ATTACHMENT TO RIM OF A PAINT CAN OR THE LIKE

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References Cited
UNITED STATES PATENTS
3,239,113 3/1966 Knize..............220/90 UX
2,873,881 2/1959 Nichols..................220/90
2,921,330 1/1960 Prytikin...............15/257.05
3,221,955 12/1965 Banaszak et al.....220/90 UX
3,309,000 3/1967 Havercstick...........220/90 X
3,356,266 12/1967 Pinter..................220/90 X

FOREIGN PATENTS OR APPLICATIONS
420,657 12/1934 Great Britain........220/90
930,271 7/1963 Great Britain........220/90

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ABSTRACT
A device comprising an annulus or ring-like member formed of an inexpensive material such as plastic or the like, which is adapted to extend over and embrace the inner and outer annular beads of the rim of a can or container of paint to cover and close the friction groove of the rim and prevent paint or the like from entering the friction groove and/or contact the inner and outer annular beads of the rim, said device having raised means whereby a brush with paint may be pressed thereagainst to cause the excess paint to flow into the interior of the container.

10 Claims, 5 Drawing Figures
ATTACHMENT TO RIM OF A PAINT CAN OR THE LIKE

BRIEF SUMMARY OF THE INVENTION

One of the objects of this invention is to provide an annulus or ring-like member or device formed of a very inexpensive material such as plastic or the like, which can be readily applied to the rim of a can or container, preferably one containing a paint, so that the inner and outer beads, as well as the friction groove, are protected and the paint or the like is prevented from entering the friction groove and/or engaging the inner and outer beads of the rim, said device having means whereby a brush containing paint can be moved thereover and which will cause the excess paint to drip or run back into the can or container.

Another object of this invention is to provide a device of the foregoing character whereby after the device has been removed the friction groove and the inner and outer beads of the rim are clean so that the lid of the can or container may be reapplied and secured to the container.

Another object of this invention is to integrally form a plurality of such ring-like members or annuli, one positioned within the other, with the outer annulus having a greater diameter so that it can be applied, for example, to the rim of a gallon can and the inner annulus of a smaller diameter so that it can be applied to a quart can, and wherein said ring-like members are integrally formed and shipped and sold in joined condition and are readily detachable from each other for independent use.

It is well recognized that the paint from a paint brush gets into the grooves of the rim of the can and also adheres to the inner and outer beads and then when the paint dries it is difficult and at times impossible to reapply the original lid to the can in order to close or seal same tightly. If the can is not tightly closed or sealed the paint in the can will harden and due to evaporation result in a loss of paint. Also, if the paint brush is placed on the rim the paint will adhere to the brush handle making it messy for the painter in handling the paint brush. The foregoing objections are overcome with the present invention in that there is provided a very inexpensive device readily attachable to and detachable from the rim of a can of paint and which will when attached thereto serve to protect the rim of the can from any paint contacting same. The device may be used repeatedly whenever the cover for the can is removed and may be removed from the rim when it is desired to reseal the can with the cover.

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings:

FIG. 1 is a top plan view showing the formation of a plurality of attachments for a can or container which are integrally formed.

FIG. 2 is a sectional view taken on line 2—2 of FIG. 1.

FIG. 3 is a view showing one of said attachment members applied to the top of the can.

FIG. 4 is a sectional view taken on line 4—4 of FIG. 3, and

FIG. 5 is an enlarged sectional view showing the attachment applied to the rim of the can.

FIGS. 1 and 2 show the formation as an integral unit of a pair of ring-like attachments for cans of different diameters whereby the outer attachment, generally indicated by the numeral 10, and the inner attachment, generally indicated by the numeral 12, are identically constructed except that the outer attachment 10 has a larger diameter than the inner attachment 12 so that when they are separated the larger attachment 10 will fit on the rim of a gallon can and the inner attachment 12 will fit on the rim of a quart can. The pair of attachments are connected by spaced connecting strips 14 so that the inner and outer attachments with the connecting strips are integrally molded of a plastic material as a unit and are sold as a unit and the customer separates the two by cutting or severing the connecting strips 14.

The conventional can or container for holding paint or the like is indicated by the numeral 16 and the conventional rim for such a can is indicated by the numeral 18. Said conventional rim has a continuous annular friction groove 20 which is formed between vertical walls 21 and 22. The inner vertical wall 21 terminates in an inner annular bead or edge 24 adjacent the central can opening 25. The top of the annular bead 24 is indicated by the numeral 26. The outer vertical wall 22 of the friction groove continues laterally outwardly as at 28 and then upwardly and is bent over to form a rolled top surface 30 and continues downwardly as at 32 and upwardly as at 34 around the down-turned end 36 of the wall of the can 10 and is crimped thereto. This provides an outer annular edge or bead generally indicated at 38. The upper portion or top surface 30 of the bead 38 is on a higher plane than the upper portion of the inner bead 24.

As is well understood, the conventional lid (not shown) for closing or sealing the container or can fits on the rim 18 and engages the friction groove 20 to effect a sealing engagement with the rim. The problem heretofore has been that the annular friction groove 20, as well as the top of the inner and outer beads 24 and 38, become caked with paint which makes it difficult and at times impossible to reseal the lid.

The attachment or rim covering device forming this invention, generally indicated by the numerals 10 and 12, are both identical except for size, therefore a description of one will suffice. It comprises a ring-like member or annulus 40 having a top wall 42 of a width to cover the rim of the can. The top wall slopes or inclines downwardly. Extending downwardly from the top wall 42 and as a continuation of the top wall is an annular vertical inner wall 44 which then continues substantially horizontally to form an inner annular horizontally extending lip 46. Extending and continuing downwardly from the inclined top wall 42 is an outer annular wall 48 which slopes or inclines inwardly as at 50 towards the bottom thereof and then continues horizontally outwardly to form an outer annular horizontal lip 52.

A portion of the inclined top wall 42 is shaped to form an arcuate-shaped member generally designated by the numeral 54 which, as best shown in cross-section in FIG. 2, has a narrow arcuate-shaped top flat portion 56 which continues downwardly at an inclined angle to form an inclined or sloping inner wall 58 which merges with the top wall 42, and also has an outer wall 60...
which inclines or slopes outwardly and merges with the top wall 42. The opposite ends of said arcuate-shaped member terminate in outwardly inclined end walls 62. This raised or upwardly extending arcuate-shaped member 54 is formed integrally with the device and serves the purpose of providing a surface on which a paintbrush covered with paint may be scraped or pressed against, causing the excess paint from the brush to flow back into the container. Thus, as the paintbrush is moved over the raised member 54 the excess paint will flow from the brush back into the container or can.

As shown in FIGS. 1 and 2, there is provided a unit which consists of two annular members 10 and 12 of identical construction and shape, except that the outer annular member 10 is of a greater diameter than the inner member 12 and they are connected by connecting strips 14. In the molding process, said pair of rings 10 and 12 are molded so that the arcuate raised portion 54 of the larger ring 10 is diametrically opposite to the raised portion 54 of the inner ring 12.

Each of the rings 10 or 12 is positioned on the rim of a can of its respective size and snapped into locking position, as best shown in FIGS. 4 and 5. The inclined top wall 42 will extend over and cover the friction groove 20 of the rim 18 of the can and will engage the inner and outer beads of the rim. The inner annular wall 44 will also abut the bead 24 and extend below the bead while the outer annular wall 48 will extend over the outer bead 30 and will incline inwardly under the outer bead 30 to effectively retain the ring on the rim of the can. Thus, the inner and outer beads, as well as the friction groove of the rim, are fully covered and protected. The ring may be readily removed from the rim by lifting it so that the can cover can be connected to the rim in the conventional manner. While the ring is on the rim no paint can be lodged on any portion of the rim. The ring may be repeatedly used.

What is claimed is:

1. A device of the character described for temporary attachment to the rim of a can or the like containing paint, which rim has inner and outer annular bead-like surfaces spaced from each other with a friction groove therebetween, said device comprising a plurality of ring-like members or annuluses integrally formed of identical shape and construction except for difference in size, one positioned within the other and connected together but separable from each other so that each ring-like member may be used separately on a rim having a different diameter, each said ring-like member having a top wall of a width to extend over and cover the friction groove, inner and outer annular walls extending downwardly from each said top wall with said inner annular wall extending adjacent the inner bead and the outer annular wall extending adjacent the outer bead, each said top wall having a raised portion for a portion of its circumference which serves to permit a paintbrush to be passed thereover for the purpose of wiping the excess paint from the brush and to permit said excess paint to flow into the interior of the can.

2. A device of the character set forth in claim 1 in which each outer annular wall slopes inwardly and extends below the bottom of the outer bead.

3. A device of the character set forth in claim 2 in which each inner annular wall extends vertically and terminates below the inner bead.

4. A device of the character set forth in claim 1 in which each top wall slopes downwardly and inwardly.

5. A device of the character set forth in claim 1 in which each raised portion has an inner wall which slopes towards the inner wall of the ring-like member or annulus.

6. A device of the character set forth in claim 1 in which each raised portion is of arcuate shape.

7. A device of the character set forth in claim 1 in which each inner annular wall has an inwardly extending horizontal lip and each outer annular wall has an outwardly extending horizontal lip.

8. A device of the character set forth in claim 1 which comprises a pair of ring-like members integrally molded of plastic material.

9. A device of the character set forth in claim 9 in which the raised portions are of arcuate shape and have an inclined inner wall.

10. A device of the character described for temporary attachment to the rim of a can or the like containing paint, which rim has inner and outer annular bead-like surfaces spaced from each other with a friction groove therebetween, said device formed of a plastic material and comprising a ring-like member or annulus having a top wall of a width to extend over and cover the friction groove, said top wall having an inward downward slope, inner and outer annular walls extending downwardly from said top wall with said inner annular wall extending adjacent the inner bead and the outer annular wall extending adjacent the outer bead, said top wall having a raised portion for a portion of its circumference which is of arcuate shape in top plan, which raised portion has a cross-sectional shape to provide an outer upwardly and inwardly inclined wall and an inner downwardly and inwardly inclined wall connected by a top flat connecting wall, said flat top connecting wall sloping inwardly downward, said raised portion having closed opposite end walls which extend to the top wall of the ring-like member, said raised portion serving to permit a paintbrush to be passed thereover for the purpose of wiping the excess paint from the brush and to permit said excess paint to flow into the interior of the can.