively lightweight low cost burial urn comprising a container molded from a plastic material and having a flat supporting surface for supporting the container in an upright posi-

tion, an access opening extending through the flat supporting surface defined by an upright wall, a continuous groove in the wall separated from the supporting surface by a lip, and a dished-in cover constructed of a resilient material having a disc portion of a lesser diameter than the diameter of the access opening and a first wall thickness, and an annular flange extending generally perpendicularly and continuously from the disc over the full circumference of the disc, the flange having a free end with a maximum diameter, when relaxed, greater than a maximum diameter of the groove and an axial extent, in the direction of the access opening, that is less than the width, of the groove and, the flange having a second thickness that is less than the first thickness to increase the flange flexibility and permits fluid exchange between an interior and the exterior of the container due to pressure differentials therebetween whereby damage to the cover and dislocations thereof under such pressure differentials are prevented.

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