

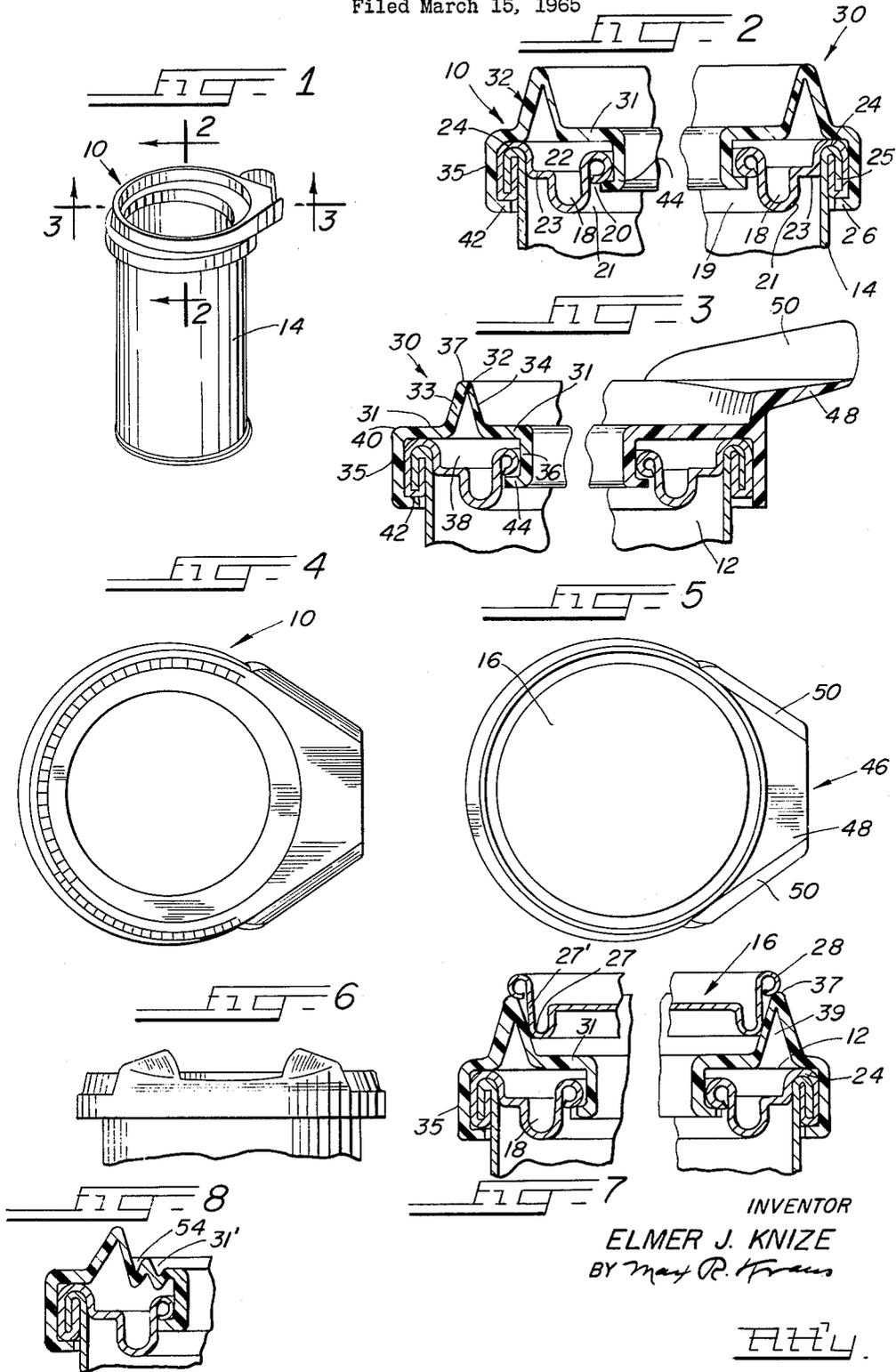
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ATTACHMENT FOR A CAN OR CONTAINER

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ATTACHMENT FOR A CAN OR CONTAINER

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8 Claims. (Cl. 222—569)

This invention relates to an attachment for a can or container for closing and sealing the friction groove on the upper part or rim of the can.

One of the objects of this invention is to provide a ring-like member detachably secured to the rim of a can or container containing paint or the like, which serves to close and seal the friction groove in the rim and prevents the paint or the like from entering the friction groove, and which provides a seat for accommodating the removed regular lid to close the can.

Another object of this invention is to provide a device of the foregoing character having a spout through which the can contents may be poured.

Another object of this invention is to provide a device of the foregoing character which may be integrally molded of a plastic material, such as polyethylene or the like, and which may be economically manufactured.

Another object of this invention is to provide a device of the foregoing character which has a generally inverted V or U-shaped wall which permits the device to be secured to cans of different widths and sizes and to retain lids of varied diameters.

Another object of this invention is to provide a device which may be readily cleansed and which may be repeatedly reused.

In the use of paint cans and like products, the paint on the paintbrush usually gets into the friction groove on the rim of the can and dries, which makes it difficult or impossible to reapply the original lid to the can to close same tightly. This usually causes hardening of the paint in the can and also a loss of paint due to evaporation. In addition, paint on the rim of the can is objectionable in that if the brush rests on top of the rim the paint thereon will get on the brush handle. The foregoing objections are eliminated with this invention.

This invention consists of a very simple and inexpensive device which, after the lid is removed, is readily attachable to the rim of the can and prevents the paint from entering the friction groove or any portion of the rim and maintains the rim in the original condition it was before the can was opened. The device has means to accommodate the original lid to close the can with the device in position on the rim. It also has a pouring spout.

Other objects and advantages will become apparent as this description progresses.

In the drawing:

FIG. 1 is a perspective view showing the invention applied to a can of paint or the like.

FIG. 2 is an enlarged broken-away sectional view taken on line 2—2 of FIG. 1.

FIG. 3 is an enlarged broken-away sectional view taken on line 3—3 of FIG. 1.

FIG. 4 is a top plan view of the invention.

FIG. 5 is a top plan view with the can lid positioned therein.

FIG. 6 is a front view.

FIG. 7 is a view similar to FIG. 2, but with the lid positioned therein, and

FIG. 8 is a sectional view of a modified construction.

The attachment device forming this invention is generally indicated at 10 and is adapted to be applied to the conventional rim 12 of a conventional can or container 14 after the original lid 16 thereof has been removed. The conventional rim 12 of the can has a continuous annular friction groove 18 which is formed be-

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tween vertical walls 20 and 21. The wall 20 terminates in an inner annular bead or edge 22 adjacent the central can opening 19. The wall 21 continues laterally outwardly as at 23 and then upwardly and is bent over to form a rolled top surface 24 and continues downwardly and upwardly around the downturned end 25 of the wall of the can and is crimped thereto. This provides an outer annular edge or bead 26. The original lid 16 is provided with an annular U-shaped flange 27 which is adapted to be received in the annular friction groove 18 for securement of the lid to close the can. The flange 27 terminates in an outer annular bead 28 which engages the rolled top surface 24 of the rim 12 when the lid is closing the can. All of the foregoing is conventional.

The attachment device 10 forming this invention is adapted to be integrally molded of a polyethylene material and comprises an annular or ring member generally indicated at 30 which is formed of an annular horizontally extending flat top wall 31 from which extends upwardly an annular inverted generally V-shaped member forming an annular raised wall, generally indicated at 32. The annular raised wall 32 is formed of spaced outer and inner inclined walls 33 and 34 respectively, the lower ends of which merge into the horizontal top wall 32. The wall herein described as of a generally inverted V-shape may also be of an inverted generally U-shape, however, the inverted V-shape has been found to be best for the purpose herein specified. It is preferred that the raised wall 32 should have two spaced walls connected at their upper ends either in a generally V-shaped or U-shaped configuration.

Extending downwardly from the top wall 31 is a depending annular outer wall 35 and an annular depending inner wall 36 spaced from the outer wall to provide an annular recessed area 38 therebetween. The outer and inner walls 35 and 36 are substantially at right angles to the top horizontal wall 31. A slight radius or curve 40 is provided at the juncture of the top and outer walls. The outer wall 35 terminates in an inwardly extending annular lip 42 and the inner wall 36 terminates in an annular lip 44 facing outwardly and positioned above the bottom horizontal plane of the inwardly facing lip 42. The lips 42 and 44 extend around the device, except that the lip 42 does not extend around the area below the spout which is at the front of the device and which will be subsequently described. This is shown in FIG. 3.

The walls of the inverted V-shaped raised wall member 32 are of different thickness, the outer wall 33 being thicker than the wall 34. The apex 37 has a radius. The space between the walls 33 and 34 is indicated by the numeral 39. The inverted V-shaped raised wall member 32 is positioned off-center or eccentrically with respect to the annular horizontal top wall 31. This can be most clearly seen in FIGS. 2 and 3. In FIG. 2, taken on line 2—2 of FIG. 1, the inverted V-shaped walls on the sides of the device are closer adjacent the depending outer wall 35 than they are at the rear of the device shown in FIG. 3, which is taken on line 3—3 of FIG. 1.

Continuing forwardly at the front of the inverted V-shaped raised wall member 32 is a spout or pouring lip, generally indicated at 46, which is formed of a generally outwardly and forwardly extending wall portion 48 provided with upwardly extending spaced sides 50. The sides 50 of the spout extend above the top of the inverted V-shaped raised wall member 32. The spout is at a slight pitch. The inverted V-shaped raised wall member 32 at the spout portion is of a slightly reduced height than the remainder of the wall of said member.

The device 10 forming this invention may be readily positioned on and attached to the rim of a container, such as a paint can, when the lid thereof is removed.

When thus positioned the wall 31 of the device extends over the rim of the can to enclose and cover the friction groove 18. The outer annular wall 35 extends over the crimped portion of the rim and the lip 42 engages the outer annular edge or bead 26 of the rim. The inner wall 36 extends over the inner bead or edge 22 and the lip 44 engages the bead 22. Thus, the rim and the friction groove in the rim of the can is completely sealed by the present invention and no paint can find its way into the groove, which would normally occur if the rim was unprotected.

With the attachment device 10 in position on the rim of the can, the original lid 16 may be positioned on the attachment device to close the can. The annular raised inverted V-shape wall 32 of the device, in effect, takes the place of the friction groove 18 of the rim, as best shown in FIG. 7 and the lid 16 is inserted inside the annular raised wall 32 so that the outer wall 27' of the annular flange 27 of the lid rests against the inside of the inclined inner wall 34 of the raised wall 32 and the bead 28 of the lid rests on the top or apex 37 of the wall 32. There is a friction fit between the lid and the raised wall 32 which will tightly retain the lid on the attachment device to keep the can closed and sealed.

The inner inclined wall 34 of the inverted V-shaped wall member 32 will have a tendency to stretch and "give" when the lid is positioned thereon and will be pushed if necessary against the outer inclined wall 33 which acts as a backing or support against which the inner wall 34 may move and which limits the outward movement of the inner wall 34. This serves to securely retain the lid in a friction fit arrangement with this device. The inverted V-shaped wall 32 also permits the device to be secured on the rims of cans of different widths and sizes. It will also accommodate and retain lids of different and varied diameters. It can be appreciated that the inverted V-shaped wall 32 permits the width across the top wall 31 to be increased or decreased for the aforementioned purpose.

The invention herein also permits a paintbrush to be positioned at rest across the top of the rim so that the brush portion will in part rest on the spout end and a portion over the can opening. In this manner the paint on the brush will drip back into the can and not exteriorly of the can.

While the attachment device 10 when once attached to the can will be securely locked thereto against accidental disengagement, it may be manually removed therefrom when desired, either for the purpose of cleaning same or for use on another can. Thus, the device is detachably secured to the can and may be repeatedly reused and has a long life.

FIG. 8 shows a modification in which the top wall 31', which would correspond to the top wall 31 of the device previously described, is accordion-shaped as at 54. In all other respects the modified construction is as previously described. The accordion-shaped top wall permits a further expansion and contraction of the top wall and increases the range of sizes that may be accommodated.

The device forming this invention may be integrally formed of injection molded plastic material, such as polyethylene, in a single shot and can be made very in-

expensively. Or, it may be formed of rubber or other like material in an inexpensive manner. The material forming the device has a degree of resiliency.

While the invention has been described in relation to a paint can it is not so limited, as it may be used in connection with cans or containers containing other products. The device of this invention may likewise be formed without the spout.

It will be understood that various changes and modifications may be made from the foregoing without departing from the spirit and scope of the appended claims.

What is claimed is:

1. A device of the character described for attachment to the rim of a can or the like, comprising an annular body member having a top wall and depending outer and inner side walls connected to said top wall and spaced from each other, said top wall adapted to rest on the top of the rim of the can to cover the friction groove of the rim with the outer and inner walls engaging the rim to detachably secure said device to the rim, an annular wall extending upwardly of the top wall, said annular wall having a height substantially that of the height of the original lid of the can, the inside of said annular wall being in substantial vertical alignment with the friction groove of the rim to frictionally engage the lid of the can for closing the can.

2. A structure defined in claim 1 in which the annular upstanding wall is positioned in off-center relation to the top wall.

3. A structure defined in claim 1 in which the annular wall is of a generally inverted V-shape.

4. A structure defined in claim 3 in which the outer wall of the generally inverted V-shaped wall has a thickness greater than the inner wall and in which the inner wall is substantially in vertical alignment with the friction groove of the rim.

5. A structure defined in claim 3 in which the inverted V-shaped annular wall has a space between the inclined walls.

6. A structure defined in claim 1 in which the annular upstanding wall is formed by a pair of spaced walls connected at their upper ends.

7. A structure defined in claim 1 in which the top wall is accordion-shaped.

8. A device of the character described for attachment to the rim of a can or the like comprising, an annular body member having a top wall and depending outer and inner side walls connected to said top wall and spaced from each other, said top wall adapted to rest on the top of the rim of the container to cover the friction groove of the rim with the outer and inner walls engaging the rim to detachably secure said device to the rim, said top wall being accordion-shaped.

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