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B. F. CONNER

2,076,550

JAR

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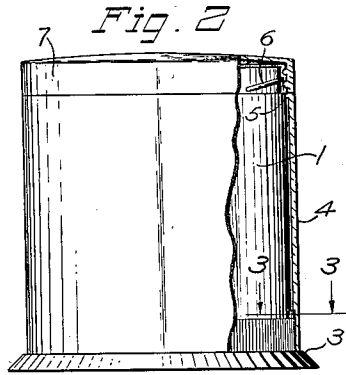
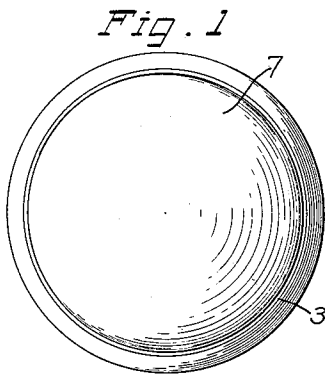


Fig. 3

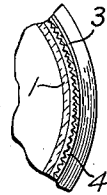


Fig. 5

Fig. 4

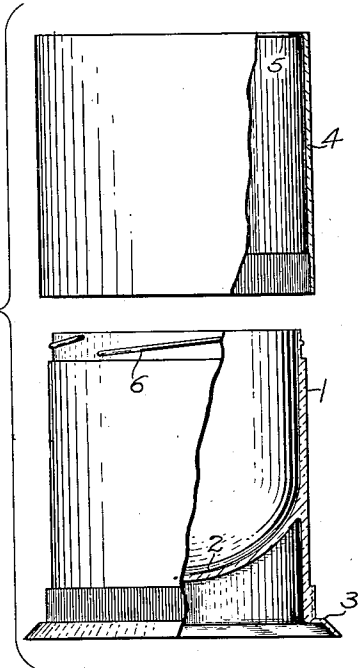


Fig. 6

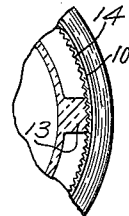
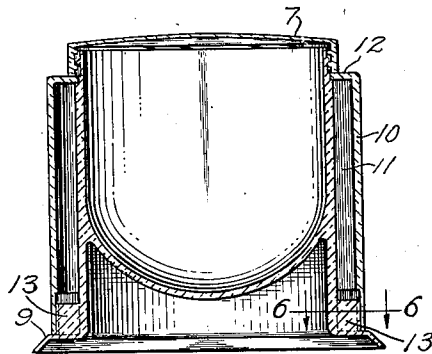


Fig. 7

Fig. 9

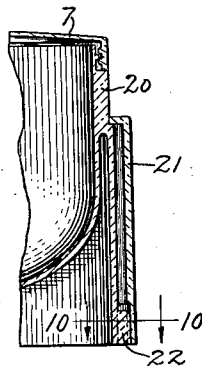
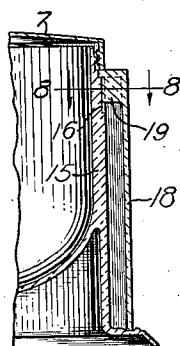


Fig. 10

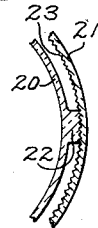
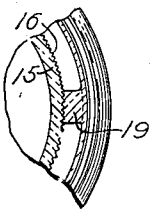


Fig. 8



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UNITED STATES PATENT OFFICE

2,076,550

JAR

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Application April 24, 1935, Serial No. 18,030

11 Claims. (Cl. 215—12)

The invention relates particularly to jars adapted or intended primarily for containing cosmetic preparations including salves, cold creams, and other preparations of a pastelike consistency and also including powders. Jars for products of the general character referred to have been commonly made of glass, but it has heretofore been proposed, and to some extent practiced, to mold jars of this type from materials of the synthetic resin class. Several alternative jars so molded are disclosed in my copending application for jars, Serial No. 18,031 filed June 22, 1935.

The general object of the present invention is to provide a jar of the type disclosed in the said copending application, but having certain alternative details of construction which may be advantageous under some circumstances or to meet specific conditions.

In the accompanying drawing I have shown several alternative embodiments of the invention in order that the scope thereof may be clearly indicated, but it will be understood that the drawing is intended for illustrative purposes only and is not to be construed as defining or limiting the scope of the present invention, the claims forming a part of this specification being relied upon for that purpose.

Of the drawing:

Fig. 1 is a plan view of a jar embodying the invention.

Fig. 2 is a side view with a part of the outer member and the closure broken away.

Fig. 3 is a fragmentary horizontal sectional view taken along the line 3—3 of Fig. 2.

Fig. 4 is a combined side and vertical sectional view showing the outer and inner members separated from each other but in the relative positions which they assume prior to assembly.

Fig. 5 is a vertical sectional view showing an alternative embodiment of the invention.

Fig. 6 is a fragmentary horizontal sectional view taken along the line 6—6 of Fig. 5.

Fig. 7 is a fragmentary vertical sectional view showing another alternative embodiment of the invention.

Fig. 8 is a fragmentary horizontal sectional view taken along the line 8—8 of Fig. 7.

Fig. 9 is a fragmentary vertical sectional view showing another alternative embodiment of the invention.

Fig. 10 is a fragmentary horizontal sectional view taken along the line 10—10 of Fig. 9.

Referring to Figs. 1 to 4 of the drawing, it will be observed that the body of the jar consists of two concentric members. The inner member 1 is

shown as being cylindrical in external contour and is provided at 2 with a bottom wall which is preferably spaced upward from the bottom edge of the outer cylindrical wall of the member. The member 1 may also be provided at the bottom with an outward projecting base portion 3.

The outer member 4 surrounds the major portion of the inner member 1 and is movable downward relatively to the inner member to effect engagement therewith. The outer member 4 has an annular portion with a downward exposed face, preferably of uniform height, which engages an upward exposed face or shoulder of the inner member, this latter face or shoulder being preferably of uniform height. As shown in Figs. 1 to 4, the said downward exposed face on the member 4 is at the bottom thereof, and the upward exposed face on the inner member is at the top of the outward projecting base portion 3. The diameter of the outer member may be only slightly greater than that of the inner member, and the outer member may be provided at 5 with a small inward projecting bead for closing the space between the two members.

It will be understood that the members 1 and 4 may be molded from materials of the synthetic resin class, although the invention is not necessarily so limited. The said members are molded separately and it will be evident that their walls are relatively thin so that they can be conveniently molded and effectively cured.

The inner member 1 is extended above the top of the outer member 4 and is adapted to receive or engage a closure of the cap type. Preferably, the inner member is provided with external threads 6 and a threaded closure or cap 7 of conventional form is provided. The cap 7 is substantially flat at the top, although it may be slightly crowned, as shown in the drawing. As shown, the exterior diameters of the outer member 4 and of the cap 7 are the same, but as to this there may be variation. The cap, when in place, engages the outer member and thus locks it in place.

The two members 1 and 4 may be cemented together if desired to prevent relative rotative movement; but I preferably provide the said members with integral interlocking means for preventing such movement. The construction of the interlocking means is preferably such that the two members can be easily and quickly assembled in any of several positions of relative angular adjustment. Preferably, at least one of the two members is provided with a complete circumferential series of vertical serrations or

notches, and as shown, both members are provided near the bottom with such serrations in engagement with each other. It will be observed that irrespective of the initial angular relation between the two members they can be easily and quickly engaged without much, if any, relative rotation. The outer member 4 is placed above the inner member 1, as shown in Fig. 4, and is moved downward so that the respective serrations engage each other. It will be evident that after assembly the outer member 4 can be grasped in one hand and that the cap 7 can be screwed into or out of place with the other hand, there being no possibility of relative rotative movement.

In Figs. 5 and 6 I have shown an alternative embodiment of the invention which is quite similar to that shown in Figs. 1 to 4. The inner member 8 is similar to the inner member 1 except that the base 9 thereof is of somewhat larger diameter. The outer member 10 is of considerably larger diameter than the inner member 8 so as to provide an annular space 11 of considerable width between the two members. For closing or bridging the said annular space 11 at the top thereof there is provided an annular flange 12 immediately below the level of the threaded portion of the inner member. As shown, this flange is formed integrally with the outer member and extends into an annular rabbet in the inner member. In this alternative construction, the flange 12 constitutes an additional annular portion with a downward exposed face, this face engaging the upward exposed shoulder at the bottom of the annular rabbet in the inner member. The interlocking means between the two members 8 and 10 consists of a plurality of radially extending vertically serrated lugs on one of the members and an annular series of vertical serrations on the other member. As shown, vertically serrated lugs 13, 13 are formed integrally with the inner member 8, and the outer member 10 is provided with an annular series of serrations at 14.

The construction shown in Figs. 7 and 8 is very similar to that shown in Figs. 5 and 6, the only difference being in the details of the interlocking means. The inner member 15 is provided near the top with an annular series of vertical serrations 16, and the outer member 18 is provided near the top with radially inward extending lugs 19 serrated to engage the serrations 16.

The construction shown in Figs. 9 and 10 is also similar to that shown in Figs. 5 and 6, differing chiefly in that the inner member 20 and the outer member 21 are so related that a portion of the inner member is peripherally exposed above the outer member 21. In this case the closure or cap 7 does not serve as a means for locking the outer member in place, the said member being held solely by friction. The inner member 20 is provided with serrated lugs 22 engaging serrations 23 on the outer member 21. As shown in Fig. 10, the inner member is not provided with an outward projecting base portion, but such a base portion may be provided if desired.

What I claim is:

1. The combination in a jar of the class described, of an inner thin-walled cup-shaped member externally threaded adjacent its upper periphery, an outer thin-walled member adapted to surround a portion of the inner member below the thread and movable downward relatively to the inner member to effect engagement therewith, the said outer member having an annular portion with a downward exposed face of uniform height which engages an upward exposed face of uni-

form height on the inner member, and a closure of the cap type interiorly threaded to engage the thread on the inner member.

2. The combination in a jar of the class described, of an inner thin-walled cup-shaped member molded from a material of the synthetic resin class and externally threaded adjacent its upper periphery, an outer thin-walled member molded from a material of the synthetic resin class and adapted to surround a portion of the inner member below the thread and movable downward relatively to the inner member to effect engagement therewith, the said outer member having near the top an inward extending flange with a downward exposed face which engages an upward exposed shoulder on the inner member, and a closure of the cap type interiorly threaded to engage the thread on the inner member.

3. The combination in a jar of the class described, of an inner thin-walled cup-shaped member externally threaded adjacent its upper periphery, an outer thin-walled member adapted to surround a lower portion of the inner member and movable downward relatively to the inner member to effect engagement therewith, the said thin-walled members being provided with integral interengaging means for positively preventing relative rotation, the said outer member having near the top an inward extending flange with a downward exposed face which engages an upward exposed shoulder on the inner member, and a closure of the cap type interiorly threaded to engage the thread on the inner member.

4. The combination in a jar of the class described, of an inner thin-walled cup-shaped member externally threaded adjacent its upper periphery and provided with an outward projecting base portion at the bottom, an outer thin-walled member surrounding a portion of the inner member below the thread and above the base portion and engaging at its bottom with the said base portion, and a closure of the cap type interiorly threaded to engage the thread on the inner member.

5. The combination in a jar of the class described, of an inner thin-walled cup-shaped member externally threaded adjacent its upper periphery and provided with an outward projecting base portion at the bottom, an outer thin-walled member surrounding a portion of the inner member below the thread and above the base portion and engaging at its bottom with the said base portion, the said thin-walled members being provided with integral interengaging means for preventing relative rotation, and a closure of the cap type interiorly threaded to engage the thread on the inner member.

6. The combination in a jar of the class described, of an inner thin-walled cup-shaped member externally threaded adjacent its upper periphery, an outer thin-walled member adapted to surround a portion of the inner member below the thread and movable downward relatively to the inner member to effect engagement therewith, the said outer member having an annular portion with a downward exposed face of uniform height which engages an upward exposed face of uniform height on the inner member, and a closure of the cap type interiorly threaded to engage the thread on the inner member, the said closure overlying the outer member and thus preventing removal thereof from the inner member.

7. The combination in a jar of the class described, of an inner thin-walled cup-shaped member externally threaded adjacent its upper periphery and provided with an outward projecting base

portion at the bottom, an outer thin-walled member surrounding a portion of the inner member below the thread and above the base portion and engaging at its bottom with the said base portion, and a closure of the cap type interiorly threaded to engage the thread on the inner member, the said cap overlying the outer member and thus preventing removal thereof from the inner member.

8. The combination in a jar of the class described, of an inner thin-walled cup-shaped member externally threaded adjacent its upper periphery, an outer thin-walled member surrounding a lower portion of the inner member and spaced outward therefrom and movable upward relatively to the inner member to effect disengagement therefrom, one of the said members having an integral annular flange which extends horizontally to bridge the annular space between the two members, and a closure of the cap type interiorly threaded to engage the thread on the inner member.

9. The combination in a jar of the class described, of an inner thin-walled cup-shaped member externally threaded adjacent its upper periphery, an outer thin-walled member surrounding a lower portion of the inner member and spaced outward therefrom and movable upward relatively to the inner member to effect disengagement therefrom, the said members being provided with integral interengaging means for preventing relative rotation and one of the said members having an integral annular flange which extends horizontally to bridge the annular space between

the two members, and a closure of the cap type interiorly threaded to engage the thread on the inner member.

10. The combination in a jar of the class described, of an inner thin-walled cup-shaped member externally threaded adjacent its upper periphery and provided with an outward projecting base portion at the bottom, an outer thin-walled member surrounding and spaced outward from a portion of the inner member below the thread and above the base portion and engaging at its bottom with the said base portion, one of the said members having an integral annular flange which extends horizontally to bridge the annular space between the two members, and a closure of the cap type interiorly threaded to engage the thread on the inner member.

11. The combination in a jar of the class described, of an inner thin-walled cup-shaped member externally threaded adjacent its upper periphery, a closure of the cap type interiorly threaded to engage the thread on the inner member, an outer thin-walled member adapted to surround a portion of the inner member below the thread and movable downward relatively to the inner member to effect engagement therewith, the said outer member leaving a portion of the inner member exposed immediately below the closure and the said outer member having an annular portion with a downward exposed face of uniform height which engages an upward exposed face of uniform height on the inner member.

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