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F. C. HILL

2,284,901

PAINT BRUSH CLEANER FOR CANS

Filed March 11, 1940

Fig. 1

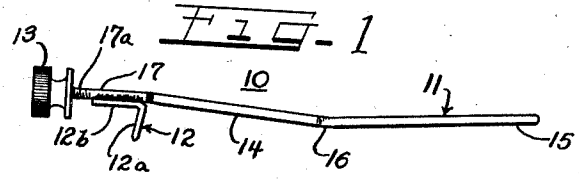


Fig. 2

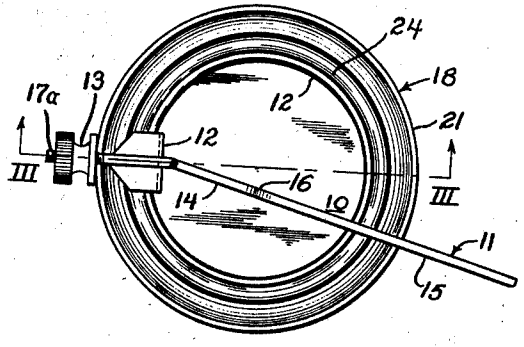


Fig. 3

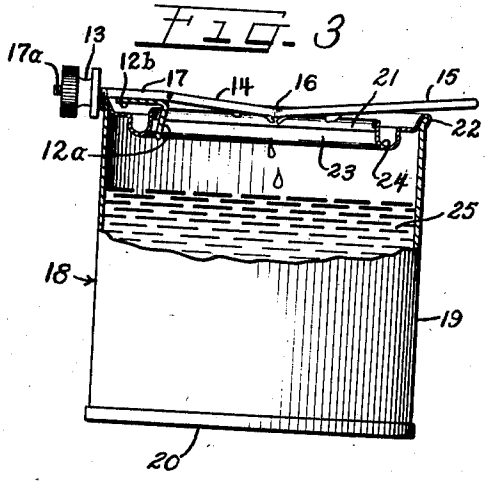


Fig. 4

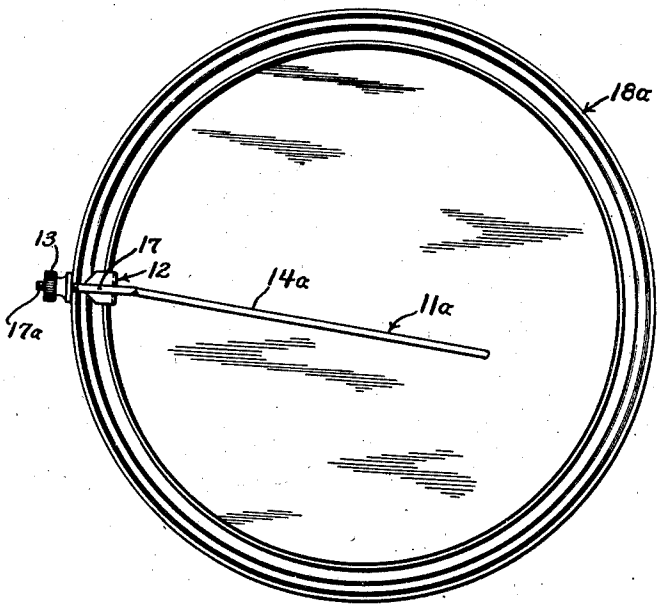


Fig. 5

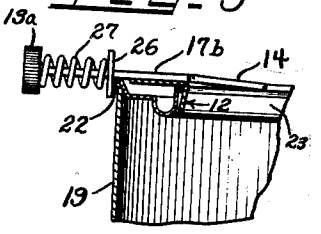
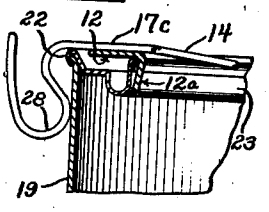


Fig. 6



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PAINT BRUSH CLEANER FOR CANS

Frank C. Hill, Chicago, Ill.

Application March 11, 1940, Serial No. 323,257

4 Claims. (Cl. 220—90)

This invention relates to a wiper device across which a liquid-applying brush may be drawn for squeezing excess liquid out of the brush. More particularly, the invention relates to a paint brush wiper construction adapted to be removably connected to a paint container and so shaped as to allow excess paint to drip into the container away from its side walls.

Containers for liquids of the type used for decorative or protective purposes, such as paints, lacquers, varnishes, and the like, are usually provided with a flanged opening for receiving a cover. By flanging the inner edge of the cover opening, a recess or groove is formed between the flange and the outer side wall of the container.

When a brush is dipped into the liquid and the excess of liquid squeezed out of the brush by drawing it across the flange, some of the liquid drips into the recess adjacent the flange. If the liquid is a mixture which dries to form an adherent film, the cover becomes sealed within the container opening and its removal therefrom is made difficult. Furthermore, if the liquid drips back into the container from the grooved flange some partially dried material may become mixed with the liquid to form objectionable lumps.

The method of partially or entirely scraping liquids from a brush on the edge of a container is further objectionable due to some of the excess liquid running down along the outside of the container thereby spreading to the operator's hands when grasping the container walls.

It is, therefore, an important object of the present invention to provide a device in combination with a liquid container which eliminates these objectionable features.

Another object of this invention is the provision of an inexpensive device, capable of being quickly and removably connected to a liquid container, across which a brush dipped into the liquid may be drawn to squeeze the excess liquid out of the brush.

A further object of this invention is the provision of a cleaner device for liquid-applying brushes which, when attached to a liquid container, is shaped to provide a drip for the excess liquid in the brush in such a manner that the excess liquid drips into the container away from its edges or side walls.

A still further object of the present invention is the provision of a cleaner device for liquid-applying brushes constructed for attachment to various sizes of containers and providing for a drip for excess liquids at a point away from the edges and side walls of the container.

The novel features believed to be characteristic of this invention are set forth with particularity in the appended claims. The invention itself, however, both as to its organization and manner of construction, together with further objects and advantages thereof, may best be understood by reference to the following description, taken in connection with the accompanying drawing, in which:

Figure 1 is a side elevational view of a paint brush cleaner embodying the principles of this invention;

Figure 2 is a plan view illustrating the device of this invention in combination with a liquid container;

Figure 3 is a side elevational view of the combination illustrated in Figure 2, with a portion of the container in vertical cross-section as taken substantially along a plane indicated by the line III—III of Figure 2, and showing the dripping arrangement of the brush cleaner at a point inside of the container edges and side walls;

Figure 4 is a view similar to Figure 2 illustrating the brush cleaner device when attached to a relatively large liquid container;

Figure 5 is a fragmentary cross-sectional view, with parts in elevation, illustrating a modified form of this invention which includes a compression spring for retaining the brush cleaning device in mounted position on a container; and

Figure 6 is a view similar to Figure 5 illustrating another modified form of the present invention.

In its preferred form, the wiping device indicated by the reference character 10 and illustrated in Figures 1, 2 and 3, includes a wiping bar 11, a flange or bracket 12 secured thereto and depending therefrom adjacent a straight end 17 thereof, and an adjusting nut 13 in threaded engagement with a threaded portion 17a of said end 17.

The wiping bar 11 comprises offset sloping portions 14 and 15 which converge to form a liquid dripping portion 16. As best shown in Figure 2, the converging portions 14 and 15 of the wiper bar 11 are bent in horizontal angular relation to the straight end portion 17. The bracket 11 is of sufficient width to automatically and diametrically position the straight end portion 17 of the wiper bar when applied against the flange forming the cover opening of a liquid container 18.

Figures 2 and 3 serve to illustrate the construction of the usual brushing-liquid container. Such a container generally comprises side walls 19 and a bottom wall 20.

A top wall 21 of the container 18 has its outer edge 22 crimped or spun over the top edge of the container side walls 19. Its inner edge is turned upwardly to form a flange 23 defining a cover opening and a circumferentially extending recess or groove 24 adjacent thereto.

The angular bracket 12 is adapted to be seated

on the container 18 so that its downwardly extending leg 11a engages the inner edge of the flange 23 and its horizontal leg 12b rests on the top portion of the flange 23. The wiping device is attached to the container in an operative position by threading the nut 13 against the crimped edge 22 of the container. When the wiping device is so connected, the dripping area 16 of the wiping bar 12 is so positioned that any liquid dripping therefrom will fall into the body of the container, as illustrated in Figure 3.

When the wiping device is operatively connected to the container as illustrated in Figures 2 and 3, a brush dipped into the liquid 25, such as paint, varnish, and the like, is drawn upwardly out of the container against the wiper bar 12 to remove excess liquids therefrom. Any excess liquid wiped on the bar will flow towards the depressed dripping area 16 to drip therefrom into the body of the container. This method of wiping an excess of liquid from a brush eliminates the objectionable features of having the liquid flow into the top wall recess or, after partially hardening, of dripping back into the body of the liquid to make it lumpy.

If all the liquid is not used, the wiping device is easily and quickly removed from the container and its cover applied thereto without any of the liquid getting on either the top or the sides of the container.

If large-sized containers 18a as illustrated in Figure 4, having the same construction as the container 18, are used the wiping bar 11a is formed to provide a downwardly and laterally offset wiping portion 14a. In this form of the device, the dripping area is at the free end of the wiping bar rather than in an intermediate depressed portion as shown in the device illustrated in Figure 1.

It should be understood, however, that the wiper devices illustrated in Figures 2 and 4 may be used with any size container it being important only to provide a drip portion allowing excess liquid to drip into the container away from its sides and top edges and sufficient room adjacent the wiper bar to allow for stirring or removal of the liquid by a brush.

The modified form of the device illustrated in Figure 5 provides a different means for connecting the wiping device to the container. The wiping device of this modification is the same as that illustrated in Figures 1 to 3, inclusive, with the exception that the straight end portion 17b of the wiping bar is longer than that provided in the preferred form of the device.

A washer 26 is urged against the outer crimped edge 22 of the container top wall 21 by a coil spring 27, the compression of which is adjustable by threading the adjacent nut 13a along the threaded portion of the end of the wiping bar.

An additional modification of the wiping device of this invention is illustrated in Figure 6. In this modification, the end 17a of the wiping bar is provided with a U-shaped spring portion 28 at its free end. The U-shaped portion 28 is sprung over against the side wall 19 of the container to be thereagainst and hold the downwardly extending leg 12a of the bracket 12 in retaining engagement with the container 18.

It is to be noted in each of the wiping devices illustrated, the wiping bar is angularly offset in a horizontal plane to provide sufficient room for inserting a brush into the liquid container and to allow for stirring of the liquid as it is being used.

It is apparent from the foregoing description that a wiping device for liquid-applying brushes is effected which, when operatively connected to a liquid container, provides means for wiping excess liquid from a brush in such a manner that the liquid drips into the body of the container away from its edges or side walls thereby eliminating the smearing of liquid on the outside of the container.

While particular embodiments of the present invention have been shown, it will, of course, be understood that the invention is not to be limited thereto, since many modifications may be made, and, therefore, it is contemplated by the appended claims to cover all such modifications as fall within the true spirit and scope of the present invention.

I claim as my invention:

1. A wiping device for liquid-applying brushes comprising a bar member adapted to extend crosswise of the open top of a container, said bar member having a depressed portion defining a drip and an end portion in angular relation thereto in the plane of the rim defining the top of the container, the angular end of said bar member having a laterally extending stiff flat flange portion and a threaded portion extending beyond in normal relation to the outside of the container, and a nut engaging said threaded portion and arranged to coact with said flange portion for detachably connecting said wiping device to a portion of the rim of said container.

2. A wiping device for liquid-applying brushes comprising a bar member adapted to extend crosswise of the open top of a liquid container, said bar member having a depressed portion defining a liquid drip, said bar also having a threaded end portion in angular relation to said depressed portion and being offset in the plane defined by the rim of said container, a wide flat bracket axially connected to and radially depending from said bar member adjacent its threaded end portions, and a nut engaging said threaded end portion of the bar member, said nut and bracket arranged for detachably connecting said wiping device to a rim portion of said liquid container.

3. A wiping device for liquid-applying brushes comprising a bar member adapted to extend crosswise of the open top of a liquid container, said bar member having a depressed portion defining a liquid drip, said bar member also having a threaded end portion in angular relation to said depressed portion, a bracket depending from said bar member adjacent its threaded end portion and adapted to engage the inner edge of the open top of said container, a washer on the threaded end portion of said member adapted to engage the outer edge of said container, a coil spring embracing said threaded end portion, and a nut engaging the threaded end portion to compress said coil spring for detachably connecting said wiping device to the top of said liquid container.

4. A wiping device comprising a rod member adapted to extend crosswise of the open top of a container, one end of said rod member being threaded and extending beyond in normal relation to the outside of the container, a flat flange member extending radially from and being fixedly connected to an intermediate portion of said rod member, and a threaded member for receiving therethrough said one threaded end of the rod member, said threaded member and flange member coacting for detachably connecting said wiping device to the rim of said container.

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