

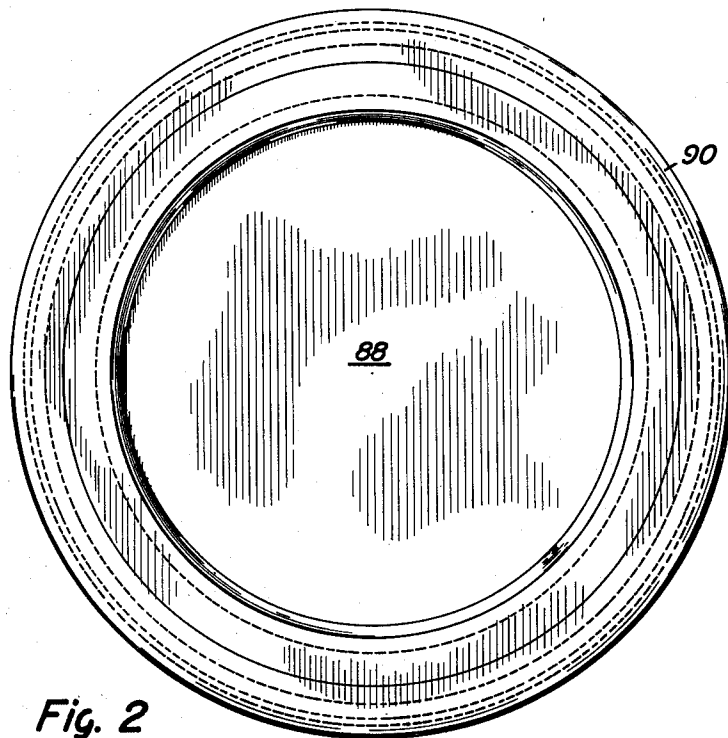
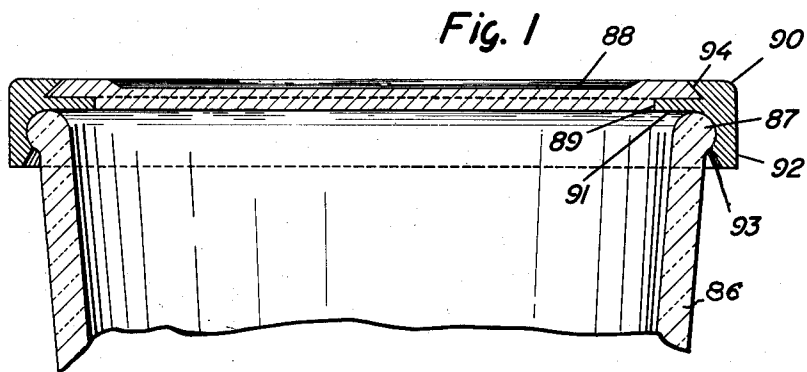
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W. H. ROBINSON

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DUAL-PURPOSE CLOSURE MEMBERS

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INVENTOR

William H. Robinson

by *Irvin V. Gleason*

Attorney

1

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DUAL-PURPOSE CLOSURE MEMBERS

William H. Robinson, 602 E. Jefferson St.,

Miamisburg, Ohio

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1 Claim. (Cl. 215—41)

This invention relates to dual-purpose closure members and it consists in the combinations, constructions and arrangements of parts herein described and claimed. More particularly, this invention relates to types of dual-purpose closures which are especially suitable for vacuum sealing of containers and for effective and easy resealing of containers for re-use after the original vacuum seal has been broken.

This application is a division of the copending United States application, Serial No. 539,104, filed October 7, 1955, and entitled, "Dual-Purpose Closure Members," issued on August 25, 1959, as United States Patent No. 2,901,140.

The requirements imposed to effect a commercially satisfactory and highly suitable dual-purpose closure have not hitherto been attained. Difficult initial removal of the closure from a container, assurance against dislodgment during handling and storage, protection of contents in a container against tampering while concomitantly affording an effective seal with easy reinstallation of the closure on the container for re-use after the original seal has been broken, are exemplary of such requirements. Presently available closures consist of a metal cap and gasket to be sealed upon a vessel such as a glass jar. The metal cap is of the type which is pressed on the vessel to effect a hermetic sealing but after the initial seal has been ruptured, the cap after ordinary removal is not generally capable of properly or effectively resealing the vessel for re-use.

Now, I have discovered dual-purpose closure members which synergistically attain the above noted requirements.

It is accordingly an object of the invention to provide a novel dual-purpose closure member.

Another object of the invention is to provide, in a device of the character set forth, novel means for maintaining a vacuum in a container while at the same time providing means for re-sealing the container.

Still another object of the invention is to provide means, in a closure member, for sealing and for re-sealing a container upon which the same may be mounted.

Still another object of the invention is to provide a novel combined rigid and flexible closure member for containers.

Other and further objects of the invention will become apparent from a reading of the following specification taken in conjunction with the drawings, in which:

FIGURE 1 is a fragmentary vertical sectional view illustrating one form of the invention mounted upon a container; and

FIGURE 2 is a plan view of the device illustrated in FIGURE 1.

In the form of the invention illustrated in FIGURES 1 and 2, there is shown a container 86 having an outwardly extending bead 87 at its upward edge. The closure member in this case consists of a circular disc 88 of metal or similar substantially rigid material having a shoulder 89 formed or undercut in its peripheral portion. A ring 90 of flexible material completes the present device and

2

is provided with an inwardly extending flange 91 which fits within the undercut portion 89 and bears against the top of bead or lip 87. A dependent skirt 92 is formed integrally with the ring 90 and is provided with a V-shaped inwardly extending annular bead 93 adjacent its lower end. The member 88 may be upwardly and inwardly beveled, as indicated at 94, but may be otherwise shaped to anchor it into the flexible portion, and the ring 90 is shaped to receive the same so that the rigid and flexible portions of the instant cover may be handled as a unit.

In operation, the device illustrated in FIGURES 1 and 2 may be placed as a unit upon the container 86 and the contents of the container may be vacuum or hermetically sealed therein, the rigid member 88 providing the necessary strength and rigidity to withstand the vacuum and a seal being formed by the flange 91 between the outer portion of the rigid member 88 and the upper end of the bead 87 and the entire device being maintained in position by the bead 93 bearing against the underside of the bead 87. Here again, the device may be removed as a unit without distorting the rigid member 88 by utilizing the fingers in conjunction with the lower end of the skirt 92 and it will also be apparent that this device is also capable of reuse after the vacuum has been broken.

While but one form of the invention has been shown and described herein, it will be readily apparent to those skilled in the art that many modifications and alterations may be made without departing from the spirit of the invention or the scope of the appended claim.

What is claimed is:

A closure for a container having an open upper end and an outwardly projecting lip surrounding said open upper end, comprising: an annular flexible member having an integral inwardly projecting flat flange portion intermediate its upper and lower ends adapted to sealably overlie said open upper end of said container and having a downwardly extending integral skirt, an annular inwardly directed bead formed on said skirt adjacent its lower end adapted to sealably engage under said lip of said container whereby said flat flange portion of said flexible member is adapted to be drawn into sealing engagement with said open upper end of said container, and a rigid disc closure member mounted on said annular flexible member, said disc closure member having an upwardly stepped annular flat rim portion overlying said flat flange portion so as to dispose the inner edge of said flat flange portion in abutting relationship to the step formed at the inner edge of said annular rim portion to prevent seal-breaking relative movement between said disc closure member and said annular flexible member, the outer edge of said disc closure member having a tongue retainingly received in a mating groove formed in the inner surface of said annular flexible member, the upper surfaces of said annular flexible member and said flat rim being substantially coplanar to conserve packaging space and to minimize the danger of a seal-breaking impact against exposed portions of said closure.

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