Oct. 20, 1936. C. E. PIECK 2,057,972

CONVERTIBLE CONTAINER

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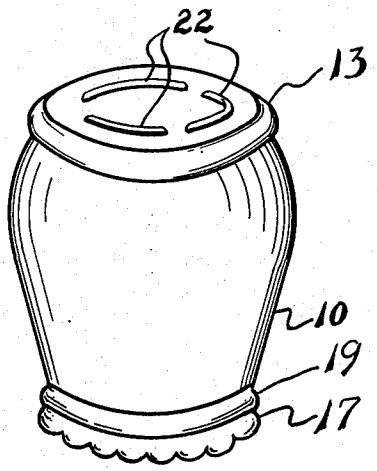


Fig. 3.

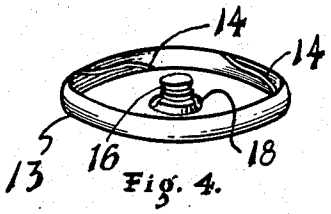


Fig. 4.

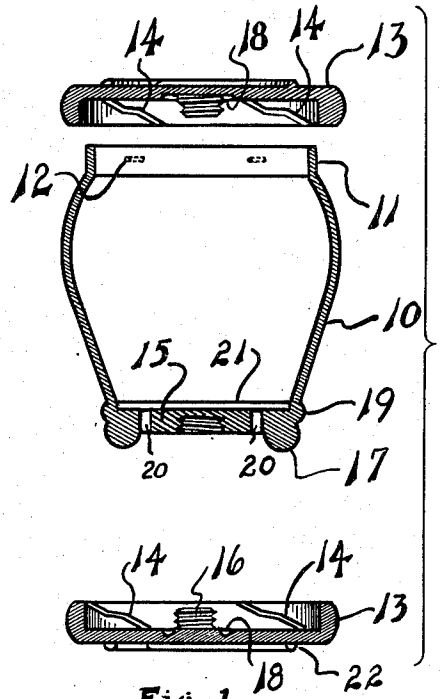


Fig. 1.

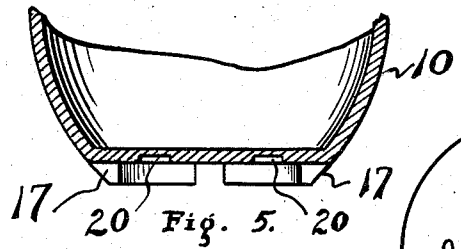


Fig. 5.

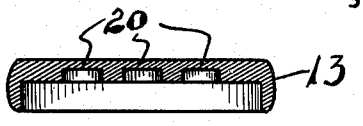


Fig. 6.

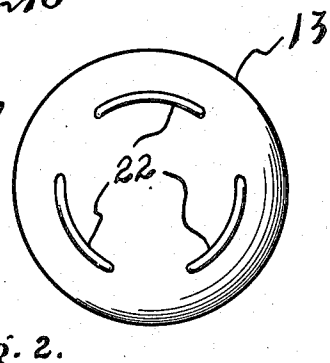


Fig. 2.

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CONVERTIBLE CONTAINER

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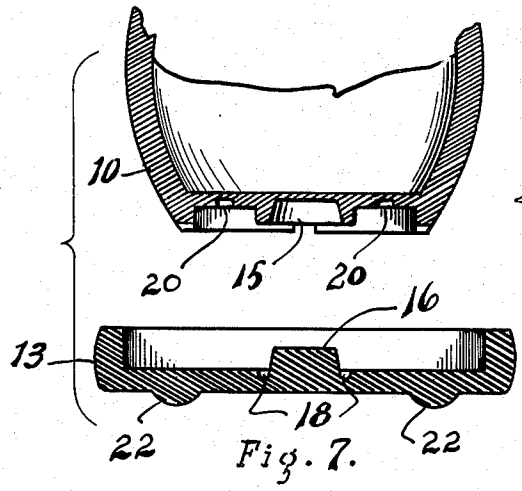


Fig. 7.

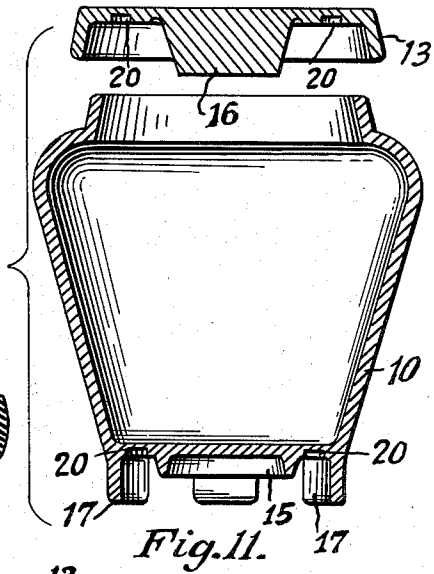


Fig. 11.

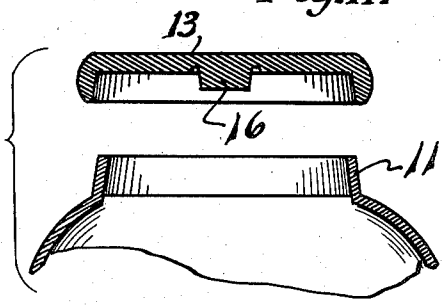


Fig. 8.

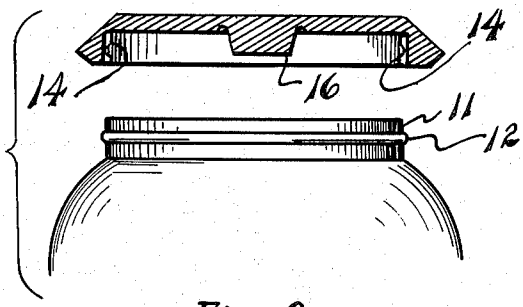


Fig. 9.

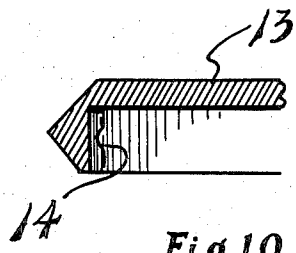


Fig. 10.

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UNITED STATES PATENT OFFICE

2,057,972

CONVERTIBLE CONTAINER

Carl Edward Pieck, Covington, Ky.

Application February 20, 1935, Serial No. 7,418

22 Claims. (Cl. 47—34)

This invention relates to a container for foods, cosmetics, medicines and the like, which is convertible to a flower pot, salt or sugar shaker and similar uses.

The present application is a continuation in part of my prior application Serial No. 716,110 filed March 17, 1934 and allowed August 22, 1934.

Specifically, my container may be used for jam, cheese, cold cream or the like and then converted into a useful and ornamental flower pot, shaker or simple container.

An object of my invention is to provide a container of such character that may be carried out in synthetic resin material for instance "Richelain", "Bakelite", etc.

Another object is the provision of means in such a construction, whereby the lid or the bottom of the container may be perforated with simple tools.

Another object is to provide means for attaching the lid to the bottom of the container to form a stable base thereon which is capable of retaining drained water. This feature is mainly for use when the container is used as a flower pot.

Another object is to provide means for sealing holes already made in a container of this character, the said means being readily removable when desired.

Another object is to provide a container lid which is adapted to confer three distinct uses.

Reference is now had to the accompanying drawings in which—

Fig. 1 is a sectional view in elevation of the container or jar, showing two sectional views of the lid; an upper one in which it is ready to be used to close the jar and the lower one in which it is ready to be attached as a base.

Fig. 2 is a plan view of the lid from above, showing the lugs upon which it will rest when the lid is used as a base.

Fig. 3 is an oblique view of the exterior of the jar, showing the lid attached in its upper position.

Fig. 4 is an oblique view of the lid, showing a portion of its interior or cavity portion.

Fig. 5 is a detail in sectional elevation of the container body showing depressions in the bottom which are adapted to be punched through to form holes.

Fig. 6 is a similar view of a lid similarly provided with depressions so that a shaker top may be formed from it by breaking holes through.

Fig. 7 shows the combination of a lid and container base. The bottom of the main body of the container is provided with depressions adapted to be punched into holes and a central tapered hole is provided to receive a lid. The lid is shown also in section provided with a conical central plug or boss which is adapted to fit the central hole of the container bottom.

Fig. 8 shows a cooperating lid in sectional elevation and container neck also in section, the lid and neck both being tapered and adapted to fit each other with a push fit.

Fig. 9 shows a cooperating lid and container neck in sectional elevation, both being provided with snap buttons.

Fig. 10 shows a detail of the lid shown in Figure 9, the interior snap means being shown on a larger scale.

Fig. 11 is an elevation of the simplest form of my invention. In this form the lid fits on the top of the container by a push fit over the edges of the latter, thereby protecting them from chipping.

The container comprises a body portion 10, adapted to hold both the original contents and later the soil. The upper portion of the body is a collar 11 over which a lid is intended to fit. The collar is provided with integral lugs 12 on its outer wall. The lid 13 is provided on its inner vertical wall with a plurality of staggered grooves 14, which are adapted to cooperate with lugs 12 to form a bayonet-type closure.

In the bottom of body 10 there is a threaded hole 15 which may, but preferably does not extend all the way through the bottom of the body. This hole is of susbtantial proportions. Inside the lid is a central threaded projection 16 which fits the hole 15 so that the lid can be attached to the bottom of the body. This is done by rotating the lid into the body bottom until the bosses 17 engage the inner lid surface. The two units are thus solidly locked into one; the lid interior forming a catch receptacle for liquid.

The bosses 17 as can be seen from Fig. 3 amount to a scalloped lower edge for the body 10. The empty spaces therefore allow the escape of moisture from the bottom of the pot, which is very desirable when the container is used as a flower-pot. About the threaded projection 16, there is a channel 18 which prevents contact of the bottom of body 10 and the inside of lid 13 around the immediate neighborhood of the threaded projection 16, thereby preventing tensile rupture of the latter or stripping of screw threads from such cause.

About the bottom of body 10, there is a raised circumferential band 19. This, together with the

beaded edge or bosses 17 below 19 adds weight to the bottom of the container besides adding to its appearance. It is therefore not topheavy when the lid is in its upper position. Strength is also materially increased at the bottom and lower edge.

To facilitate draining of moisture when the jar is in use as a flower-pot, the bottom of body 10 is provided with a plurality of small holes 20, of which the two shown in Fig. 1 are merely examples. From six to ten holes are recommended in actual practice. A sheet seal or gasket 21 is placed over the holes when the container is used for its original contents, to prevent leakage, but it is of course removed before the use as a flower-pot occurs. Holes 20 are not necessary and may be omitted if the container is to be used merely as such, not as a flower-pot.

In order to provide a stable support for the container when used as a flower-pot, the lid is provided with three or more lugs 22 cast preferably as arcs. Three lugs are preferred since they give the most stable support, i. e. a three point plane.

Besides "Bakelite", my jar may be made of other plastics, hard rubber, glass, metal, wood or any other suitable material and may be opaque or transparent. If transparent, the outer surface may be provided with a scale (not shown) which will indicate the amount of contents.

It will be seen therefore that I have provided an ornamental and useful jar, readily convertible to use as a flower-pot, which when so used is stable, well drained and which prevents soiling, wetting or damaging the surface upon which it rests.

Numerous modifications may be made in my container as shown in Figs. 5 to 10 inclusive, without departing from the spirit of the invention.

As shown in Fig. 5, the central hole 15 may be omitted from the bottom of the container and the holes 20 may be shortened to depressions covered with a thin skin of molded material that may easily be punched all the way through. The bosses 17 may be given the shape shown in Fig. 5, instead of that shown in Fig. 2.

As shown in Fig. 6, the bosses 22 may be omitted from all forms of the lid, and depressions 20, covered with a thin skin of molded material may also be molded into the lid. Piercing of such depressions to form holes makes it possible to have a shaker top at short notice on any form of the lid in which such depressions are provided. A central boss 16 either threaded or unthreaded may be provided on the interior of any such lid because its presence does not interfere with its utility as a shaker top.

As shown in Fig. 7, the central depression or hole 15 may be made unthreaded and tapered and the central boss 16 in the lid interior may be also made tapered and unthreaded to fit the hole 15 by a push fit. Such form is preferred because it is easier to mold.

Likewise, as shown in Fig. 8 the lid 13 and the shoulder 11 of the jar may be made to cooperate by a tapered push fit. Shoulder 11 is shown tapered and lid 13 is tapered to fit the shoulder.

As shown in Figs. 9 and 10, metal inserts 14 may be used as the locking means on the interior of lid 13 to cooperate with a molded band 12 or corresponding metal inserts molded into shoulder 11 on the jar. These metal inserts may be the common snap-buttons used on gloves or their equivalents. It is immaterial whether the female member of such closures is molded into the lid and the male member into the jar shoulder or vice-versa.

It is to be observed that the bosses 17 and the lid boss 16 are so proportioned that when lid boss 16 is fully engaged in the depression or hole 15, the bosses 17 just touch the inner surface of the web of the lid. By "web" is meant that expanse of molded material that joins all edge points of the rim or annulus of the lid. In other words, the "web" is the top of the lid.

Figure 11, while it is the simplest one of the forms shown, may be still further simplified by leaving off the serrated bosses 17, and leaving out the easily punchable depressions 20 from both the lid and the container body. The lid then is adapted to hold the container up and off the lid web by means of interior central boss 16 alone.

I claim as my invention:—

1. In combination, a container and a lid therefor, means for selectively attaching said lid to the top of said container, whereby to close the latter, or to the bottom thereof to provide a stable base, a perforated bottom on said container and an interrupted edge on the exterior thereof to permit liquid to drain from the container interior to the base.

2. In combination, a molded container and a lid therefor, integrally molded means for selectively attaching said lid to the top of said container whereby to close the latter, or to the bottom thereof to provide a stable base which is also a catch receptacle, a perforated bottom for said container and a beaded edge on the outside thereof to permit the liquid to drain from the container interior to the catch receptacle formed by the attached lid.

3. In combination, a container and a lid therefor, co-operating bayonet lock means on the top of the container and on the lid interior permitting said lid to be attached to and to close the top of the container, co-operating screw means on the interior center of the container bottom, and on the lid interior center whereby said lid may be attached to said container bottom to make a base and a catch receptacle therefor, said container bottom having a plurality of small holes whereby liquid may drain into the interior of the lid when the latter is attached to the container bottom.

4. In combination, a container of generally pot shape, a lid therefor, means on the top of said container and on the interior of said lid adapted to co-operate to form a fastening means, a bottom for said container having a central threaded hole extending upwardly into the said bottom, a central threaded projection extending from the interior surface of said lid and adapted to threadedly engage the center of said bottom whereby said lid is adapted to be attached to the bottom of said container to form a saucer-shaped base, said container bottom having a plurality of small perforations to allow drainage.

5. In combination, a container of generally pot shape, a saucer-shaped lid adapted to be attached thereto either at the top to close the container or at the bottom of said container, to provide a liquid receiver, a multi-perforated bottom for the container, and a plurality of serrated bosses on the outer bottom of the container adapted to engage the inner surface of the lid while still providing spaces for the escape of liquid from the bottom of the container.

6. In combination, a container of generally pot shape, a straightly perforated, molded bottom

therefor, a saucer-shaped lid adapted to be attached to the top thereof, means for attaching said lid in inverted position on the bottom of the container, an easily removable sealing means over said bottom and means to preserve free drain spaces to the interior of the said lid when same is attached to the bottom of the container.

7. In combination, a container and lid of molded plastic material, integrally molded means for fastening said lid to said container at the top to close same and at the bottom to provide a catch receptacle and base, a bottom for said container having integrally molded drain means and an integrally molded scalloped edge on the bottom of said container to provide free egress for liquid drained through the drain means.

8. In combination, a container of molded synthetic resin material, a lid therefor, said lid being adapted to co-operate with a tapered shoulder on the container to establish a push fit, a tapered shoulder on the container to co-operate with said lid, a tapered boss on the interior central surface of said lid, a tapered central recess in the outer surface of the bottom of said container adapted to receive said boss and to hold said lid when used as a base out of contact with said container except at said boss.

9. A combination according to claim 8 in which the lid is also provided with a plurality of depressions adapted to be easily punched through to make a shaker top.

10. A combination according to claim 8 having in addition, bosses on the outer edge of the container bottom, the bosses being of such height as to contact the lid interior when the lid boss is fully engaged in the container bottom.

11. In combination, a container of molded synthetic resin material, a lid therefor, bosses on the bottom of said container, a tapered depression in the middle of the bottom of said container, tapered walls about said depression, and a central boss in the interior of said lid adapted to fit the depression in the container bottom by a push fit and proportioned to allow the lid interior surface to contact the bosses on the container bottom when said fit is complete.

12. A combination according to claim 11 in which the lid is provided with a plurality of depressions molded therein so that they may be easily punched through to form holes.

13. A lid of molded synthetic resin comprising an internally tapered flange, whereby said lid may be held on a container by a push fit, and a web over said flange and a tapered boss in the middle of said web.

14. A lid of molded synthetic resin comprising an internally tapered flange, whereby said lid may be held on a container by a push fit, and a web over said flange and a tapered boss in the middle of said web, and a plurality of depressions in the surface of said web whereby holes may be easily punched in the web to convert the lid to a shaker top.

15. A lid of molded synthetic resin, an internally tapered flange on said lid whereby said lid may be held on a container by a push fit, and a plurality of depressions in the surface of said lid adapted to be punched entirely through so as to convert the said lid into a shaker top.

16. A lid of molded synthetic resin, an internally tapered flange on said lid whereby said lid may be held on a container by a push fit, and a plurality of depressions in the surface of said lid adapted to be punched entirely through so as to convert the said lid into a shaker top, and a plurality of bosses on the top surface of said lid to provide a stable support for same when the said lid is inverted.

17. A lid of molded synthetic resin material, a flange on said lid, locking means on said flange adapted to co-operate with other locking means on the lid's companion container, a plurality of bosses on the top surface of said lid and a boss on the inner surface of said lid in the middle thereof, said boss being adapted to co-operate with a female depression in the bottom of the lid's companion container.

18. A lid of synthetic molded material having a boss at the middle point of its inner surface, by which boss the lid is adapted to be attached to the bottom of the lid's companion container, and a snap fastening means molded into the inner surface of the lid rim and adapted to co-operate with snap fastening means molded into the lid's companion container to establish a snap closure.

19. A container of synthetic molded material having a lid, co-operating means on said lid and in the bottom of said container whereby said lid may be inverted and attached to said container to provide a stable base, depressions in said lid adapted to be easily punched through, similar depressions in said container bottom and bosses on said container bottom adapted to preserve clearance between said lid and said bottom when said lid is attached to said bottom.

20. In combination, a container, a lid for same, means for securely attaching said lid to the container to cover the top opening thereof, means for securely attaching said lid to the bottom of said container and means on the bottom of said container for preserving a plurality of clear spaces between said lid and said container bottom when said lid is attached to said bottom.

21. In combination, a container, a lid for same, said lid having a greater diameter than the bottom of said container, a downwardly extended flange on said lid, means for securely locking said lid to the container to cover the top opening and the top edges thereof, means for securely attaching said lid to the bottom of said container when said lid is in the inverted position whereby said lid is adapted to serve as a base and the area enclosed by the flange as a drip catcher for said container.

22. A container according to claim 20 in which the entire combination is made of molded synthetic resin.

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