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RECEPTACLE AND CLOSURE THEREFOR

Filed Jan. 6, 1930

Fig. 1.

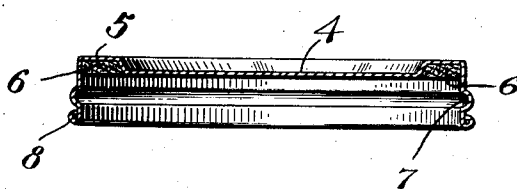
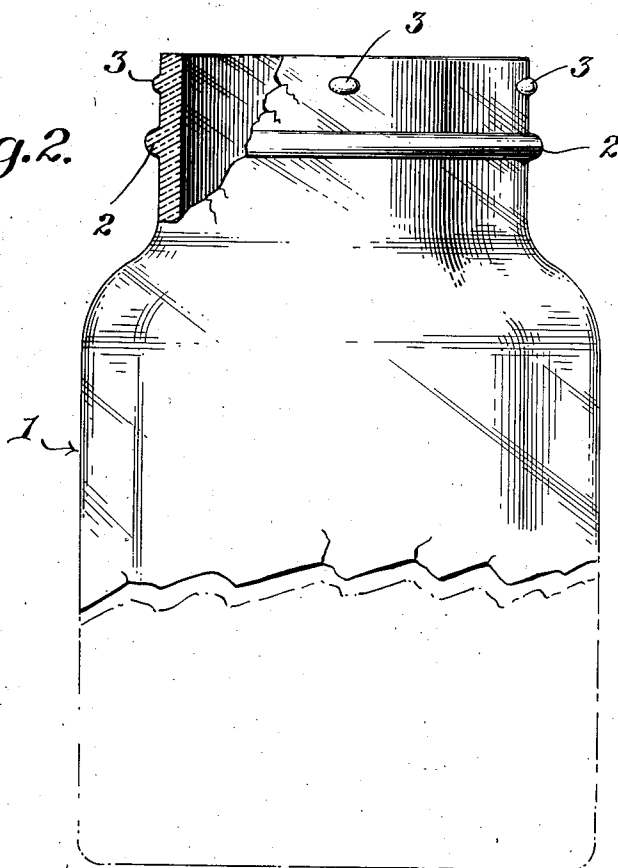


Fig. 2.



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RECEPTACLE AND CLOSURE THEREFOR

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This invention relates generally to a cap for jars and similar receptacles, of either the friction or vacuum type, and one of the objects of the invention is to provide a one-piece metal cap which is inexpensive in manufacture, but which in cooperation with the novel finish of the glass container, produces a highly efficient closure.

Another object of the invention resides in the provision of a cap closure which may be readily secured in sealing position, whether the container is being vacuum sealed or otherwise.

A further object of the invention is to provide a cap which permits ready removal from the container without liability of injury to the operator, and yet which remains intact for replacement for resealing the container.

Other objects and advantages of the invention will be apparent to those skilled in the art, from the following detailed description, when taken in connection with the accompanying drawing; in which

Figure 1 is a vertical sectional view of the cap closure; and

Figure 2 is a side elevational view of a glass jar with the improved finish; the neck of the jar being partly broken away to show the finish in section.

Referring to the drawing more in detail, the numeral 1 indicates a portion of a glass container, which may or may not be provided with the usual beading 2, as desired. The finish of the glass container includes a plurality of knobs or studs 3 which are arranged around the mouth of the container in spaced relation and at a slight distance below the mouth thereof. The number, size and shape of the knobs or studs, as well as their spacing are variable, depending upon the size of the container, the holding power desired, the gauge of cap metal, etc.

The cap is indicated generally by the numeral 4, and may be made of any of the common metals, such as tin plate, zinc, iron, steel or aluminum. The top of the cap is preferably provided with an annular seat 5 to receive the sealing compo 6; but it is to be understood that the cap may be equally well designed as a side seal. In embodying the in-

vention in a cap of the side seal type, the annular seat for the sealing material is formed in the skirt instead of in the top of the cap as illustrated in the preferred form of construction. And while I have illustrated, and prefer to use, a compo sealing medium, yet the seal may obviously be made by rubber gaskets or rings, or by a liner of pulp and oil paper, etc., and the invention contemplates the use of any desirable sealing medium.

The skirt of the cap is provided with a continuous annular beading, which presents an internal groove 7. This internal annular groove is arranged at the proper distance from the top of the cap, so that when the cap is in sealing position the groove will engage over the knobs or studs 3.

The bottom of the skirt is provided with an outward roll or bead 8, to facilitate the insertion of a removing tool, and to eliminate the liability of cutting the operator.

The manner of applying and removing the cap will now be briefly described.

In view of the fact that the cap has a continuous cylindrical skirt, it will be fairly rigid, and hence it would be practically impossible to stretch it over a continuous bead finish of slightly greater diameter, i. e., of a diameter sufficiently large to cause a gripping action with the cap. However, by the use of the finish disclosed herein, comprising a plurality of knobs or studs with intervening spaces, the skirt is distorted and flattened out tangentially between the knobs, and hence can be forced over the knobs with comparative ease, due to the increased diameter of the skirt at the points of engagement with the knobs.

This distortion of the cylindrical skirt, together with whatever stretch occurs, results in a clamping action; the lower wall of the annular groove clamping over the spaced knobs, and thereby securely fastening the cap in sealing position. Any attempt to lift the cap or to blow it off will be resisted by an increasing distorting force.

The cap may be removed by prying with a lifting motion at one or more of the holding points of the glass finish; any pointed tool being used for this purpose. When the cap

has been once removed it will be stretched sufficiently to permit an easy reseal to be made by manual pressure.

By reason of the fact that the locking groove 7 is continuous, the cap does not have to be placed on the container in any particular position relating to the knobs or studs 3. This facilitates the sealing; and when the caps are to be employed in vacuum sealing it permits the use of the present vacuumizers.

While the cap and glass finish have been described herein in considerable detail, it will be understood that various changes and modifications may be made without departing from the spirit of the invention, and the appended claims are intended to be of such scope as to cover all such changes or modifications.

What I claim is:

1. In combination, a glass container, a plurality of integral knobs widely spaced about the mouth of the container, a cap having a depending skirt, said skirt provided with a continuous internal groove spaced from the lower edge thereof, said cap seated on the mouth of the jar with the groove engaging over said knobs.
2. In combination, a metallic cap having an annular seat adapted to receive a sealing medium, the skirt of said cap provided with a continuous annular internal groove spaced from the lower edge of the skirt, a glass container, knobs widely spaced about the mouth of the container and formed integral with the container, said knobs being below the mouth of the container a sufficient distance to cooperate with the continuous groove, when the cap is in sealing position.
3. In combination, a metallic cap having in its top an annular seat adapted to receive a sealing composition, the skirt of said cap provided with a continuous annular internal groove, the bottom of the skirt having an outwardly rolled edge, a glass container, widely spaced knobs having curved surfaces arranged about the mouth of the container and formed integral with the container, said knobs being below the mouth of the container a sufficient distance to cooperate with the continuous groove, when the cap is in sealing position.

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