Aug. 8, 1944. A. E. MYERS 2,355,549

BRUSH WIPER CONSTRUCTION

Filed Feb. 23, 1938

Fig. 1.

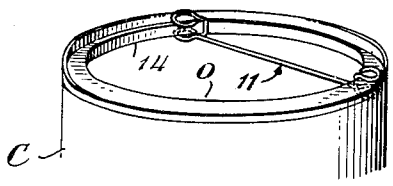


Fig. 2.

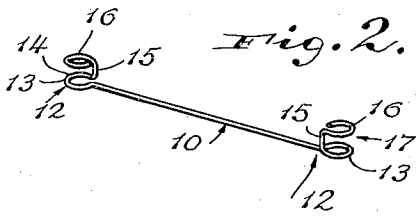


Fig. 4.

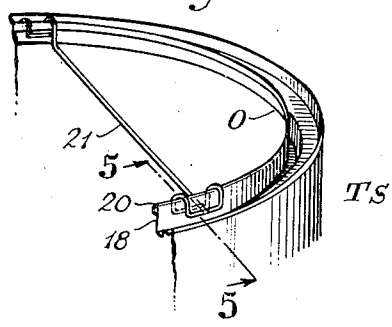


Fig. 3.

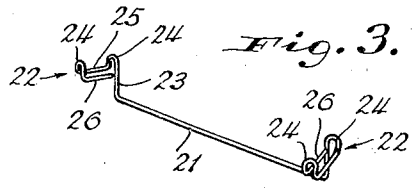


Fig. 5.

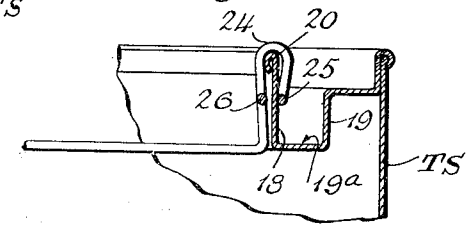


Fig. 6.

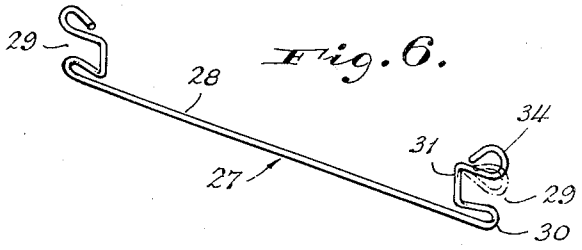


Fig. 8.

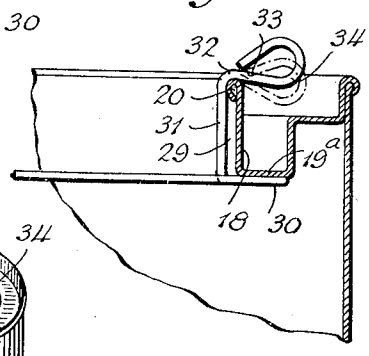
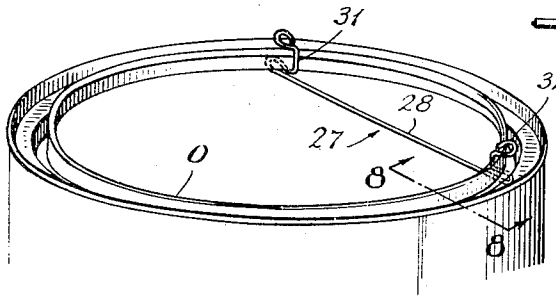


Fig. 7.



INVENTOR.
ARTHUR E. MYERS

BY

his ATTORNEY.

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BRUSH WIPER CONSTRUCTION

Arthur E. Myers, Jackson Heights, N. Y.

Application February 23, 1938, Serial No. 191,871

8 Claims. (Cl. 220—90)

This invention relates to brush wiping appliances; more particularly to brush wiping appliances to be associated with paint cans.

This application continues in part features of my invention disclosed in applications Serial No. 31,157, filed July 13, 1935; Serial No. 38,960, filed September 3, 1935; Serial No. 71,143, filed March 27, 1936.

It is the object of my invention to provide a brush wiper which may be affixed adjacent the mouth of paint cans, more particularly friction seal cans, particularly those having the double seal or triple seal type of flange, and to include means for mounting brush wiping elements in such position, characterized by security of engagement, facility of installation and removal, and the mounting of a brush wiping bar which will distribute the paint, varnish or similar liquid coating material on the bristles of the brush, to enhance efficient painting or coating operations with the brush, at the same time maintaining this container in a clean condition.

Other objects of my invention reside in the provision of a paint can appliance of the character herein mentioned, which is efficient and inexpensive and economical to produce, while preserving all of the desirable characteristics, without injury to the paint brush bristles.

To attain these objects and such further objects as may appear herein or be hereinafter pointed out, I make reference to the accompanying drawing, forming a part hereof, in which—

Figure 1 is a perspective view of my device, associated with a paint can;

Figure 2 is a perspective view of the same, separate and apart from its installation;

Figure 3 is a perspective view of another embodiment of my invention;

Figure 4 is a fragmentary perspective view of the same, associated with a paint can;

Figure 5 is a fragmentary sectional view taken on the line 5—5 of Figure 4;

Figure 6 is a perspective view of another embodiment of my invention;

Figure 7 is a perspective view of the same, installed in relation to a paint can;

Figure 8 is a sectional view taken on the line 8—8 of Figure 7.

Making reference to the drawing, I have illustrated various embodiments of a brush wiper, preferably made of wire stock and comprising a rectilinear section against which brush bristles, after having been dipped into paint, may be wiped uniformly to distribute the liquid coating material to enhance the uniform qualities of the coating operation, free the paint of entrapped air, distribute the liquid coating material upon the bristles so that they, in turn, may distribute the coating material upon the surface to be coated efficiently.

Round wire stock is preferred by me in that such material acts so as to give a doctoring action as the brush is rubbed against the wire, efficiently to distribute the film forming material upon the bristles before the brushing or painting operation.

For household coating or painting operations, the appliance which I have contrived is of assistance to the amateur painter in properly preparing the coating material upon the brush, while maintaining maximum cleanliness, especially as the quantity of paint may not be completely used during one operation.

My appliance further contemplates the inclusion, with such contrivance, of attaching means to the paint can opening which efficiently and rigidly holds the same in position and may be applied and affixed in such position facilely and without soiling the fingers.

To accomplish these objectives, in Figures 1 and 2 I have illustrated a brush wiper 10 comprising a rectilinear section 11, having at its opposite ends can flange engaging means 12, made by including a loop 13 arranged to underlie the can flange 14. Inwardly directed from the loop 13 is an upstanding branch 15, which is offset from the end of the loop. The extremity of the branch is provided with a second loop 16, lying more or less in parallelism with the loop 13, and arranged to overlie the flange 14. It will thus be observed that this construction provides, in connection with the rectilinear bar 11, hooked portions 17 bent from the body of the wire section, which has the free ends thereof arranged to overlie the can flange 14, which defines the opening O of the can C so that the hooked portion terminates into the body portion of the wire, to provide an undercut offset 13 to be received beneath the flange 14 and an overlying portion 16 to engage the upper edge of the flange 14. The relationship of the loop 13 to the loop 16 provides a seat having a lateral entrance for the flange 14 whereby a lateral force from the axial line of the opening towards the flange will cause the loops 13 and 16 to grip the flange of the can in view of the relationship of the beads formed adjacent the upper and lower edges of the flange 14. It will be understood that the natural springiness of the wire stock from which the contriv-

ance 10 is made will serve to dispose the loops 13 and 16 towards each other as spring fingers. These loops 13 and 16, adjacent their extreme ends, are normally formed closer to each other than the branch 15 so that in affixing the same in relation to the flange 14 of the can, by lateral force, the hooked portion 17 forming a seat, will resiliently clasp the flange 14, gripping the same and retaining the wiper bar in position. It will be understood that the loops 13 and the bar 11 are in the same plane and will be within the can opening well below the flange 14. Thus, when a brush is wiped thereon, the excess liquid coating composition will drip into the paint can.

For removal, when the painting operation is completed, one of the loops 16 may be conveniently grasped and slid towards the axial line of the can, thereby disengaging one of the hooked portions 17. A slight upward tilting action will permit the opposite underlying loop 13 to slide from the seating position.

In Figure 1 I have described a contrivance which is available for attachment to the so-called double seal or triple seal can. In Figures 3, 4 and 5 I have described a construction which is particularly suitable for so-called triple seal cans TS, which includes the mouth O of the container formed with an upstanding flange 18, spaced from a secondary flange 19. Between these flanges there will be provided, in the can top, a concentric groove 19a. The free end of the flange 18 is usually formed with a bead 20, in relation with which a lid (not shown) serves to make frictional engagement. With this type of construction, I provide a wiper bar 21, preferably made of resilient wire, as in the previous construction. To the opposite ends of the bar 21 and integral therewith, I provide flange engaging portions 22, made by disposing from the upstanding branch 23 bead overlying lips 24, connected by the branch 25. The branch 25 is arranged to lie partly in the groove 19a and conform to the same by partly extending around the groove.

An inwardly directed branch 26 extends over and under the bead, to contact the same.

It will be observed that the loops 24, in relation to the branches 25 and 26, provide doubly bent, U-shaped end portions which are so disposed that one branch of the loop enters the groove or channel 19a and the other engages the interior surface of the flange 18, underneath the bead 20, so that the flange is gripped firmly between the legs of the loops 24.

The wiping bar 21 is a common member to the flange engaging portions 22 and these provide means to bind the wiping bar against the upstanding flange. Due to the rectilinear character of the groove and the fact that the distance between the attaching members 22 is less than the diameter O of the opening of the can, a wedging fit will be obtained.

In positioning the contrivance shown in Figures 3, 4 and 5, one of the attaching members 22 may first be snapped in position against the flange 18. This more or less anchors one end. The opposite end then is brought backwards slightly, towards the axial line, then downwardly to direct the bar within the mouth O of the can, against the natural resiliency of the attaching portion first positioned. The second attaching member 22 may then be brought in line with the flange 18 adjacent the bead and the resilient tension released as the U-shaped loop 24 spans the bead 20. Release of the tension will then cause the manipulative attaching end 22 to spring into the limiting position and frictionally bind the wiper bar 11 against displacement.

In Figures 6, 7 and 8 I have illustrated another embodiment of my invention in which a wiper bar 27 comprises a rectilinear section 28, to which opposite ends are affixed flange engaging hooks 29 made by extending from the ends of the section 28, a paint can flange underlying loop 30, from which, by reverse bending, there is formed an upstanding branch 31 and a loop 32, overlying the bead 20. This loop 32 may be pressed downwardly and angularly to provide the branch 33, at which terminal portion a finger operating loop 34 is provided. For any variation in depth of the flange 18, the branch 33 may be bent against the normal resiliency of the wire from which this contrivance is made, toward the loop 30, thereby compensating for any variation in size of the flange 18, and to give more or less frictional engagement to the seating portion of the hook 29 as it underlies the flange 19 at one point and overlies the bead 20 at another point.

To affix this contrivance in position, one of the hooking members 29 is inserted into the can opening so that the loop 34 rides over the bead 20 and then, by slight pressure, the loop 30 underlies and engages the flange 19a. This will serve to anchor one end of the wiper bar. The other end then is brought back towards the axial line, at the same time bringing the wiper bar in parallelism with the top of the can until the loop 30, held by the fingers, is brought beneath the flange 19a. Slight pressure on the loop so held by the fingers upwardly from the axial line will frictionally cause the loop 34 to ride over the bead 20, firmly affixing the wiper bar in position.

It will thus be observed that I have provided a highly efficient and simple brush wiper assembly which may quickly and facilely be attached in position, to carry out the objectives heretofore emphasized.

Having thus described my invention and illustrated its use, what I claim as new and desire to secure by Letters Patent, is:

1. In a can having a concentric groove at its top and a bead interiorly of the groove, the combination of a curved portion extending partly around the groove, said curved portion extending upwardly and over the bead and then downwardly against the bead to contact the same and then extending upwardly and terminating in a common member which serves as a wiping blade and means located on said curved portion to enlarge the same whereby a wedging fit is secured in said groove.

2. An article of manufacture of the class described adapted to be associated with a paint can having a depending groove near the inner periphery of its top and a bead interiorly of the groove, comprising, a continuous wire body member having curved portions adapted to be located in the said groove and a connecting element, said connecting element having its intermediate portion straight in form and of a length greater than a paint brush of predetermined character and extending across the opening of the said paint can, the ends of the connecting element extending downwardly, then upwardly, and then downwardly to join the said curved portions, said upwardly extending portions engaging the said bead for the purpose described.

3. In a can having a concentric groove at its top and a bead interiorly of the groove, defining

the can opening, the combination of a curved portion extending into the groove, said curved portion extending upwardly and over the bead and then downwardly against the bead to contact the same and then extending and terminating in a common member which serves as a wiping blade, said portion having an intermediate portion formed to wedge the bead-contacting portion securely in position whereby the wiping blade is securely held in respect of the bead interiorly of the groove.

4. In a paint can having a concentric groove at its top and a bead interiorly of the groove, defining the paint can opening, the combination of a wire section formed to provide a portion conforming to a part of said groove and extending partly around the groove and into the same, said curved portion extending upwardly and over the bead and then outwardly against the bead to contact the same and then extending inwardly and terminating in a common member which serves as a wiping blade, and means located on said curved portion to cause binding action of the same in relation to the groove, whereby a wedging fit is secured in respect of said groove and bead of said can.

5. As a new article of manufacture, a paint brush wiper for detachable attachment across the mouth of a paint can of the type having an inwardly directed flange in the form of an open-faced annular channel for frictional engagement with a closure, said wiper being made of resilient wire and comprising a wiper bar and integral doubly bent U-shaped end portions, said portions being so disposed that one leg thereof enters the channel and the other leg engages the inner portion of said flange, said end portions and the legs thereof being so dimensioned that the flange is gripped firmly between the legs thereof.

6. A brush wiper attachment for a container having a circular rim provided with an inturned flange portion, comprising a spring member having a substantially straight portion receivable within and disposable in chordal relation to the rim, said spring member having formations continuous with the straight portion and providing shoulders for engaging the inturned flanged portion on the lower side thereof, said formations being shaped to extend over the rim, and an arm continuous with one of the formations and extending exteriorly of the rim, said arm being engageable with the outer surface of the subtended part of the rim at a point circumferentially spaced from the ends of said part for yieldably retaining the shoulders in engagement with the inturned flange portion.

7. In combination with a container having an inner circular rim with a beaded top edge and an outer rim surrounding said inner rim, affording a groove therebetween, a brush wiper attachment for said container and comprising a member having a substantially straight portion to be disposed within the confines and below the top of and in chordal relation to the inner rim, arms extending upward from said portion to be nested with said beaded edge, and an extension continuous with and extending from one of said arms exteriorly and circumferentially of said inner rim and in said groove and engageable with the exterior of said inner rim within said groove along that portion of said inner rim which is subtended by said straight portion at a point substantially spaced from the ends of said straight portion.

8. In combination with a container having an inwardly projecting annular top flange terminating inwardly in an upstanding sleeve portion defining an opening in the container, a one-piece wiper member comprising a straight portion disposed in chordal relation to and within the confines of and below the top of said sleeve portion, said member projecting upward from the ends of said straight portion in substantial engagement with the inner wall of said sleeve portion and disposed in close nested relation to the upper part of said sleeve portion, said member terminating within the outer envelope of the container, and an extension on said member and engaged with the outer side of the subtended part of said flange at a point circumferentially spaced from the ends of said straight portion.

ARTHUR E. MYERS.