May 19, 1964 A. C. A. HEISE 3,133,668

SHELF-TYPE ATTACHMENT FOR PAINT CANS

Filed Nov. 13, 1962

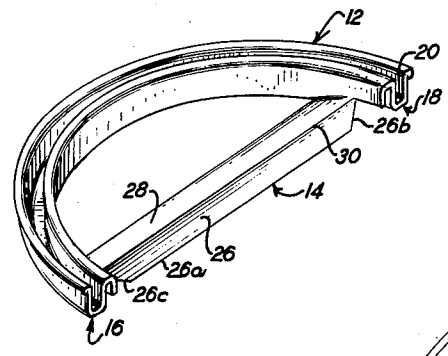


Fig. 1

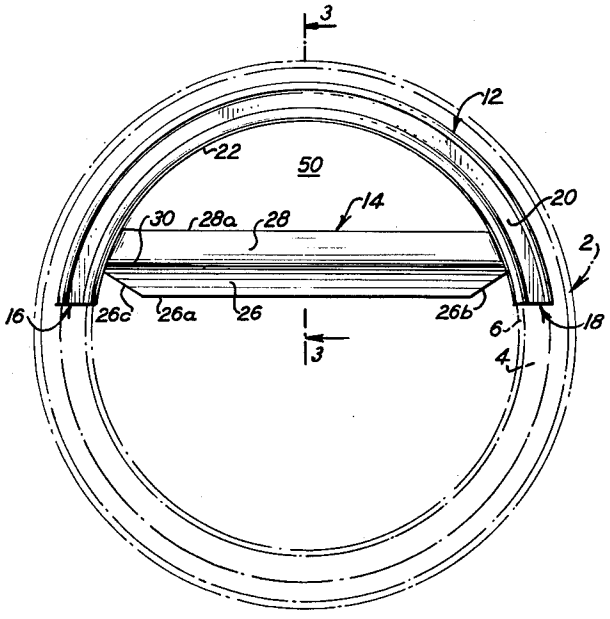


Fig. 2

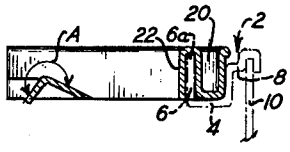


Fig. 3

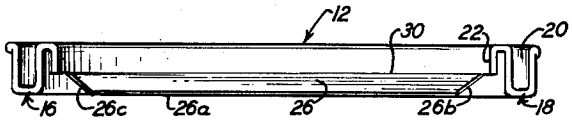


Fig. 4

INVENTOR

ARTHUR C. A. HEISE

BY Jacobi & Davidson

ATTORNEYS

United States Patent Office 3,133,668 Patented May 19, 1964

3,133,668

SHELF-TYPE ATTACHMENT FOR PAINT CANS

Arthur C. A. Heise, 268 Arundel Road,
Riviera Beach, Md.

Filed Nov. 13, 1962, Ser. No. 236,825
1 Claim. (Cl. 220—90)

This invention relates to devices for enabling the selective removal of excess paint from a paint brush, and the return of the removed excess paint to the paint container.

It is well-known to even the average layman that in carrying out a painting operation, one normally dips the paint brush in the container carrying the paint, and then draws the paint brush over an adjacent surface, normally the inner edge of the paint can rim, to wipe-off the excess paint on the brush. This conventional type of operation results in filling the paint can rim recesses with paint, and eventually in most all instances, there is a drain of paint down the sides of the container. Filling of the paint can rim recess or recesses does not permit proper resealing of the can once the painting operation is completed. Moreover, the draining of the paint down the sides of the can normally requires that the can sides be wiped before storage so that the excess paint is not deposited on a surface of the storage area.

Due to the inconvenience caused in the sealing and wiping operations which result with the use of an ordinary paint can, as described above, previous workers in the art have proposed that some type of attachment be utilized with the paint can to eliminate the problems. Some of the prior constructions incorporate an auxiliary shelf overlying the top of the paint can, or disposed within the paint can, and hung or clipped onto the rim of the can. These constructions present problems in that the same become loose or disattached in the event any substantial wiping pressure is applied to the shelf thereof. Other constructions, in contrast with the hung-on or clip-on type have utilized the frictional recess provided in a paint can rim to secure the shelf in place. While this other type of construction can be properly secured possibly, the same does not positively provide for the return of paint within the container, and/or prevent the flow of paint within the rim recess or recesses.

It will be understood that the brief discussions set forth in the preceding paragraph of the problem encountered with prior constructions is but exemplary. However, such discussion serves to indicate the need for an improved construction of a device which enables the selective removal of excess paint from a paint brush and the return of the removed excess to the paint container.

A primary object of the present invention is to satisfy the aforesaid need for an improved construction, and specifically, it is an object of the present invention to provide such a device which will accommodate brushes of various sizes, which permits the user to quickly selectively leave the quantity of paint on the brush which he desires, which insures that the paint can and rim thereof is substantially entirely free from any paint, which can be readily inserted with minimum pressure onto the can for permanency in operation even under substantial wiping strain, and which in addition, can be easily removed from a paint can with which it is used when it is desired to reseal the can with its original lid.

Still further, important and auxiliary objects of the present invention are to provide such an improved construction which can be comparatively inexpensively manufactured, which can be formed in varying sizes so as to be available for use with varying sizes of paint containers, which does not substantially block access to the interior of a paint container with which it is used, and which is so designed that the operation thereof is not impaired due to clogging or coating with continued use.

The invention lies in the combination, arrangement, and formation of a device conforming with the preceding objects, and will be better understood after consideration is given to the following detailed description. Moreover, objects other than those specifically set forth above will become apparent after reading the following description. Such description refers to the annexed drawings wherein:

FIGURE 1 is a perspective view of a device constructed in accordance herewith;

FIGURE 2 is a plan view of a device constructed in accordance herewith showing the same in association with a paint container, the container appearing in phantom;

FIGURE 3 is a transverse sectional view taken on the line 3—3 of FIGURE 2 and showing the construction of the device hereof in detail; and

FIGURE 4 is a front view of the device shown in FIGURES 1, 2, and 3.

The invention finds particular application as used with a paint container of the type including a horizontally inwardly extending top rim such as that designated by the numeral 2 and shown in phantom in FIGURES 2 and 3. Such rim includes an upwardly opening recess 4 therein of predetermined shape, namely, circular as shown. Moreover, such rim has an inner upstanding wall such as that designated by the numeral 6. The upstanding wall is disposed about the inner side of the recess 4.

Paint containers now in widespread use generally include at least the portions or elements discussed in the preceding paragraph. In addition, the rims thereof may include a horizontally extending radial outer portion 8 which joins with the container wall 10. Regardless of what other portions or elements the container rim incorporates, the present invention can be used properly therewith so long as the same has a recess such as that designated by the numeral 4 and an inner wall such as that designated by the numeral 6.

Now, turning to the construction of the device provided hereby, and referring to FIGURE 2, it will be noted that the same comprises a rim section 12 and a scraper arm 14. The rim section 12 is of a shape corresponding to the predetermined shape of the container. As shown, the rim section comprises part of a circle which is concurrent with the circle defined by the recess 4 of the can rim. Circular cans are in the most widespread use today, and accordingly the preferred embodiment hereof contemplates the utilization of a circular rim section in a device constructed in accordance herewith. The rim section terminates in a pair of free ends 16 and 18 which are spaced apart with respect to one another. A plane passing through the ends 16 and 18 defines the chord of a circle, as shown be apparent.

Forming part of the rim section 12 is an upwardly opening vertically extending U-shaped portion 20. The portion 20, as best shown in FIGURE 3, is adapted to frictionally mate with the upwardly opening recess 4 of the container rim 2. Such cooperating frictional engagement is the same as that normally achieved with a conventional container rim and lid adapted to frictionally mate therewith. Accordingly, further discussion of the frictional mating engagement achieved with the device hereby is believed to be unnecessary.

In addition to incorporating the U-shaped portion 20, the rim section 12 also includes a downwardly opening inwardly folded-over flange portion 22 which is disposed horizontally inwardly of the U-shaped portion 20. The flange portion 22 is of inverted U-shape and is adapted to engage and overlie the upper ends 6*a* of the upstanding wall 6 of a container with which the invention is used. Of course, it is to be appreciated that the cooperation between the U-shaped portion 20 and recess 4 is important to proper securing, but that the utilization

of the flange portion 22 in cooperation with the upstanding wall 6 is also of importance for proper securing of the device provided hereby in the desired position of use on the rim of a paint container.

Extending across the rim section 12 adjacent the free ends 16 and 18 thereof is the scraper arm 14. Preferably, such arm is integrally formed with the rim section 12, and a gauge of material is utilized which corresponds to the gauge of the container lid itself. In other words, it is conventional to make lids for paint cans of particular gauges, and the device provided hereby can be constructed from metal of corresponding gauges. Alternatively, the device provided hereby can be constructed from plastic or other suitable materials.

Regardless of the material from which the device hereof is formed, the arm thereof comprises a pair of joined elongated upper faces 26 and 28 which are preferably disposed at an obtuse angle, A, with respect to one another. At least one of the faces, and specifically the face designated by the numeral 26 and having an outer edge 26*a* nearest the free ends 16 and 18, is downwardly sloped from the junction 30 between the faces 26 and 28. The edge 28*a* of the other face which is remote from the junction 30, and the folded-over flange portion 22 define the entire periphery of an open space 50 therebetween.

Preferably, as shown, the open space 50 is of crescent shape, and the elongated face 28 is downwardly sloping. Moreover, the open space 50 is preferably formed by cutting out a section between the arm 14 and the rim section 12. Consistent with this construction, the ends 26*b* and 26*c* might well be tapered, whereas the ends of the face 28 are preferably integrally joined with the folded-over flange portion 22. More particularly, the face 28, in this instance, effectively comprises a bar member having its ends joined with the folded-over flange portion 22, and the face 28 comprises a corresponding bar member, integrally joined with the face 28, but depending therefrom. A mere bending operation provides for the proper downward sloping of the face 26 as well as the proper downward sloping of the face 28.

In operation of the device provided hereby, one removes from the paint container the lid normally cooperating therewith, and by mere hand pressure, inserts frictionally within the rim recess of the container and in cooperation with the upstanding wall thereof, the rim section 12. This securely frictionally sets the arm 14 in a horizontal position extending across the container lid without substantially blocking the entry of a paint brush therein. The substantial opening of the top of the container is apparent from FIGURE 2.

After the device is set in place, as aforesaid, a user inserts a paint brush within the container, and then draws the brush bristles in wiping relation across the forward edge 26*a* of the face 26. This permits the selective removal of excess paint from the paint brush. Either the paint drops from the lower end of the paint brush directly into the container, or any paint which happens to remain on the arm 14, through the action of gravity, drains from the sloped faces 26 and 28 thereof into the container. By virtue of the location of the face 26, and particularly the forward edge 26*a* thereof, and by virtue of the inward taper of the ends 26*b* and 26*c* of the face 26, it is virtually impossible for any paint which has been wiped from the brush to enter the rim of the container, or the recess 4 therefor. Accordingly, the device provided hereby insures, with proper use, that excess paint will be directed only within the container, and not about the rim of the container.

A further important consideration regards the secure fixing of the device hereof in its position of intended use. By utilizing the frictional fit normally used to retain a container lid in position, the device hereof is secure and can withstand substantial wiping pressures without becoming dislodged.

Quite naturally, the integral construction incorporated in the preferred embodiment reduces the cost of manufacture and provides stability. The use of a substantial opening or open space 50 within the device hereof prevents any clogging of drain openings or the like, since all spaces are of sufficient size as to be essentially noncloggable.

After reading the foregoing detailed description of an illustrative and preferred embodiment of the invention, various modifications other than those suggested may occur to those of ordinary skill in the art. Accordingly, what is claimed is:

For use with a paint container of the type including a horizontally inwardly extending top rim having an upwardly opening circular recess and an inner upstanding wall disposed about the inner periphery of said recess; a device for enabling the selective removal of excess paint from a paint brush and the return of the removed excess paint to the paint container, said device comprising a rim section shaped as part of a circle and terminating in a pair of spaced free ends, said rim section having an upwardly opening vertically extending U-shaped portion in the body thereof, said U-shaped portion being adapted to frictionally mate with said upwardly opening recess; said rim section also having a downwardly opening inwardly folded-over U-shaped flange integrally formed with and disposed horizontally inwardly of said U-shaped portion for frictionally engaging the upper end of said upstanding wall in overlying relation thereto; and a scraper arm supported by said inwardly folded-over U-shaped flange rim section and extending as a chord across the base of said rim section and disposed slightly rearwardly of said free ends thereof, said arm comprising a pair of integrally joined elongated narrow bar members disposed at an obtuse angle with respect to one another, at least the one of said bar members having an outer edge nearest said free ends being downwardly sloped from the junction between said faces, the end portions of said outer edge being tapered inwardly from the junction between said faces and laterally spaced from the free ends of said rim section for a minor fractional part of the overall length of said outer edge, the edge of the other of said bar members remote from said junction and said folded-over flange portion defining the entire periphery of a generally semi-circular open space therebetween.

References Cited in the file of this patent

UNITED STATES PATENTS

2,699,882	Lieb	Jan. 18, 1955
2,767,891	Beadles	Oct. 23, 1956
2,802,609	Donovan	Aug. 13, 1957
2,842,286	Beyer	July 8, 1958
2,960,257	Sasse	Nov. 15, 1960
2,996,215	Giza	Aug. 15, 1961

FOREIGN PATENTS

177,983	Great Britain	Apr. 13, 1922