

Feb. 25, 1969

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3,429,475

CAN

Filed July 18, 1960

Sheet 2 of 5

Fig. 3.

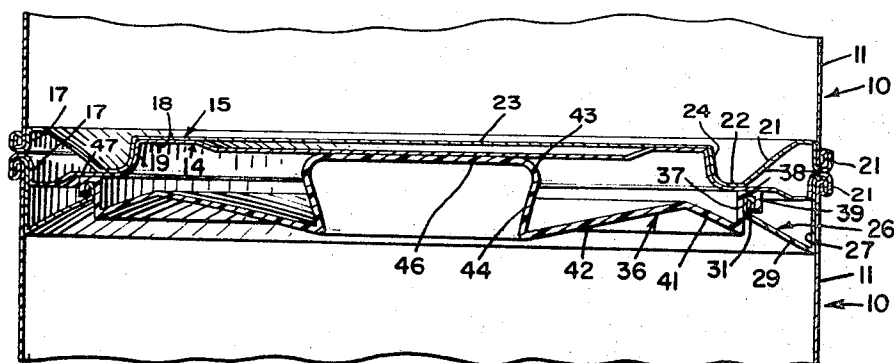
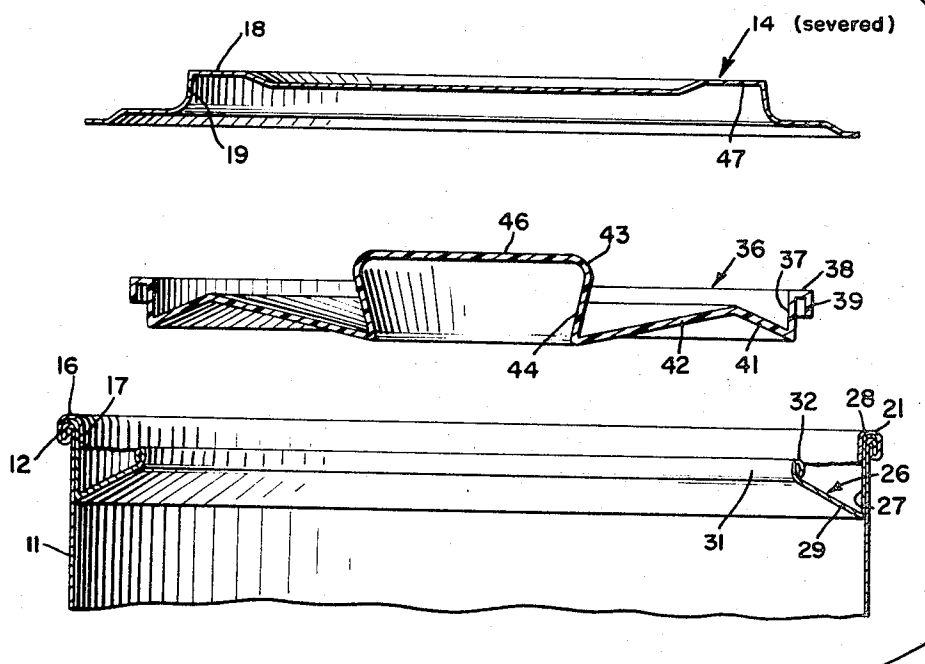


Fig. 4.

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Sheet 3 of 5

Fig. 5.

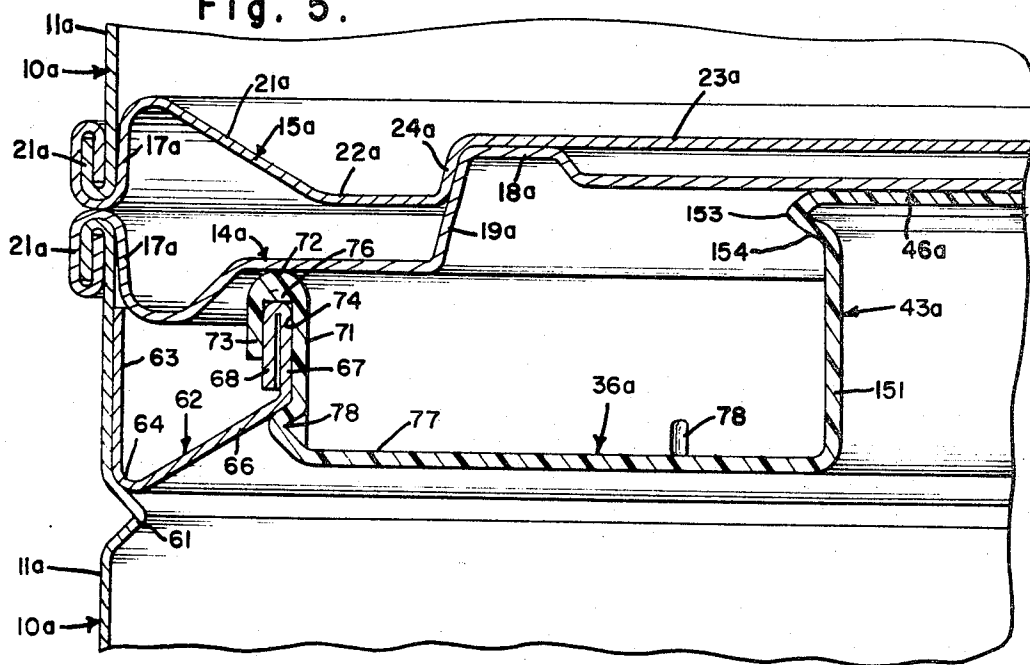
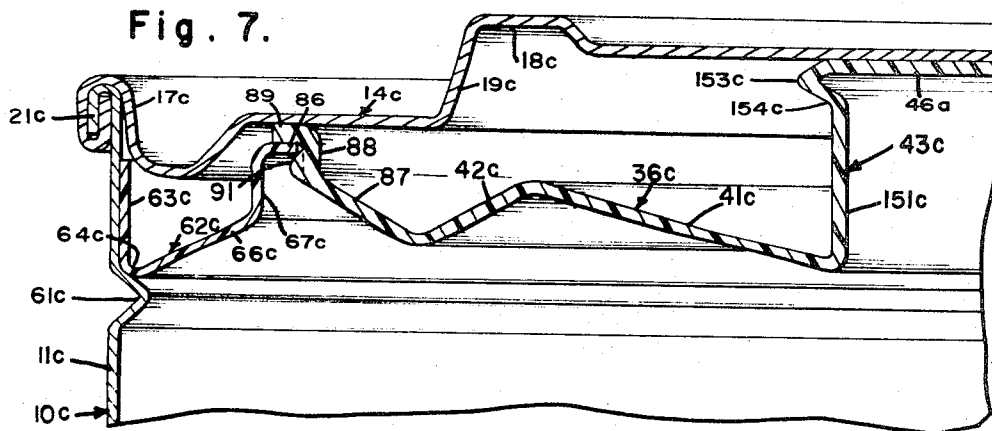


Fig. 7.



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Sheet 4 of 5

Fig. 6.

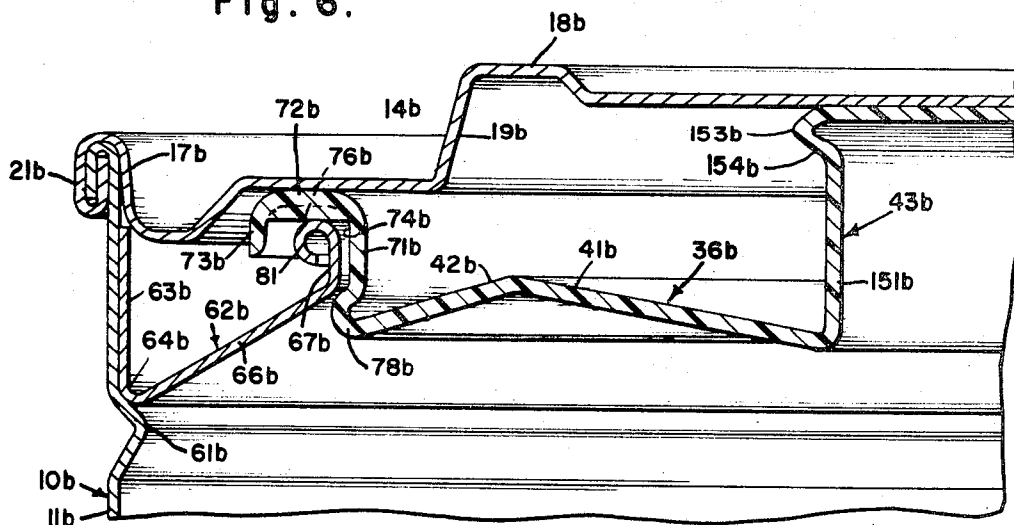
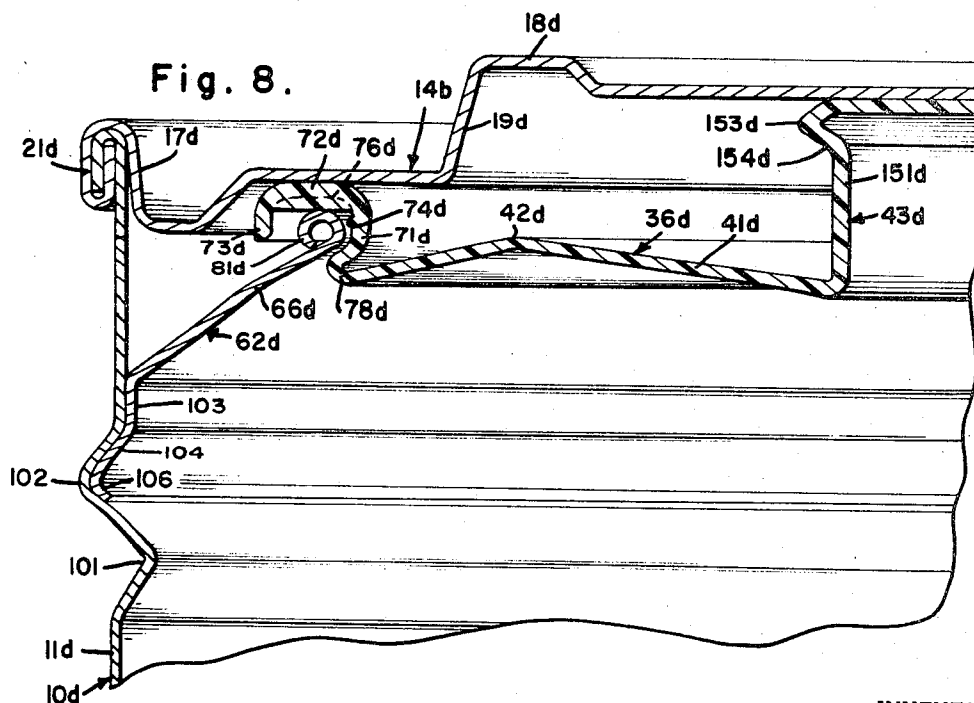


Fig. 8.



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Sheet 5 of 5

Fig. 9.

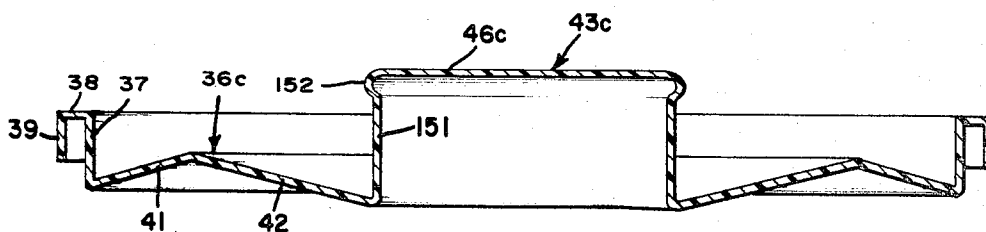
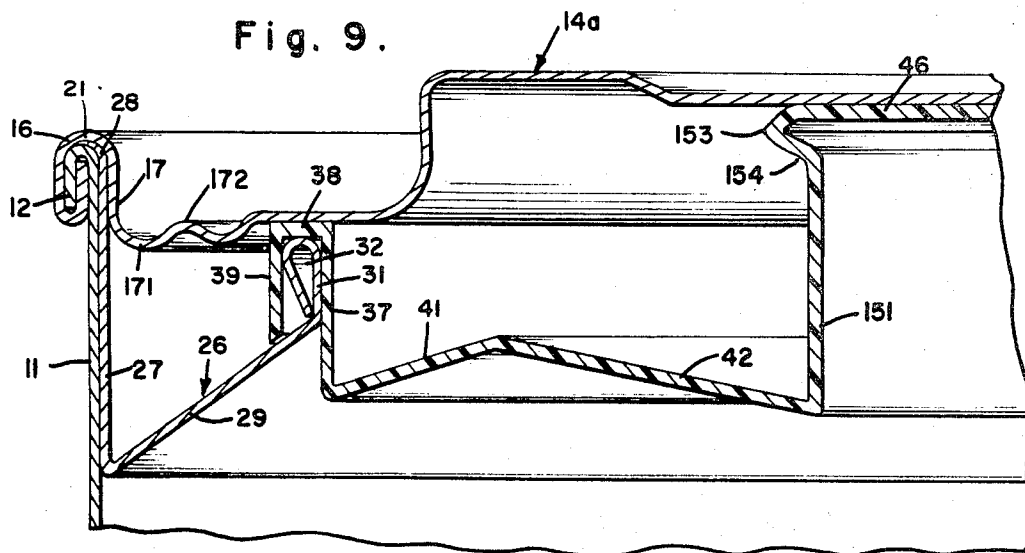


Fig. 10.

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1

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33 Claims

This invention relates to a new and improved can with inner replaceable closure. More particularly, the invention relates to a can having a conventional end which is removed in the usual manner to provide access to a replaceable cap-type closure, or the like, which may be removed and replaced at will.

Accordingly, the principal object of the present invention is to provide a can having an end closed in a conventional manner, but which differs from such conventional can construction in that after the end has been removed, a replaceable closure is provided which may be used to reseal the contents as required.

One of the features of the present invention is the provision of a collar located immediately inside the can end so constructed that when the can end is applied and seamed onto the body the collar is secured in place. The collar has an inwardly directed portion which terminates in a curl, bead or hem of a diameter substantially less than the inside diameter of the can body. The curl, bead or hem preferably projects upwardly and outwardly. A flexible plastic cap, or the like, snaps over the curl, bead or hem and thus is removably positioned to protect the contents of the can from the atmosphere.

A further feature of the invention is the formation of an integral lifting knob on the cap. The construction of the cap, and particularly the knob and flexible nature of the cap facilitates removal and replacement of the cap. The knob may project upwardly from a depression in the center of the cap to enhance the natural flexibility of the plastic material of which the cap is constructed so that it snaps on to the bead of the collar and may be removed therefrom, but sufficient tension is imparted to the cap so that the contents are sealed by the cap gripping the bead of the collar.

Still another feature of the invention is the provision of an upwardly projecting dome in the center of the upper end of the can, which provides clearance for the upwardly projecting lift-knob heretofore described. As a further feature of the invention, the bottom end of the can is formed with a depression having a shape complementary to the upward projection of the upper end. Such complementary construction makes it possible to stack cans on top of each other with the beads of the top and bottom cans resting on each other, but the nesting of the projections and depressions of the upper and lower ends of the cans preventing the stack from shifting or tipping.

Still another feature of the invention is the provision of a space between the reclosure cap and the can end, which space may be used for advertising circulars or premiums, directions for use of the contents of the can, or other purposes. A small package of additive such as a coloring material or flavor may be placed in the space between the cap and the end to be added to the contents of the can by the consumer as desired.

tainer so constructed that, when the can end is cut by a conventional can opener, upward pressure is exerted on the severed end so that it does not fall into the container nor is it necessary to pry the end out of the container to obtain access to the interior.

Another object of the invention is the provision of a lifting knob on the replaceable inner closure so constructed that it is easily gripped by the fingers of the user and yet is shaped so that the closure may be molded of

2

plastic without requiring the use of a split cavity mold.

An alternative feature of the invention is the provision of nibs or other means on the reclosure cap so constructed that communication is maintained between the interior of the can and the headspace between the cap and the upper can end. Thus when the can is evacuated (as in vacuum packing of products such as coffee), drawing a vacuum in the can simultaneously creates a vacuum in the headspace.

Heretofore various types of reclosure cans have been developed. In many of such constructions the cylindrical wall of the can is opened, as by means of a tear strip opened with a key, and cooperating means provided on the can body and the portion of the body originally above the tear strip and/or the can end itself for reclosure. Such constructions have the disadvantages inherent in key opening cans—such as high cost of manufacture and inconvenience to the consumer in opening the can. They have additional disadvantages in that sealing on reclosure is either ineffective or difficult from an operational standpoint.

In other prior constructions the top of the cylindrical body wall is deformed, as by the rolling of deep beads and the can end likewise deformed by stamping or drawing deep depressions which fit inside and seal against the bead. Thus when the end is cut by a can opener reclosure may be accomplished by pressing the end downwardly until the depression seats against the bead. Such constructions raise serious manufacturing obstacles. Further, because of lack of rigidity of the end, repeated reclosure of the end is not feasible. Another disadvantage of such constructions resides in the fact that the inside diameter of the bead must necessarily be almost as great as the can body diameter, which does not leave much room for the user to pry the end out of the bead and hence further contributes to the inconvenience of use. Additionally, the exposure of the raw edge of the severed end is a hazard to the fingers of the user.

Other prior art constructions employ snap-on or friction outer ends, which prevent hermetic sealing of the can and make sterilization of the contents after sealing impossible.

A still further prior construction employs a ring held in the double seam between the end and body and having a central perforation or aperture in which fits a friction plug-type reclosure cap. Removal of such caps requires use of a prying instrument of some type and is generally time and effort consuming. Further, if a tight seal is to be accomplished, considerable force is required to push the cap into the aperture which necessitates a rugged construction and increases the cost of materials and manufacture. The effectiveness of making an air-tight reclosure seal is also less in this type construction than in that hereinafter described.

Accordingly, the present invention affords important advantages over prior reclosure can constructions without material increase in the cost of construction thereof.

Other objects of the present invention will become apparent upon reading the following specification, and referring to the accompanying drawings in which similar characters of reference represent corresponding parts in each of the several views.

In the drawings:

FIG. 1 is an exploded vertical sectional view of the various elements making up the can, the body of the can being broken away to conserve space.

FIG. 2 is a vertical sectional view of the upper end of a can assembled.

FIG. 3 is an exploded vertical sectional view, showing the end of the can cut away by a conventional can opener and the plastic reclosure cap removed.

FIG. 4 is a fragmentary vertical sectional view of the upper end of one can and the lower end of a superimposed

can showing the nesting feature of the can construction.

FIGS. 5 to 8, inclusive, are fragmentary vertical sectional views of modifications of the invention showing the upper end of one can and the lower end of a superimposed can nested therewith.

FIG. 9 is a modified view showing a preliminary stage in the manufacture of the lift knob of the reclosure cap of FIGS. 5 to 8.

FIG. 10 is a fragmentary view of a pull knob at a preliminary stage of its production.

The present invention is adapted for use with a standard can, such as a sanitary can, although it may be adapted for use with other can constructions, such as paint cans and other general line cans. A conventional can has a body 11 which is customarily cylindrical in shape and seamed and soldered together in a side seam (not shown). Outwardly directed flanges 12, 13 are formed on the top and bottom of the body. In conventional sanitary can construction, the upper and lower ends 14, 15 of the can are disks of sheet metal each having a trough 16 formed at the outer periphery and containing sealing compound (not shown). Inwardly of the trough 16 is a vertical wall 17, which fits relatively snugly inside the end of the can body 11. In the construction of the present can, the diameter of the wall 17 of the end 14 is slightly less than conventional construction in order to provide space for the collar hereinafter described. The shape of the upper can end 14 may be different from conventional construction, in that an upwardly projecting dome 18 is provided, the dome affording space for the upwardly projecting knob of the reclosure cap, as hereinafter described. The vertical wall 19 or flank of dome 18 is so dimensioned as to nest with the bottom end 15 of a superimposed end, also as hereinafter described.

Referring to the form of end 14a shown in FIG. 9, the radius 171 at the bottom of wall 17a is somewhat greater than in conventional can ends. A raised annular bead 172 is provided inward of radius 171. Large radius 171 and bead 172 tend to spring the severed end 14a upward when it is cut by a can opener and prevent the end from dropping into the container. Bead 172 further tends to reduce wrinkling of the end as it is cut.

By means forming no part of the present invention, and well understood in the can manufacturing art, a closing machine is employed to form a double seam sealing the can end to the can body resulting in a conventional end bead 21. Such a conventional closing machine is employed to close the can of the present invention, and a feature of the present invention is the fact that no alteration of such machine is required, other than shaping the chuck to fit the can end. It will be noted that the elevation of dome 18 is greater than that of the bead 21 on the outer periphery of the can in the assembled position, as shown in FIG. 2.

The bottom end 15 is likewise conventional in construction, except that spaced inwardly of the trough 16 the end had a downwardly-inwardly slanted portion so that the elevation of the ring 22 is below that of the bead 21 in the assembled position of the can. Inwardly of the ring 22, a recess 23 is formed having a wall 24 with a diameter slightly greater than the diameter of the flank 19 of dome 18. Thus, as best shown in FIG. 4, the bottom bead 21 of the superimposed upper can 10 rests upon the top bead 21 of the lower can 10, and the dome 18 on the lower can fits into the recess 23 in the bottom end of the superimposed can. This nesting facilitates stacking the cans on end, a feature which is particularly important in displays and in storage.

An important distinguishing feature of the form of the present invention shown in FIGS. 1 to 4 is the provision of a collar 26 inside the upper end of the can and secured thereto. The collar 26 has a vertical side wall 27, having a diameter to fit inside the can body 11 with a friction fit. The depth of the side wall 27 is sufficient so that the collar is not severed when the upper can end 14 is removed by a conventional can opener. The upper end of the side wall 27 is formed with an outwardly directed flange 28,

which is similar in shape but shorter than the flange 12 on the upper end of the can body. Thus the flange 28 rests on top of flange 12 and prevents the collar 26 from being pushed downwardly into the can body. When the end is double-seamed onto the body 11, collar 26 is permanently secured to body 11. In the form of the invention shown in FIGS. 1-4, the bottom edge of the side wall 27 merges into an upwardly-inwardly directed breast 29, which terminates in an upwardly directed short-cylindrical neck 31, having an outwardly turned terminal curl 32. The inside diameter of neck 31 is preferably such as to provide convenient access to the contents of the can body. It will be noted that the outwardly turned curl 32 prevents injury to the fingers of the user when reaching inside the collar. Instead of an annular collar 26, other shapes may be used since a noncylindrical can body may be employed and, further, the opening in the collar may be non-circular. A bead or a hem may be substituted for curl 32 and in this specification and the appended claims the term "bead" is used to include both a bead, a curl and a hem. The bead may be inwardly, rather than outwardly, turned. The shape of collar 26 is subject to other modifications in that it may slant downwardly instead of upwardly.

The collar 26 receives a reclosure cap 36 which, in the preferred embodiment of the invention, is preferably formed of a relatively flexible inexpensive plastic material such as high impact polystyrene. Reclosure cap 36 fits over neck 31 and may be constructed to seal the contents of the can both before and after the can end 14 has been removed. For such purpose the side wall 37 of cap 36 may have a diameter slightly more than the inside diameter of neck 31 and a peripheral outwardly directed horizontal flange 38 terminating in a downwardly directed vertical flange 39 fitting around the outside of bead 32. Thus the cap 36 seals on neck 31 on the contact surfaces of wall 37 and neck 31, horizontal flange 38 and bead 32 or vertical flanges 39 and bead 32, or any combination of these zones.

Referring to other modifications of the cap hereinafter described in detail, it will be seen that nibs may be formed on the surfaces of elements 37, 38 or 39 which contact curl 32 for the purpose of easier removal and reclosure of the cap. Also, such nibs or other means may function as vents so that air may be evacuated from the headspace between cap 36 and end 14 when the can body is evacuated in packing such products as coffee under vacuum. (See particularly FIGS. 6 and 8).

In the form shown in FIGS. 1-4 at the bottom edge of wall 37 the cap is formed with a short, annular upwardly-inwardly slanted surface 41, which merges into a downwardly-inwardly slanted surface 42. The angle between surfaces 41 and 42 provides circumferential rigidity of the cap and also provides a spring action tending to lift upper end 14 after it has been opened. Centrally of surface 42 is a lift knob 43 having an outwardly-upwardly slanted side 44 merging into a horizontal top 46. It will be understood that handle 43 might be flat or even recessed. Where a nonprojecting knob 43 is used, then end 14 may be made without dome 18 and end 15 without recess 23. The cap 36 is preferably unitary and flexible, the shape of the cap combining with the flexibility of the plastic material to facilitate snapping the cap onto the collar and removing the same with facility. Where desired, the cap may be made to engage the bead 32 tightly so as to seal the contents from the atmosphere when the cap is in place.

Cap 36 as heretofore described and shown in FIGS. 1-4 specifically, the slanted side 44 of knob 43 is best produced by means of a split cavity mold. To avoid using a split cavity mold, a form of knob as indicated by reference numerals 43a-43d of FIGS. 5-8 may be used. As originally molded, the knob is as shown in FIG. 10. Such knob 43c originally has substantially vertical sides 151 with a slight bulbous projection 152 around the upper end and a flat top 46e. Such a shape may be stripped from the mold without using a split cavity. Downward pressure is applied to top 46e and hence a deep undercut 154a-d is

5

formed by bulging the upper edge outwardly as shown by reference numerals 153a-153d, respectively in FIGS. 5-8. The undercut 154a-d under bulge 153a-d facilitates lifting the cap.

The can may be filled at either end, i.e., the cap 36 and end 14 applied either at the can factory or the cannery. Where the can is to be filled at the top, the bottom end 15 is sealed onto the bottom of the can body 11 in conventional manner at the can factory. The collar 26 is slipped onto the upper end of the can body and is held in place by friction. At the cannery or other location when the can is filled, the contents of the can are then filled through the opening in the collar 26 and the cap 36 applied, snapping into place over the bead 32. At this point, advertising circulars, premiums, directions, or small packages of additives may be placed on top of the closure cap. Cap 36 prevents such materials from coming into contact with the contents of the can prior to consumption. Thereupon the upper end 14 is sealed onto the can body by conventional machinery, the seaming of the upper end locking the collar 26 permanently in place. The upper end 14 preferably fits so that one of the annular rings 47 of the upper end 14 fits relatively tightly against the horizontal flange 38 of the reclosure cap, holding it in place on the bead 32. End 14 may also engage knob 36 to assist in preventing displacement of the cap during transportation.

Alternatively, collar 26 may be shipped to the cannery loose, with plastic cover 36 attached, and both assembled as one unit after the product has been filled in the can.

Alternatively, where the can is to be filled at the bottom, cap 36 and end 14 may be applied at the can factory. In such case, the can is filled through the open bottom and end 15 applied by a conventional closing machine at the cannery. This method of filling is preferable where no material is to be inserted between end 14 and cap 36.

Where the containers are displayed at point of sale, they may be stacked end to end, as best shown in FIG. 4, it being understood that the use of dome 18 and recess 23 is not essential where cap 36 does not project upward.

At the destination, the consumer cuts off the upper end 14 with a can opener in conventional manner (see FIG. 3), the depth of the side wall 27 of collar 26 being such that the blade of the can opener does not sever the collar. Once the end 14 is removed, the advertising circulars or other material placed on top of the reclosure cap are accessible to the consumer. Prior to this time premiums and the like in the headspace are inaccessible and tampering therewith eliminated. When it is desired to remove all or part of the contents of the can, the reclosure cap is removed by lifting the knob 43 and thereby the cap flexes and snaps off bead 32. Whenever desired, and as many times as desired, the reclosure cap may be replaced.

A feature of the invention is a construction which permits cutting of end 14 without the possibility that end 14 will drop into the container or have to be pried out of the container. For such purpose, the height of knob 43 is greater than the area it displaces in the sealed container, or, in other words, the knob 43 is compressed. Thus it exerts an upward pressure to lift end 14 when it is severed. Further, the elevation of bead 32 and the thickness of flange 38 are such that when the end 14 is applied the collar 26 flexes inwardly slightly because of space requirements. Again, when pressure is relaxed by cutting end 14 the end is lifted. Radius 171 and bead 172 also cooperate to accomplish the same result, as heretofore set forth.

It will be understood that although the construction of the can herein illustrated is of the sanitary or hermetically-sealed type, the present invention may also be used in connection with other styles of cans, such as a paint can sealed at the upper end with a friction plug.

It will also be understood that in place of the simple reclosure cap herein illustrated and described, other caps, such as those having pouring spouts, dredges, or means for

6

measuring the volume of product dispensed, may be substituted. Other devices for proportionately adding various additives such as catalysts, activators for paints and the like, may be attached to add material to the contents being dispensed.

It will further be understood that means for mixing, stirring or otherwise mechanically manipulating the product may be incorporated in the cap 36.

A pressed fibre material may be inserted in the hollow of knob 43 and when such material is saturated with water it tends to keep the contents of the container moist. This form of the invention is particularly desirable for products such as tobacco, keeping the tobacco in condition for slow and cool burning. A dehumidifying agent may likewise be inserted to keep powdered products dry and prevent caking.

In the modification of the invention shown in FIG. 5, the can body is formed with an inwardly extending bead 61. Ring 62 differs from ring 26 of the preceding modification, in that it is not seamed between the end and body flange. On the contrary, ring 62 has a cylindrical wall 63 which nests between bead 61 and the upper end of 14a, the upper edge of the ring 62 seating between radius 17a of end 14a and the upper end of the can body 11a. At the lower end of cylindrical wall 63 is a curved portion 64 which fits against bead 61 (which serves as a stop) and inwardly of curved portion 64 is an upwardly slanted breast 66 which terminates in an upwardly extending neck 67. The inner edge of the ring 62 is turned inwardly in a hem 68 so that the raw edge of the ring is not exposed.

In the form of the reclosure cap 36a of FIG. 5, the side wall 71 of the cap has a diameter slightly less than the inside diameter of neck 67 and has a peripheral outwardly curved portion 72 fitting over the hem 68 and terminating in a short downwardly extending skirt 73 which fits over the outside of the hem 68. At intervals, around the circumference of the groove 74 between side wall and skirt is a plurality of nibs 76, there being approximately five in number. Nibs 76 on the contact surfaces make removal and reclosure of the plastic cap 36a easier. Further, where the container is to be evacuated (as in packing coffee) the nibs 76 serve as vents so that air may be evacuated from the headspace between the cap 36a and the top end 14a. Further, the nibs 76 may extend on all surfaces of groove 74, where said surfaces contact neck 67 and hem 68 to facilitate evacuation of the headspace. Below the wall 71 is a horizontally direct flange 77 and at the juncture of wall 71 and flange 77 are outwardly directed second nibs 78 which fit under breast portion 66 and hold the cap in place. Since the nibs 78 are deformable, the cap may be removed and replaced.

The lift knob 43a of the cap shown in FIG. 5 is somewhat different in construction and in its manner of production from that shown in FIGS. 1 to 4, inclusive. The form of reclosure cap 36 shown in FIGS. 1 to 4 requires the use of a split cavity mold. To eliminate use of such a mold, the lift knob 43a may be formed with a substantially vertical slide 151 which, in the initial condition of manufacture 43e as shown in FIG. 10 is only slightly outwardly curved in a bulb 152 at its upper end and terminates in a substantially horizontal top 46e. The curvature of the bead 152 at the top is sufficiently small so that the cap 43e may be stripped from a convention mold without difficulty and without the cost of construction of a split mold. After the cap is formed in the initial condition shown in FIG. 9, downward pressure on the top of the lift knob causes it to deform outwardly to the position shown in FIG. 5.

In other respects the details of construction and the nesting of the bottom of one can over the top of the lower can in FIG. 5 is similar to that shown in the preceding modification. Accordingly, similar reference numerals followed by the subscript *a* are used to designate corresponding parts.

In the modification shown in FIG. 6, a ring 62b similar to that used in FIG. 5 is used. However, a curl 81 is

formed on the upper end of neck 67b rather than hem 68 of FIG. 5. Reclosure cap 36b is likewise generally similar in construction, except that it is so seated on curl 81 as to permit ready evacuation of the headspace between ring 62b and upper end 14b. Thus the side wall 71b is spaced definitely inwardly from neck 47b and the horizontal flange 72b is of extended length so that the vertical skirt 73b is spaced from the curl 81. Nibs 76b are formed in the bottom of groove 74b to separate the walls of groove 74b from curl 81 and permit ready passage of air between the headspace and the can body. In other respects, the modification of FIG. 6 is similar to FIG. 5 and corresponding reference numbers followed by the subscript *b* are used to designate corresponding parts.

In the modification as shown in FIG. 7, the ring may be formed of plastic rather than metal. The outer wall 63c, radius portion 64c and slanted breast portion 66c are similar to the corresponding portions of the ring of FIG. 5. However, the neck terminates in an inwardly directed ledge 86 which, by reason of the fact that the ring 62c is formed of plastic, need not be beaded, curled or hemmed.

The form of reclosure cap 36c used in the modification of FIG. 7, differs somewhat from that of preceding modifications. The lift knob 43c is essentially similar to that shown in FIG. 5. At the bottom of the vertical wall 151c of the knob the cap slants in a stretch 41c upwardly-outwardly at an angle of about 15° with respect to the horizontal for about two-thirds of the distance between the axis of the can and the inner edge of ring 66c. Thereupon the cap slants in a stretch 42c downwardly at an angle of about 30° for a short distance and then upwardly in a stretch 87 at an angle of about 30°. The foregoing configuration of the cap gives it sufficient flexibility and yet rigidity to seat and unseat with a firm fit. The cap terminates in an upwardly extending side wall 88 which fits against the inner edge of ledge 86 and thence terminates in an outwardly directed terminus 89 which rests upon an inwardly directed ledge 86. A plurality of nibs 91, there being preferably five in number, are formed on wall 88 to seat under ledge 86 and detachably hold the cap in place.

In the modification shown in FIG. 8, the can body is formed with an inwardly directed bead 101 and an outwardly directed bead 102 immediately thereabove. The ring 62d is, in this form of the invention, preferably formed of coil stock, the ends of the ring being stapled, locked, seamed or butt welded together (not shown). The side wall 103 of the ring extends downwardly and adjacent its lower end is formed with an outwardly slanted portion 104 to lie against the outward bead 102 and then terminates in a short inwardly slanted portion 106, so that the ring is locked in the outwardly directed bead 102. Above side wall 103 the ring slants upwardly-inwardly in breast 66d and terminates in bead 81d. The reclosure cap 36d in the modification of FIG. 8 may be similar to cap 36b shown in FIG. 6.

In the modification of FIGS. 5 to 8, inclusive, parts corresponding substantially to previously described parts of other modifications are designated by similar reference numerals followed by the suffix *a* to *d*, inclusive.

What is claimed is:

1. In a container construction, a cylindrical body; an end, said end being attached to said body and removable from said body at the point of consumption of said container; a collar, said collar having a cylindrical wall fitting inside the top end of said body and having a depth such that a can opening instrument may traverse and cut said end without injury to said collar, means forming a peripheral seam between the end and said cylindrical body permanently securing said body and said end, a breast slanting upwardly-inwardly from the lower edge of said cylindrical wall, an annular, upwardly projecting neck on the upper end of said breast having an opening sufficient to provide access to the interior of said body, and an outwardly turned terminal bead on the upper end

of said neck; and a unitary flexible reclosure cap fitting on said collar under said end, said cap having a peripheral short, cylindrical, downwardly-extending flange sealing against the outside of said bead, a narrow annular horizontal flange extending inward from the upper end of said downwardly-extending flange and sealing against the top of said bead, a cylindrical side wall extending downwardly from the inner edge of said horizontal flange and sealing against the inside of said neck, an upwardly-inwardly slanted surface extending from the lower edge of said side wall, an annular depression in said slanted surface and an upwardly projecting lift knob disposed centrally of said depression, the top of said knob being higher than the top edge of said body; said end being formed to bear against the top of said knob and against said horizontal flange of said cap.

2. A construction according to claim 1, in which said end is formed with an upwardly projecting dome centrally of said end having an elevation higher than the top edge of said body, there being an annular space of considerable depth between said end and cap outside said lift knob.

3. A construction according to claim 2, which further comprises a second end secured to said cylindrical body at the end opposite said first-mentioned end, said second end being formed with a central recess substantially complementary to said dome, whereby when containers are stacked end to end the top end of one container nests inside the bottom end of a superimposed container.

4. In a container construction, a body; an end; means for securing said end to said body; a collar on the upper end of said body, said collar having a wall fitting inside said body, a breast slanting upwardly-inwardly from the lower edge of said wall, a neck on said breast having an opening sufficient to provide access to the interior of said body; and a unitary, flexible reclosure cap fitting on said neck and resiliently biased into engagement therewith, said cap having an upwardly projecting lift knob downwardly compressed and bearing against the underside of said end in the assembled position of said container construction and lifting upward when said end is severed by a conventional can opener, the top of said knob being higher than the plane of the upper edge of said collar before being downwardly compressed.

5. A construction according to claim 4, in which the top of said knob is initially higher than the top of said body and in which said cap further bears against said end in an annular zone between the center and periphery of said end, forming thereby an oil tight seal.

6. A construction according to claim 5, in which said end has an upward projecting dome against which said knob bears.

7. A construction according to claim 4 in which said collar and said body are flanged and said collar is seamed between said body and said end.

8. A construction according to claim 5 in which said body is formed with a body bead spaced downwardly from said end and in which said collar has a cylindrical wall stopped from downward movement by said body bead and having its upper edge restrained by said end.

9. In a container construction, a body, an end secured to said body, a collar adjacent one end of said body, cooperating means on said collar and body to secure said collar in position in said body, said collar being formed with a neck, and a unitary, flexible reclosure cap, said neck and cap having cooperating means for detachable snap engagement of said cap on said collar, said cap having an upward projecting lift knob, said cap having a peripheral short, cylindrical skirt engaging the outside of said neck, a narrow annular horizontal flange inward of said skirt resting upon the top of said neck, and a cylindrical side wall extending downwardly from the inner edge of said horizontal flange and fitting against the inside of said neck.

10. A construction according to claim 9, wherein said cooperating means include a plurality of nibs to maintain communication between the portion of said body below said cap and the portion of said body above said cap, whereby upon evacuation of one of said portions the other said portion is evacuated.

11. A construction according to claim 9 in which said cap is provided with deformable nibs fitting under said neck to detachably hold cap on said body.

12. A construction according to claim 9 in which first nibs are formed on the underside of said horizontal flange and second nibs are formed projecting out from said side wall and engaging under said neck to detachably hold said cap on said collar.

13. A construction according to claim 12 in which said skirt is displaced outwardly from said neck.

14. A reclosure cap formed of a unitary flexible plastic material comprising a peripheral short cylindrical skirt, a narrow-horizontal flange extending inward from the upper end of said skirt, a cylindrical side wall extending downwardly from the inner edge of said horizontal flange, an upwardly slanted conical portion extending from the lower edge of said side wall, an annular depression in said conical portion and a lift knob disposed centrally of said depression.

15. In a container construction, a body; an end; means for securing said end to said body; a collar on the upper end of said body, said collar having a wall fitting inside said body, a breast slanting upwardly-inwardly from the lower edge of said wall and terminating in an opening sufficient to provide access to the interior of said body; and a unitary, flexible reclosure cap over said opening, said cap having an upwardly projecting lift knob downwardly compressed and bearing against the underside of said end in the assembled position of said container construction and lifting upward when said end is severed by a conventional can opener.

16. A can comprising a body terminated by closure means comprising an outer member holding in place an inner closure member which comprises a ring secured against longitudinal sliding movement within the body and a removable and replaceable cover closing the ring opening, the outer member being mechanically locked around its periphery to the can body and adapted to be mechanically severed to separate it from the can body and being in pressure engagement with the inner closure member, at least one of said members being deformed by said pressure in an amount such that when the outer member is severed from the body and the pressure between the members is released the restoration of the deformation of the deformed member under its natural resiliency is sufficient to raise the severed edge of the outer member out of engagement with the portion of the can from which it was severed.

17. A structure such as defined in claim 16 wherein the outer member is secured to the body by a double peripheral seam and wherein the elastic restoration resulting from the release of the pressure engagement of the members with one another is in excess of the height of the seam.

18. A structure such as defined in claim 16 wherein the outer member is a frangible disk hermetically sealed with the can body along the periphery of the disk.

19. A can comprising a body terminated by closure means comprising an outer closure and an inner closure at least one of which forms a hermetic seal for the terminated end of the body, the inner closure comprising a ring secured against longitudinal sliding movement within the body and a removable and replaceable cover closing the ring opening, a portion of the outer closure that is spaced radially inwardly of the body making pressure engagement with the inner closure, at least one of said closures being deformed an amount such that when the outer closure is severed from the body and the pressure between the inner and outer closures is released

the restoration of the deformation of the deformed closure under its natural resiliency is sufficient to raise the severed edge of the outer closure out of engagement with the portion of the can from which it was severed.

20. A can comprising a body terminated by closure means comprising an outer closure and an inner closure, the inner closure comprising a ring secured against longitudinal sliding movement within the body and a removable and replaceable cover closing the ring opening, the outer closure making a hermetic seal with the body and at a portion thereof that is spaced radially inwardly of the body making pressure engagement with the inner closure, at least one of said closures being deformed by said pressure, an amount such that when the outer closure is severed from the body and the pressure between the inner and outer closures is released the restoration of the deformed closure under its natural resiliency is sufficient to raise the severed edge of the outer closure out of engagement with the portion of the can from which it was severed.

21. In a container construction, a body, an end secured to said body, a collar adjacent one end of said body, cooperating means on said collar and body to secure said collar in position in said body, said collar being formed with a neck, and a unitary, flexible reclosure cap, said neck and cap having second cooperating means for detachable snap engagement of said cap on said collar, said cap having an upward projecting lift knob and in the assembled position the cap being compressed under said end whereby, on cutting of said end, said end is lifted upwardly by said cap.

22. An integral one piece sheet formed thin walled plastic article of manufacture having a first portion at least a part of which is disposed in a first plane, a second portion integrally joined to said first portion and at least a part of said second portion being disposed in a second plane substantially parallel to and axially offset from said part of first portion, an integral hollow third portion joining said first and second portions and extending between first and second said planes, the juncture between said third portion and said second portion being characterized as being peripherally continuous and defining a relatively sharp angle whereby said second portion has an extent transverse to a common axis of said first, second and third portions greater than at least a portion of said third portion and an undercut surface is provided.

23. A one piece plastic lid member for a container having integral hollow knob means projecting from the plane of the cover portion adjacent thereto, said knob means being characterized as having a peripherally continuous head portion and a hollow peripherally continuous stem portion, said head portion being in spaced relation to said cover portion and connected thereto by said stem portion, said head portion having a dimension, as measured transversely to the common axis of said head and stem portions, greater than said stem portion adjacent said head portion, the area of juncture of said head and stem portions defining an undercut surface to afford facile engagement with said knob means.

24. The lid member set forth in claim 23 wherein said knob means is substantially centrally located in said lid member and said lid member and said knob means are substantially circular in configuration.

25. A lid member as set forth in claim 23 in which said undercut surface extends radially inwardly toward said stem with a substantial component of extension away from said head.

26. A lid member as set forth in claim 23 in which said area of juncture forms a relatively sharp angle.

27. A lid member as set forth in claim 23 in which said stem portion has an axial taper.

28. A lid member as set forth in claim 23 in which said stem portion adjacent to said head portion tapers toward said cover portion.

11

29. A lid member as set forth in claim 23 in which said cover portion has peripheral means for detachable engagement with a container.

30. A lid member as set forth in claim 23 in which said cover member has a generally conical portion radially outwardly of said knob means.

31. In a reclosure can construction, a body, an end seamed to said body, said can end having means below the top of the seam for defining an area of cut for a can opener, a collar having an annular wall the outer surface of which fits snugly in the body at the upper end thereof, the uppermost part of said annular wall of the collar bearing against the can end at the seam, said annular wall of the collar terminating below the top of the seam and above the defining area of cut of the can end, said collar having an enlarged opening for access to the interior of said can, a resilient cap for said opening, the cap being supported at its periphery by the collar, and cooperating means on said collar and cap for detachably retaining said cap on said collar; said cap being formed with a lift knob and said cap immediately surrounding said knob being formed with an annular section yieldable so that said knob is downwardly compressible, and when said end is in place said end displacing said knob below its normal level with respect to the part of the cap that is supported by said collar so that when said end is severed said knob rises above the level at which it was held by said end, for convenient access to said knob to facilitate manual removal of said cap from said collar.

32. A can construction according to claim 31 in which said knob bears against the underside of said end and said means includes an annular portion of said cap being against the underside of said end.

33. An integral one piece sheet formed thin-walled

12

plastic article of manufacture having a first portion, a second portion integrally joined to said first portion and disposed axially offset from said first portion, an integral hollow third portion joining said first and second portions and extending between first and second portions, means forming a juncture between said third portion and said second portion, said means being characterized as being peripherally continuous and with two stretches of the plastic sheet defining a relatively sharp angle, one of said stretches being a peripheral continuation of said second portion, whereby said peripheral continuation has an extent transverse to a common axis of said first, second and third portions greater than at least a portion of said third portion and an undercut surface is provided.

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