Oct. 22, 1929. L. T. CRABBE 1,733,053

DISPENSING CLOSURE FOR JARS

Filed Oct. 3, 1927

Fig. 1.

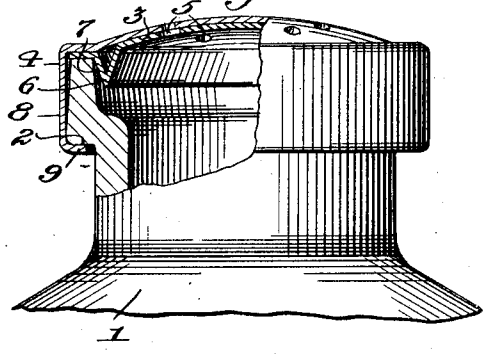


Fig. 2.

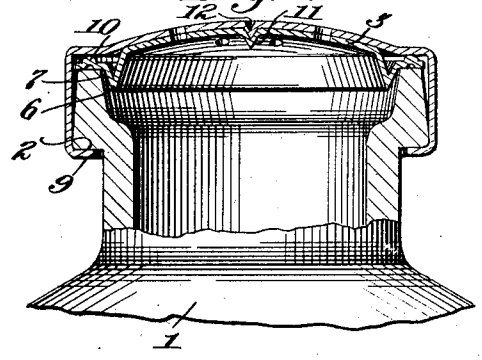
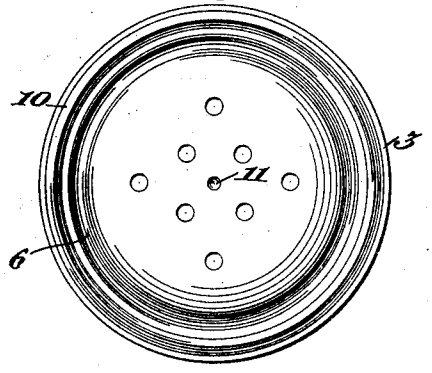


Fig. 3.



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Patented Oct. 22, 1929

1,733,053

UNITED STATES PATENT OFFICE

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DISPENSING CLOSURE FOR JARS

Application filed October 3, 1927. Serial No. 223,772.

The invention relates to new and useful improvements in closures for jars, and more particularly to a closure through which the contents of the jar may be dispensed without removing the closure.

An object of the invention is to provide a dispensing closure consisting of two parts and wherein the parts are held assembled solely through the connection of the closure to the jar.

A further object of the invention is to provide a closure of the above type which includes inner and outer perforated members through which the contents of the jar may be dispensed, and wherein the inner member is held from rotation through frictional connection with the jar, while the outer member is secured to the jar but is free to rotate thereon.

In the drawings which show by way of illustration one embodiment of the invention:—

Figure 1 is a view partly in section and partly in side elevation showing the improved closure;

Fig. 2 is a plan view of the inner member of the closure;

Fig. 3 is a view similar to Fig. 1 but showing a slightly modified form of closure.

The invention is directed broadly to a closure for jars and particularly to a closure through which the contents of the jar may be dispensed without removing the closure from the jar. To this end the closure includes inner and outer members, both of which are similarly perforated so that the perforations may be brought into alinement and the contents dispensed through the perforations. The inner member is provided with means which is adapted to frictionally engage the jar for holding said inner member from rotation. The outer member is provided with a depending flange, which is adapted to be turned underneath a shoulder on the jar for securing the members of the closure to the jar. This outer member is secured to the jar so that it may be rotated thereon for bringing the perforations into alinement or for placing them out of alinement so as to close the jar.

Referring more in detail to the drawings I have shown a dispensing closure as applied to a jar 1, which is provided with the usual ledge 2 adjacent the mouth of the jar. The closure consists of an inner member 3 and an outer member 4. The inner member 3 is provided with a series of perforations 5, 5. The outer member is also provided with a similar arrangement of perforations. The inner member is of sufficient diameter so as to overlie the lip at the mouth of the jar, and is of substantially the same diameter as the exterior of the jar at the mouth thereof. This inner member is provided with a depressed portion 6, which is V-shaped in cross section. The outer wall 7 of this depressed portion 6 is inclined slightly to the vertical. The inner wall of the jar mouth is of the usual construction. The outer wall 7 of this inner member is of sufficient diameter relative to the jar mouth so as to engage the inner wall of the jar mouth and frictionally grip the same when the projection is forced down into the jar. This projection may be differently shaped from that shown in the drawings. The essential feature resides in the shaping of the outer wall 7 which contacts with the jar mouth so as to get frictional grip between these parts.

The outer member 4 is provided with a depending flange 8. This depending flange extends downwardly and is adapted to be turned underneath the shoulder 2 on the jar as indicated at 9. In the placing of the closure on the jar the inner member is first placed on the jar with the projection 6 extending into the mouth of the jar and the outer member is then placed over the inner member and will contact therewith throughout the entire extent thereof preferably except in the region of the projecting portion, which of course is shaped so as to project away from the inner face of the outer member After the parts are thus assembled on the jar pressure is applied to the portion of the outer member directly above the lip edge of the jar. This will wedge the inner member against the inside of the glass finish of the jar. Rolls are then used to spin or tuck the lower edge of the depending flange of the outer member beneath the shoulder 2. This forcing of the inner member to the jar

mouth causes a sufficient frictional grip between the inner member and the inner wall of the jar mouth so that the inner member will not turn. The outer member however may be readily turned on the jar and thus it is that the perforations may be brought into alinement or moved out of alinement.

In Figures 2 and 3 I have shown a slightly modified form of the invention. In this form of the invention the inner member is provided with a raised rib 10, which is disposed substantially midway between the inner and outer walls of the jar mouth. The outer member is pressed against this rib when the flange is tucked underneath the shoulder on the jar. By having this inner member formed with a rib I have reduced the frictional contact between the members and this enables the outer member to hold the inner member forced well into the jar mouth without causing any binding between the members and insuring a free rotation of one member relative to the other. The rib of course may be formed in the outer member as well as the inner member and accomplish the same purpose. Also in this form of the invention the inner member is provided with a depression 11 at the center thereof, while the outer member is provided with a small bead 12 which is in the center of the closure and this bead extends into the depression in the inner member and serves as a pivotal connection between the two members.

It will be noted that the dispensing closure consists of two parts only and there are no rivets or pivot pins connecting the parts. They are held assembled solely by the connection of the outer member to the jar. It will also be noted that the inner member is held from rotation through frictional contact with the jar finish of the usual form of jar mouth. In other words, no particular shaping of the jar mouth is necessary in order to hold this inner member from rotation.

It is obvious that minor changes in the details of construction and the arrangement of the parts may be made without departing from the spirit of the invention as set forth in the appended claim.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

A dispensing closure for glass jars comprising inner and outer members having central dome-shaped portions adapted to contact one with the other, and a series of perforations therethrough adapted to be moved into and out of alinement, said inner member having an inwardly projecting portion adapted to frictionally engage the inner wall of the jar mouth for holding said inner member from rotation, said outer member having a depending flange adapted to be turned underneath the shoulder on the jar so as to hold the members to the jar and permit the outer member to be rotated, said inner member having a depression in the center thereof, and said outer member having a bead adapted to engage said depression and form a pivot around which the outer member rotates, said members directly above the lip of the jar being provided with substantially flat portions, one of which is formed with an annular rib projecting toward the other so as to reduce the surface contact between said members.

In testimony whereof, I affix my signature.

LINDSAY THORNE CRABBE.