Sept. 29, 1964 R. G. AMBERG 3,150,811

CONTAINER

Filed July 24, 1963

Fig. 1.

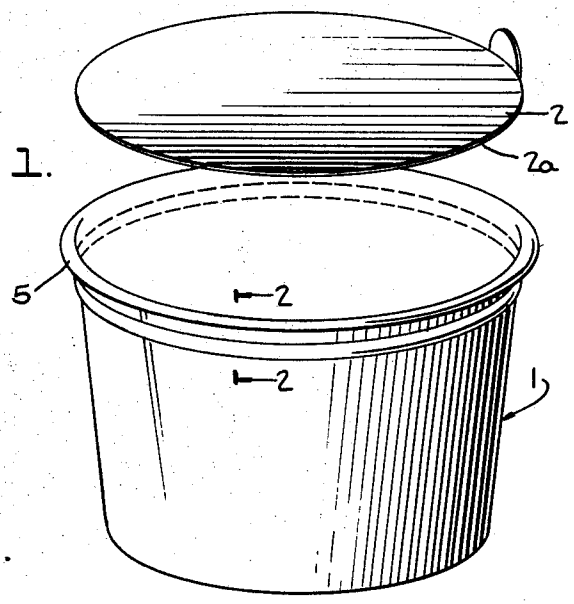


Fig. 2.

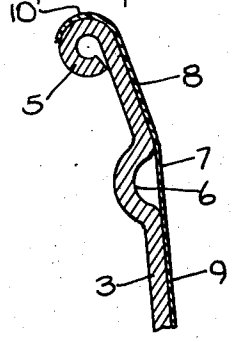


Fig. 5.

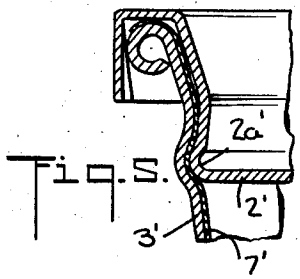


Fig. 4.

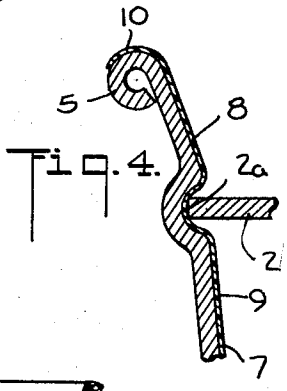
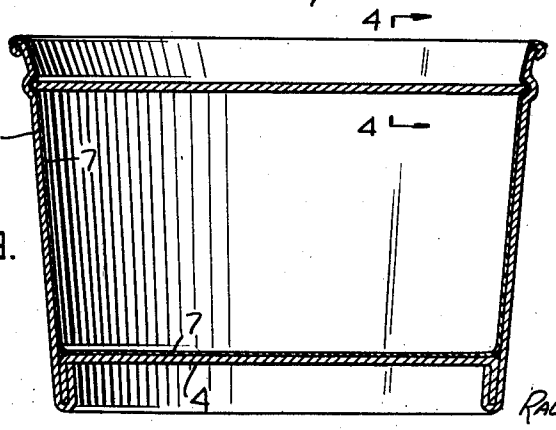


Fig. 3.



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3,150,811
CONTAINER

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5 Claims. (Cl. 229—5.5)

This invention relates to containers and more particularly to the means for effecting a seal between the container and closure means therefor. More particularly, the invention relates to paper or the like containers of the type provided with an annular groove disposed interiorly adjacent the mouth of the container for receiving a peripheral engaging margin of a closure lid.

Containers of the type above indicated are widely used for the packaging of liquids and semi-liquids, as well as to other foods requiring an air-tight or hermetic seal between the lid and container and I have discovered an effective means for providing such a seal which is equally adaptable for disc type lids or plug type snapover lids. Furthermore, such seal may be usefully employed with plug type lids whether such lids are flexible or stiff.

In essence, the invention contemplates the combination with a container of the type described of a relatively thin resilient member disposed over the internal groove for receiving the lid and intimately secured to the interior wall of the container in zones above and below the groove so as to hold the resilient sheet material substantially taut across the groove to thereby provide a yieldable cushion seal for receiving the peripheral engageable portion of the lid.

The invention will be more particularly described below in conjunction with the drawings in which:

FIG. 1 shows a perspective view of a container embodying the invention and a disc lid for closing the same;

FIG. 2 is an enlarged sectional view taken at line 2—2 of FIG. 1, showing the container before the lid has been seated in closed position;

FIG. 3 is a longitudinal sectional view showing a disc lid inserted in position to close the container;

FIG. 4 is a sectional view on an enlarged scale, taken at line 4—4 of FIG. 3; and

FIG. 5 is a sectional view similar to FIG. 4 but showing an embodiment in which the lid is a plug type lid.

Referring more particularly to FIGS. 1 and 2: The container is designated in general as **1** and the lid as **2**. The container body is of the conventional two-piece type comprising a side wall **3** and a bottom **4** (FIG. 3). The side wall **3** is provided at its upper end with a conventional beaded lip **5** and somewhat below the bead **5** is provided with the customary internal annular recess or groove **6**. **7** designates a relatively thin elastic liner (FIG. 2) which spans the groove **6** and is held securely thereover in a substantially taut condition by being adhered to the interior surface of the wall **3** at an upper zone **8** and a lower zone **9** disposed on respectively opposite sides of the groove **6**. In the present embodiment the liner **7** has its upper portion **10** extending upwardly over the top of the bead **5** and continues downwardly below the groove **6** and over the entire interior surface of the container including the side walls **3** and bottom **4** so as to be coextensive with and form a liner constituting the interior of the container. However, it is to be understood that a suitable seal requires only that the plastic sheet **7** be securely held against the interior of the body **3** for an area above and below the groove **6** sufficient to hold the sheet liner **7** taut across

the groove **6**. In the present embodiment the liner is secured to the interior of the wall **3** by being adhered thereto with a thermoplastic adhesive.

In FIGS. 3 and 4, it will be seen that the disc lid **2** is seated in closed position within the mouth of the container and the peripheral engaging portion **2***a* has flexed the liner **7** inwardly substantially the depth of the groove to thus insure a hermetic seal between the peripheral portion **2***a* and the liner **7**.

Referring to FIG. 5, it will be seen that instead of the disc type lid previously described, a plug type lid **2′** is utilized to close the container which is designated **3′** and is supplied with a liner **7′** which is initially disposed as shown in FIG. 2. However, when the lid **2′** is in position to close the container **3′**, the peripheral engaging portion **2***a′* has flexed the liner **7′** into the internal groove to thereby provide an effective seal.

While the invention has been described in particularity with reference to the preferred form thereof, it readily will be understood by those skilled in the art after understanding the invention that further modifications and changes may be made therein without departing from the spirit and scope of the invention, as defined by the claims appended hereto.

What I claim is:

1. In a container, the combination of a container body having a side wall provided with a peripherally disposed beaded lip and an internal annular groove disposed in the throat of said container below said bead, a resilient plastic liner firmly adhered to the interior of said body at a zone below said groove and extending upwardly across said groove and securely adhered to the interior of the throat of said body at a zone above said groove and said liner held taut across said groove by said upper and lower adhered zones and providing a yieldable seal for engaging a peripheral margin of a lid disposed in said groove.

2. A container as set forth in claim 1 in which said upper adhered zone extends from said groove to and including the upper part of said beaded lip.

3. A container as set forth in claim 1 in which said liner is coextensive with the interior and bottom side wall of said container and in which said upper adhered zone extends over the top of said bead.

4. A container as set forth in claim 3 in which said liner is adhered to the interior surface of said container substantially throughout said surface.

5. In a container, the combination of a container body having a side wall provided with a peripherally disposed beaded lip and an internal annular groove disposed in the throat of said container below said bead, a resilient plastic liner firmly adhered to the interior of said body at a zone below said groove and extending upwardly across said groove and securely adhered to the interior of the throat of said body at a zone above said groove, said liner being held in tension in a direction transverse said groove by said upper and said lower adhered zones and a lid having a peripheral margin exerting outward radial pressure against said liner and urging the same into said groove against the said tension of the liner.

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