

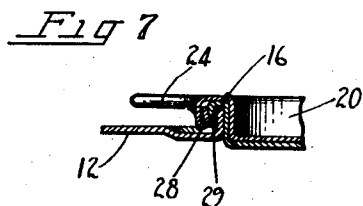
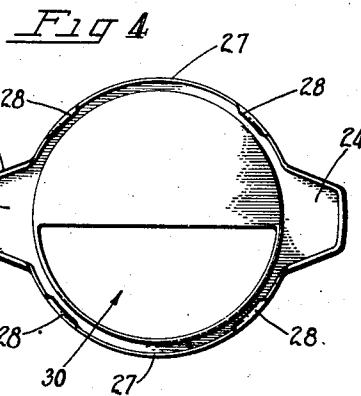
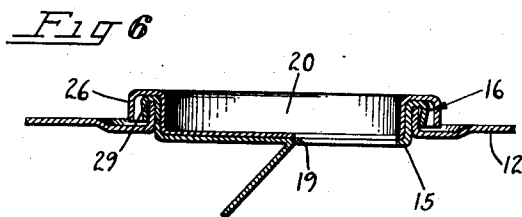
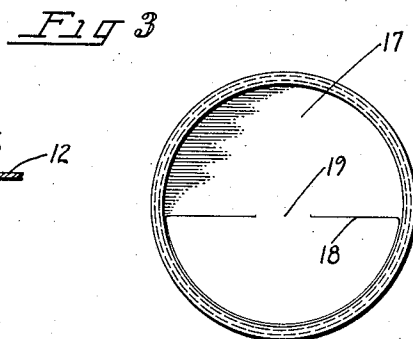
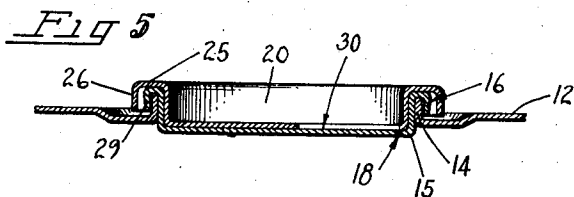
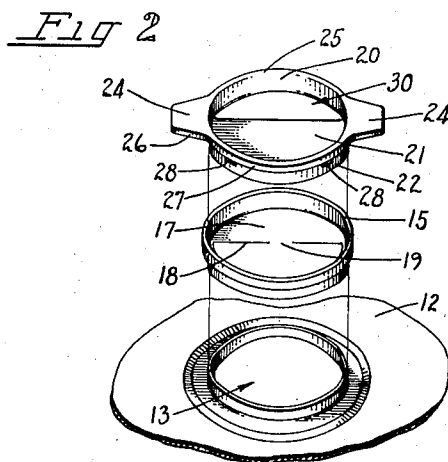
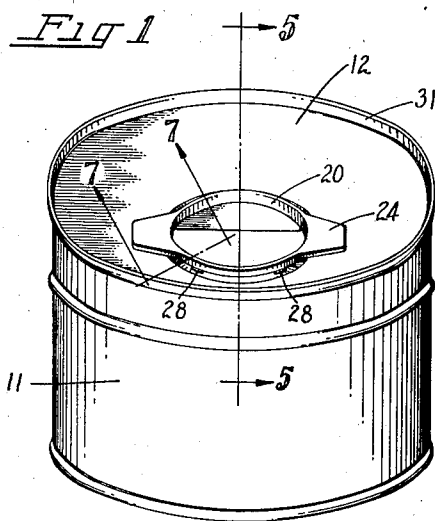
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T. F. BRENNAN

2,185,180

CONTAINER

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2,185,180

CONTAINER

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6 Claims. (Cl. 221-64)

The present invention relates generally to containers or cans and has particular reference to a can adapted for holding condiments, granular substances or other dry materials including ground or bean coffee, dried milk and the like, the can having a reclosure cap which is adapted by selective positioning relative to a dispensing opening formed in the can to provide a temporary closure when in one position and when in another position to allow free dispensing of the can contents.

An object of the invention is the provision of a can for condiments and dry substances which is provided with a replaceable reclosure cap which when applied is adapted for movement into an open or a closed position and which covers and uncovers a dispensing opening of the can.

Another object is the provision of such a reclosure cap which when applied to the can is rotatable into a closed or an open position relative to a dispensing opening made by breaking out a part of the can.

A further object of the invention is the provision of a can having a part surrounded by an upstanding wall on which a reclosure cap is adapted to be yieldingly mounted, such a cap when so assembled being rotatable into open and closed positions.

Yet another object is the provision of a rotatable reclosure cap for a can which is removably secured in a puncturable sealing member, the latter being permanently clinched to the end of the can, this assembly providing a sealed can before opening and a simple reclosure for the dispensing opening made in the sealing member after opening.

Numerous other objects and advantages of the invention will be apparent as it is better understood from the following description, which, taken in connection with the accompanying drawing, discloses a preferred embodiment thereof.

Referring to the drawing:

Figure 1 is a perspective view of a container or can embodying the present invention;

Fig. 2 is a perspective, exploded view of a part of the can, the closure member and reclosure cap;

Fig. 3 is a plan view of the closure sealing member;

Fig. 4 is an inverted plan view of the underside of the reclosure cap;

Fig. 5 is a vertical section of the reclosure cap

and closure member taken on the line 5-5 in Fig. 1 and drawn to a larger scale;

Fig. 6 is a vertical section similar to Fig. 5 but showing a weakened area of the closure member after it has been forced inwardly to open the can; and

Fig. 7 is a fragmentary vertical section of the reclosure cap and closure member taken along the line 7-7 in Fig. 1 and at a larger scale, showing engagement of a part of the reclosure cap with an adjacent wall of the closure member.

The drawing discloses a preferred embodiment of the invention in which a can body 11 (Fig. 1) of conventional construction, is provided with an end 12 having an opening 13 (Fig. 2) which is surrounded with an upstanding neck or flange 14. To this neck is attached a closure sealing member 15. The upstanding neck and closure member are united in an annular three-wall or multi-layer crimped joint indicated generally at 16. Closure member 15 is centrally depressed and its central horizontal wall 17 is weakened by a curved and straight score line 18 which defines or outlines a removable area of semi-circular or half-moon shape. An unscored portion 19 at about the center of the wall 17 provides a hinge for the half-moon section of metal when it is forced inwardly to open the can. Such an opening is effected in a usual manner as by pushing downwardly upon the half-moon area with any suitable instrument.

A reclosure cap, indicated generally by the numeral 20, is also centrally depressed in general conformity with the closure sealing member 15 and is adapted to slidably fit for rotation within the depression formed in the closure member. The reclosure cap depression includes a horizontal wall 21 surrounded by an annular upstanding wall 22, which merges at its upper edge with a horizontal flange 23. This flange is extended outwardly at diametrically opposite sections into wings 24, but along the arcs between these wings, the flange extends in the same plane in narrow annular segments 25. Along the entire contour of the flange 23 there depends a smooth vertical skirt 26.

The lower extremity of the skirt is bent horizontally inwardly beneath the wings 24 as illustrated in Figs. 4 and 7, to prevent any raw edges from inflicting injury to the hand when the cap is applied, rotated or removed. The remaining segments or arcs 27 of the skirt conforms generally to the circular joint wall 16 and are spaced outwardly therefrom. Small tabs or projections are bent inwardly and upwardly against the in-

side of the skirt and form engaging elements or lugs 28 which, as shown in Fig. 4, are disposed around the skirt at about ninety degree intervals.

When the wall of the reclosure depression moves down into position within the depression of the closure member 15 as when these parts are assembled, the lugs 28 snap yieldingly over and frictionally engage against an upwardly and outwardly flared surface 29 of the joint wall 16 as shown in Fig. 7. Such engagement is sufficient to hold the reclosure cap 20 assembled with the closure member and yet permits either its removal from the closure or its rotation around the closure axis.

A half-moon opening 30, formed in the wall 21 of the cap 20, is of substantially the same size, shape and location as the area outlined by the score line 18, in the wall 17 of the closure. When the reclosure cap is snapped over the wall 16 its horizontal wall 21 is in close contact with the closure wall 17 and, by rotation of the cap 20, the opening 30 may be made to register with the outline 18, or the aperture formed in the closure wall when the weakened area is forced inwardly. With the two apertures so aligned and in registry, the contents of the container may be removed as with a spoon, and the excess of the contents in the bowl of the spoon may be conveniently levelled off by brushing against the straight edge of the half-moon aperture.

The reclosure cap 20 is made in ample lateral dimensions but its height is relatively small so that, when the cap is assembled with the countersunk container wall 12, the top surface of the flange 23 does not extend above the level of the top edge of the double seam 31 of the container. The axis of the closure is also sufficiently removed from the double seam to permit of clearance between the extremities of the wings 24 and the inner wall of the double seam. It will be obvious that such a construction obviates the possibility of any projection of the reclosure cap 20 in any direction beyond the adjacent parts of the can and such improved reclosure cap cans may be packed as easily and in the same space as that required by cans having no reclosure caps.

While a circular closure is shown in the preferred embodiment of the invention, other forms or shapes of closures and apertures may be used. In rectangular shaped reclosures having a square or angular cap which cannot be rotated about the closure axis, the reclosing function can be obtained by removal and replacement whenever it is desirable to change from an open to a closed position or vice versa.

It is thought that the invention and many of its attendant advantages will be understood from the foregoing description, and it will be apparent that various changes may be made in the form, construction and arrangement of the parts without departing from the spirit and scope of the invention or sacrificing all of its material advantages, the form hereinbefore described being merely a preferred embodiment thereof.

I claim:

1. A container having a removable area which when broken out produces a dispensing opening, said area being surrounded by an upstanding wall, and a reclosure cap having a downwardly extending skirt portion conforming in general outline to said upstanding wall but of larger dimensions, said skirt portion being bent inwardly at spaced intervals to provide yielding elements for snap engagement with said upstanding wall

when said reclosure cap is applied to the container.

2. A container having a removable area which when broken out produces a dispensing opening surrounded by an upstanding wall, and a reclosure cap having a downwardly extending skirt portion conforming in general outline to said upstanding wall but of larger dimensions, parts of said skirt portion being bent inwardly and upwardly at spaced intervals to provide yielding elements for snap engagement with said upstanding wall when said reclosure cap is applied to the container, said cap also having laterally extending wings which allow for movement of the cap relative to said upstanding wall.

3. A container having a removable area which when broken out produces a dispensing opening surrounded by an upstanding wall, and a reclosure cap having an opening corresponding in shape and size to said removable area, said cap being rotatably mounted on the exterior of said upstanding wall and having a downwardly extending skirt portion conforming in general outline to said wall but of larger dimensions, parts of said skirt portion along its bottom edge being bent inwardly and upwardly at spaced intervals to provide yielding elements for engagement with said wall and permitting easy removal of the cap as well as rotation of the cap to align its opening with said dispensing opening thereby permitting discharge of the container contents.

4. A container having a removable area in one end which is defined by score lines and adapted when broken out to provide a dispensing opening, said end having an outwardly flanged annular wall surrounding said score lines and outlining a depressed central portion, a reclosure cap rotatably mounted over said end wall, said cap having a depressed central portion closely fitting within said end depressed portion and also having an annular skirt portion spaced outside of said end wall, an opening being formed in the depressed portion of said cap which is brought into alignment with said dispensing opening upon rotation of the cap to effect dispensing of the container contents, and yielding elements secured to said outer skirt portion and engaging under said flanged annular wall to rotatably hold the cap on the container.

5. A container having an opening formed in one end, the opening being surrounded by an upstanding wall, a sealing member permanently secured in said opening but having its edges engaged with said upstanding wall and forming an annular upstanding joint, said sealing member having a depressed center portion a part of which includes a removable area defined by score lines and adapted when broken out to provide a dispensing opening which extends over substantially half of said depressed area, a snap-on reclosure cap having rotatable movement when applied to said sealing member, said cap having a depressed central portion fitting within the depression of said sealing member, said cap sliding on said annular joint when rotated with an outer skirt portion extending outside of and spaced from the joint, the depressed portion of said cap having an opening which is brought into alignment with said dispensing opening for dispensing the container contents, yielding elements secured to said outer skirt portion and engaging said annular joint, and wing elements formed on said cap for easy manipulation thereof.

6. A container comprising a body, an end secured to said body in an upstanding seam, said

5 end having a removable area which when broken out produces a dispensing opening, said area being surrounded by an upstanding wall, and a reclosure cap rotatably mounted on said upstanding wall, the upper part of said cap being within the upper edge of said surrounding seam, said cap having a downwardly extending skirt portion conforming in general outline to the upstanding

wall of said end but of larger dimensions, said skirt portion being bent at spaced intervals to provide yielding elements for snap engagement with said upstanding wall when said reclosure cap is applied to the container, said yielding elements also permitting removal of the cap from the container. 5

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