July 21, 1936. W. L. ORR 2,048,022

RECEPTACLE HANDLE

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Fig. 1

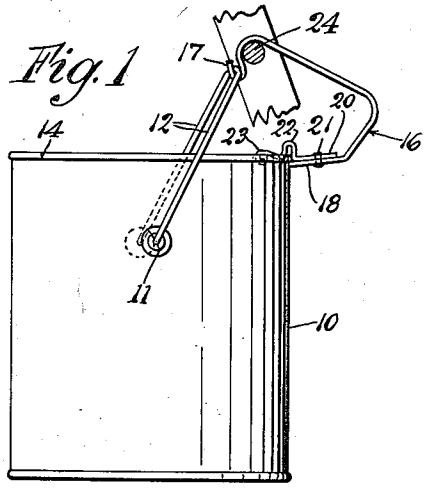


Fig. 2

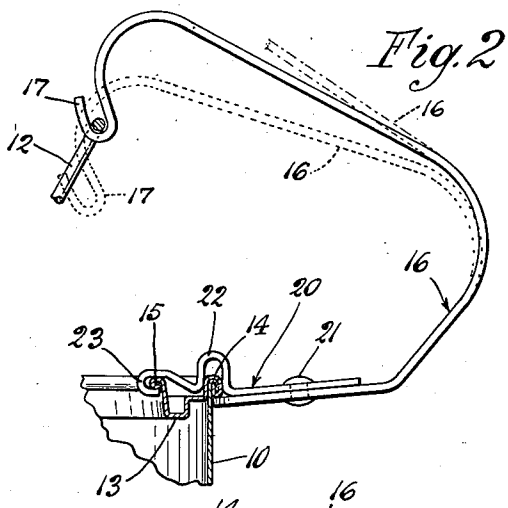


Fig. 6

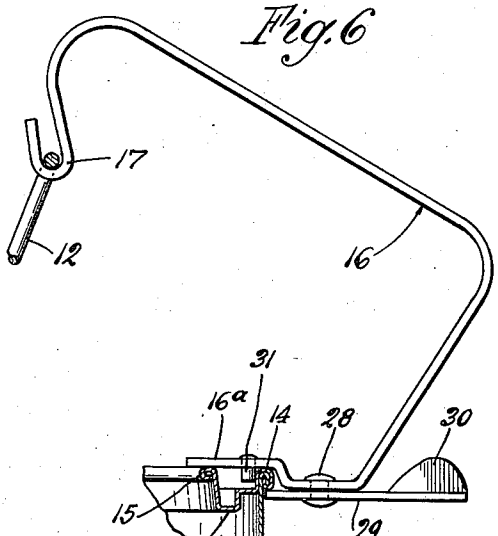


Fig. 3

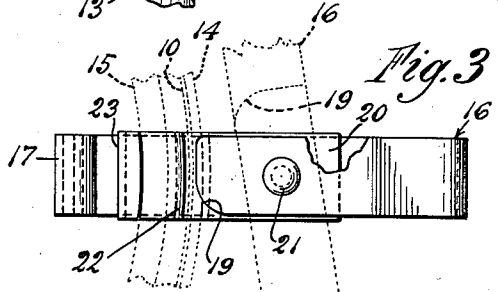


Fig. 4

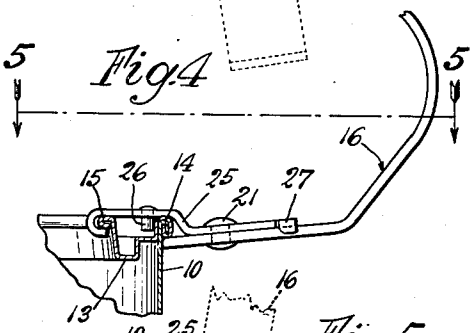


Fig. 7

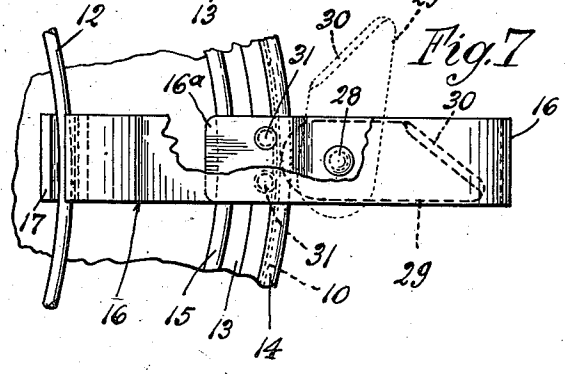
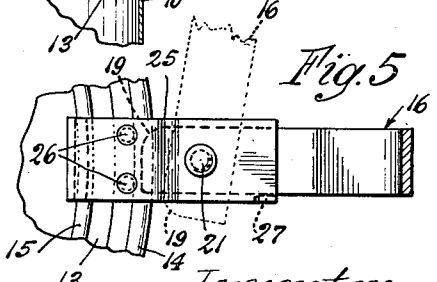


Fig. 5



Inventor
Walter L. Orr

by Maxwell F. Cargill
Attorney.

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Fig. 10

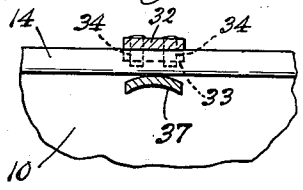


Fig. 8

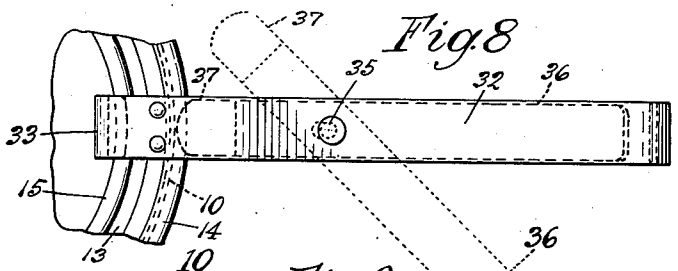


Fig. 9

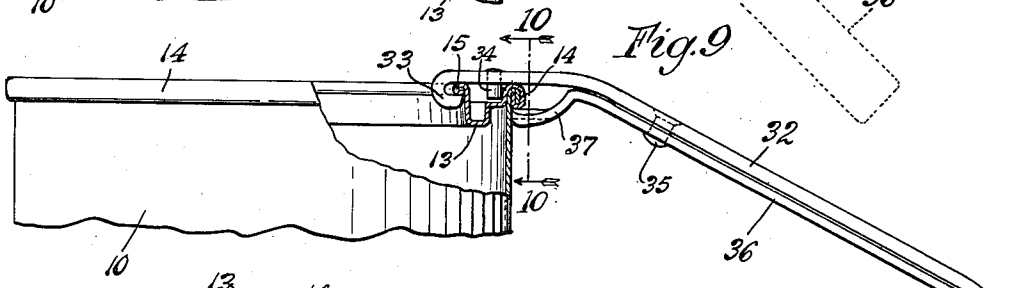


Fig. 11

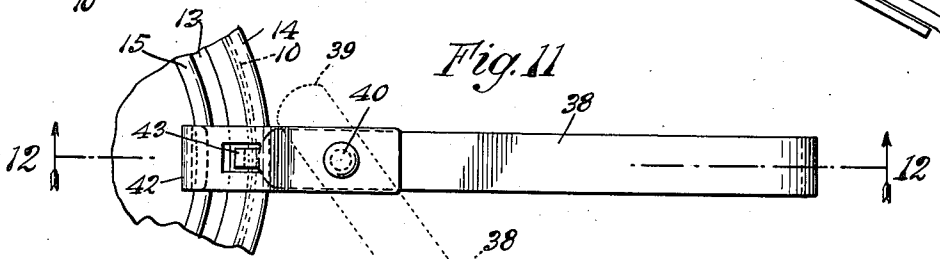


Fig. 12

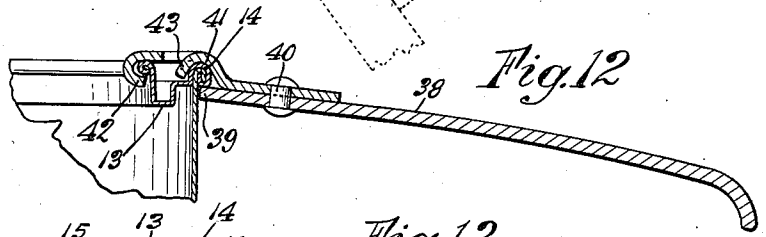


Fig. 13

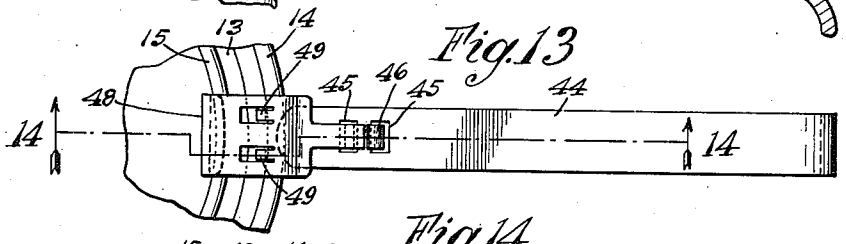
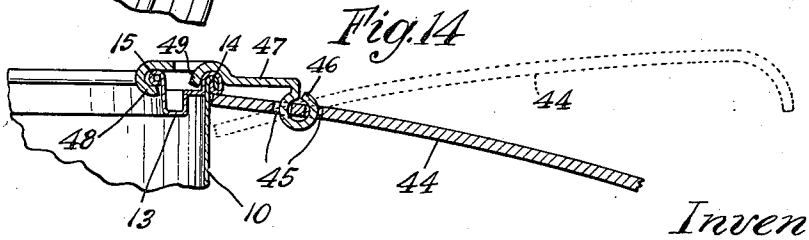


Fig. 14



Inventor
Walter L. Orr
by Maxwell F. Cargill
Attorney.

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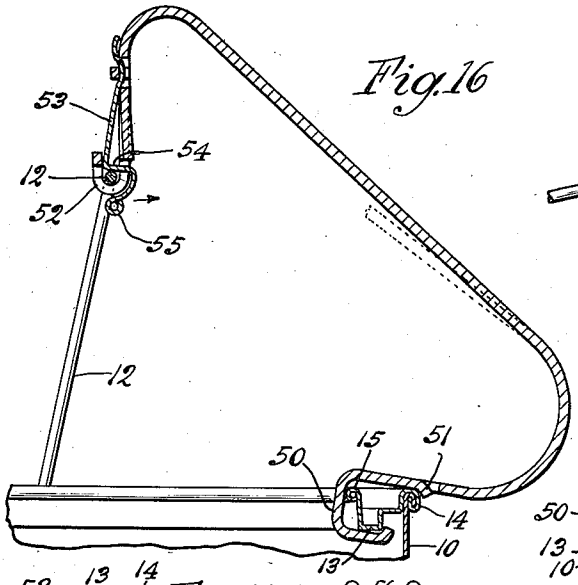


Fig.16

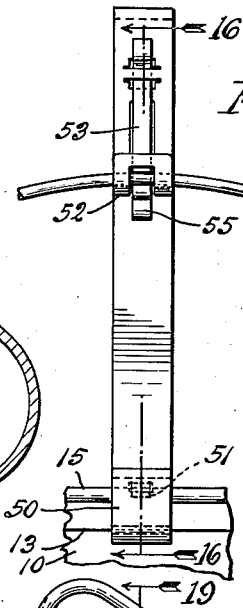


Fig.15

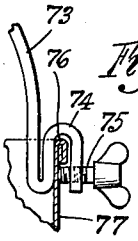


Fig.24

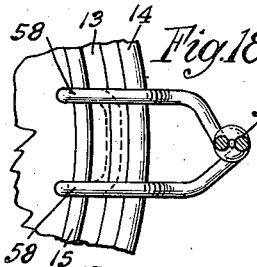


Fig.18

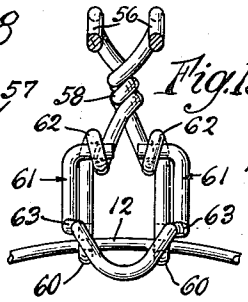


Fig.19

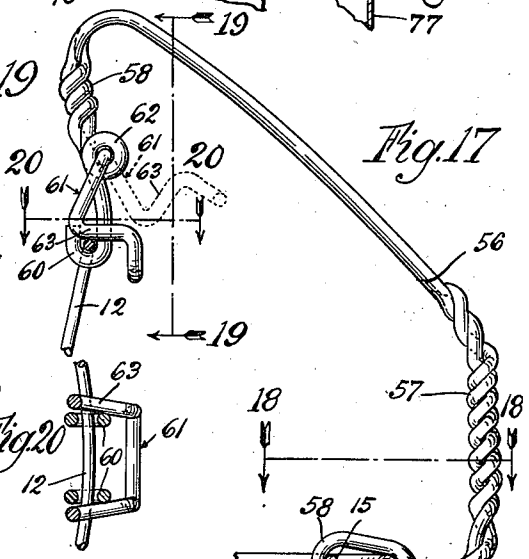


Fig.17

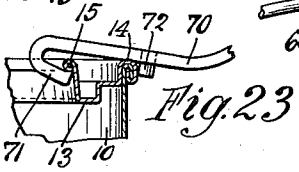
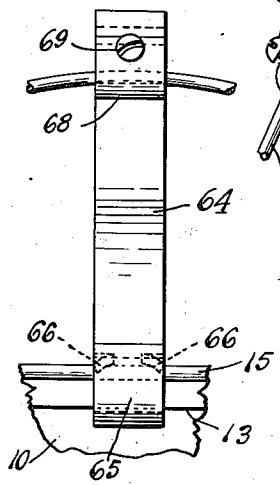


Fig.23

Fig.20

Fig.21



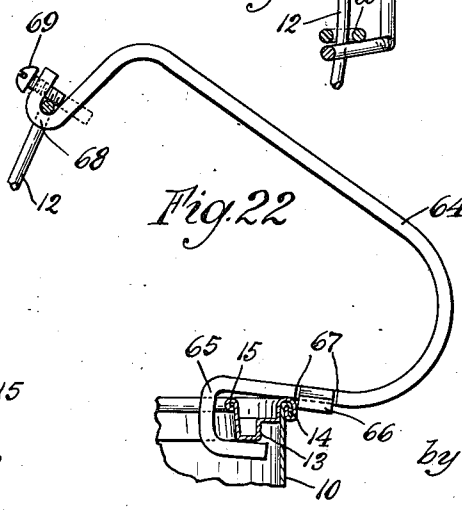


Fig.22

Inventor
Walter L. Orr
by Maxwell F. Cargill
Attorney.

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Fig. 25

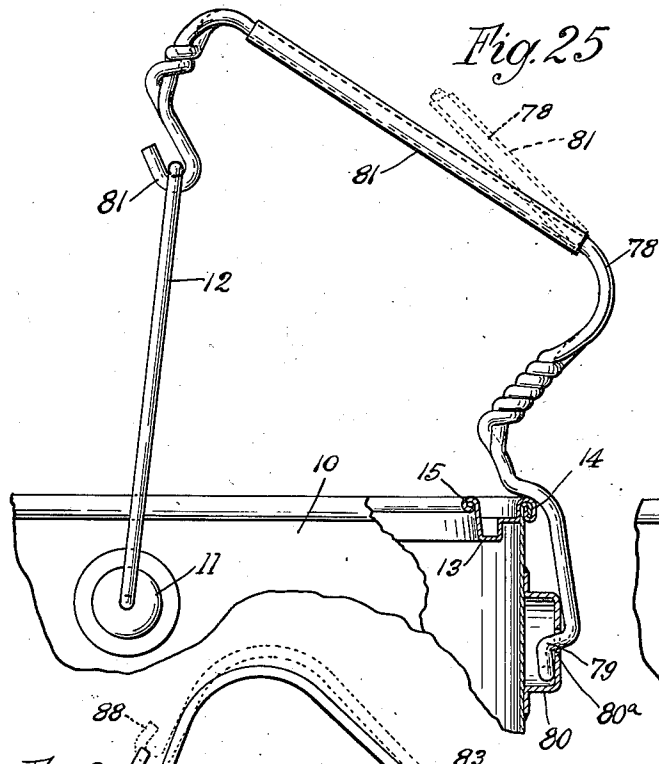


Fig. 26

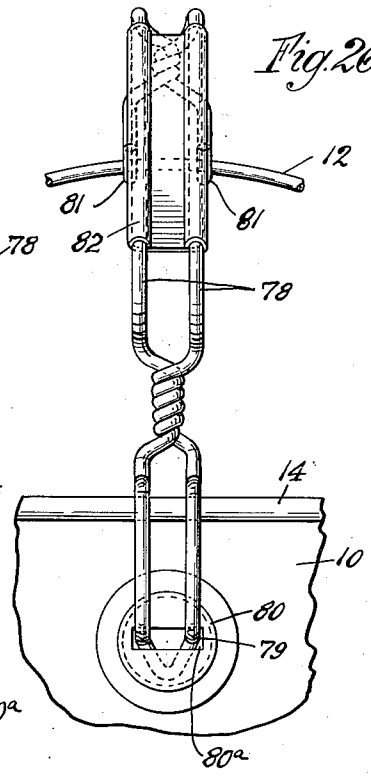


Fig. 27

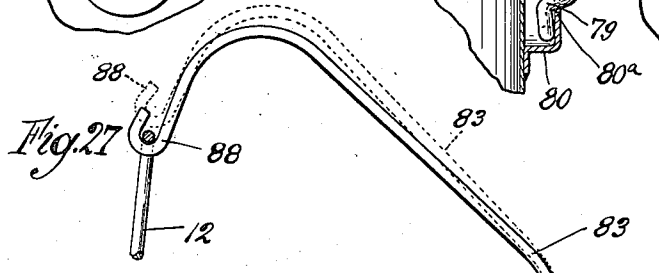
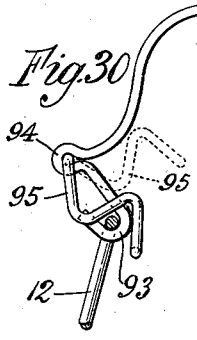


Fig. 30



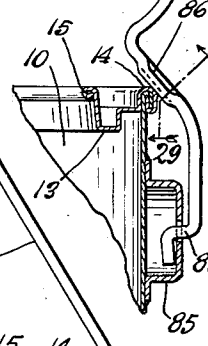


Fig. 28

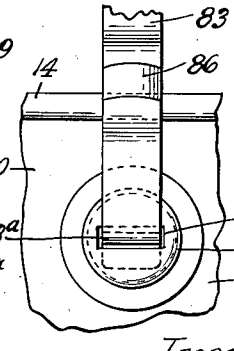


Fig. 29

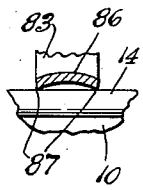
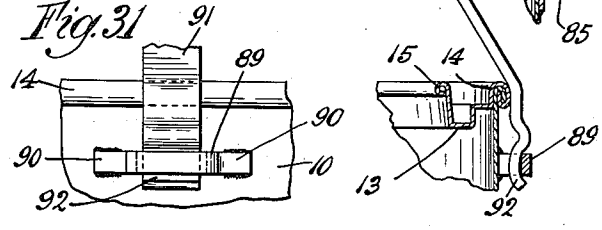


Fig. 31



Inventor
Walter L. Orr
by Maxwell F. Cargill
Attorney.

Patented July 21, 1936 2,048,022

UNITED STATES PATENT OFFICE

2,048,022

RECEPTACLE HANDLE

Walter L. Orr, Los Angeles, Calif.

Application September 15, 1934, Serial No. 744,119

5 Claims. (Cl. 220—94)

This invention relates to improvements in receptacle handles.

One object of the invention is to provide a supplementary handle for a receptacle having a bail which handle is arranged to detachably engage the receptacle at or adjacent the upper end thereof midway between the ends of the bail and to engage the intermediate portion of the bail whereby the two members so cooperate as to sustain each other in rigid position whereby with only one hand grasping the handle the receptacle may be lifted and tipped to pouring position.

Another object of the invention is to provide a modified form of supplementary handle for a receptacle having no bail which is arranged to engage the upper edge thereof to enable the receptacle to be lifted and tilted as desired, the handle being readily detachable from or attachable to the receptacle.

Paint pails, and pails for other liquid products, of the conventional friction top type are generally provided with bails carried by ears although in the smaller size pails or cams, the bails are generally omitted.

In pouring paint from a pail having a bail, it is generally necessary to use both hands and if one wishes to mix paints of different colors or to add oil or thinning material thereto, stirring can not well be done during the pouring since both hands are required in tilting the receptacle, especially where the latter is one of the larger sizes such as a conventional two quart or gallon pail. It is also frequently inconvenient to lift a small can of paint and tilt the same to pouring position since if the hands are oily or wet with paint or the paint has run down the side of the can, the can is likely to slip from the hand.

By the present improvements supplementary handles for both types of receptacles are provided which are readily attachable thereto and provide rigid handles by means of which the pails or cans can be lifted and manipulated.

A further advantage of the invention, as embodied in the supplementary handle for pails having bails, is that the cooperation between the handle and bail is such that the handle can be employed for supporting the pail on the rung of a ladder, for example, and the bail held slightly out of the normal central vertical position, thus providing easier and more convenient access to the paint by the brush of the user.

While I have described and illustrated the various forms of the invention as applied to paint pails of the conventional friction top type (except in Figure 24) it will be apparent that the invention may be employed in conjunction with receptacles of other form.

In the drawings:

Figure 1 is a side elevation of a pail having attached thereto one form of my improvements.

Figure 2 is an enlarged side elevation of the supplementary handle shown in Figure 1, with the portion of a conventional friction top pail shown in section.

Figure 3 is a bottom view of the handle shown in Figure 2.

Figure 4 is a broken sectional view of a pail and modified form of supplementary handle in position thereon.

Figure 5 is a broken top plan view of the structure shown in Figure 4.

Figure 6 is a side elevation of a different form of handle shown in position on a pail, the latter being in broken section.

Figure 7 is a top plan view of the assembled pail and handle shown in Figure 6.

Figure 8 is a top plan view of a handle construction arranged for gripping a pail or can rim without cooperation with a bail of the receptacle.

Figure 9 is a side elevation of the handle shown in Figure 8, and showing the interlocking engagement of the handle with the rim of a friction top can.

Figure 10 is a sectional view taken on line 10—10 of Figure 9.

Figure 11 is a top plan view of a modified form of handle shown in position on a receptacle.

Figure 12 is a sectional view taken on line 12—12 of Figure 11.

Figure 13 is a top plan view of a further modified form of handle shown in position on the receptacle.

Figure 14 is a sectional view taken on line 14—14 of Figure 13.

Figure 15 is an elevation of a different type supplementary handle arranged to cooperate with the bail of a pail.

Figure 16 is a sectional view taken on line 16—16 of Figure 15.

Figure 17 is a side elevation of a handle somewhat similar to the one shown in Figures 15 and 16, but constructed of wire.

Figure 18 is a sectional view taken on line 18—18 of Figure 17.

Figure 19 is a sectional view taken on line 19—19 of Figure 17.

Figure 20 is a sectional view taken on line 20—20 of Figure 17.

Figure 21 is an end elevation of a further modified form of supplementary handle.

Figure 22 is a side elevation thereof.

Figure 23 is a broken side elevation illustrating a slightly different form of receptacle rim engaging structure.

Figure 24 illustrates a supplementary handle for engaging a receptacle having no inwardly directed rim but having a simple roll or bead at the top.

Figure 25 illustrates a supplementary handle

formed of wire arranged to cooperate at one end with the bail of a pail and at the other end with a supplementary ear secured to the outside of the pail midway between the conventional bail ears.

Figure 26 is an end elevation of the handles shown in Figure 25.

Figure 27 is a side elevation of a supplementary handle similar to that shown in Figure 25, but being formed of strap material.

Figure 28 is a broken end elevation of the ear and rim engaging portion of the handle.

Figure 29 is a sectional view taken on line 29—29 of Figure 27.

Figure 30 illustrates a further modification when the supplementary handle is arranged to engage a loop attached to the outside of the receptacle in lieu of the supplementary ear above referred to.

Figure 31 is a broken end elevation of a receptacle having a loop above referred to and showing the lower portion of the handle engaging therewith.

In Figure 1, 10 indicates generally a conventional friction top pail such as is commonly used for paint or other liquids. Such pails usually have attached to the outside thereof ears 11, which carry bails 12. The cover of the pail is not illustrated since the supplementary handles shown in the drawings are used only when the pails are open.

As shown in Figure 2, the pail has a rim 13 at the inner periphery of the top and is usually secured to the pail by a bead or seam 14. The inner edge of the rim usually terminates in an inwardly directed folded edge 15.

The supplementary handle 16 shown in Figures 1, 2 and 3 is formed of strap metal having the desired resiliency, and at its forward end terminates in a hook 17 for receiving the bail 12. The opposite end 18 of the handle 16 is preferably rounded off as shown at 19 in Figure 3. Secured adjacent the end 18 is a rim engaging section 20 which is pivoted to the member 16 as at 21.

As shown in Figure 2, the member 20 is provided with an intermediate loop or offset portion 22 for spanning the bead or seam 14 and terminates at its free end in a hook 23 for engaging the inner edge 15 of the rim 13.

In attaching the supplementary handle to a pail, the section 16 is swung at an angle to the section 20, as illustrated in dotted lines in Figure 3. In this position the section 20 can be placed in engagement with the rim by first passing the hook 23 over the bead 15 and then lowering the member 20 in clockwise direction as viewed in Figure 2. The handle section 16 can then be swung on the pivot 21 in counter-clockwise direction as viewed in Figure 3, to cause the end of the section 16 to pass beneath the bead 14.

The handle is preferably so shaped that it is necessary to spring the same slightly downwardly to enable the bail 12 to be passed into engagement with the hook 17. When the parts cooperate as described, the supplementary handle and the bail cooperate to form a rigid three point attachment for the pail which enables the pail to be picked up by the supplementary handle and tipped for pouring the contents therefrom, as desired.

The bail 12 can be released from the hook 17 readily to enable the handle to be placed over the rung of a ladder for supporting the pail therefrom, after re-engagement of the hook with the bail, it will be noted that the pail, if supported from a rung 24 indicated by dotted lines in Figure 1, will tilt slightly counter-clockwise from the position shown in said figure. Since the bail 12 is held out of its normal vertical central plane, a more convenient access to the interior of the receptable with a brush is provided.

As is illustrated in some of the subsequently described figures a catch may be provided on the handle adjacent the hook 17 for preventing accidental dislodgment of the bail therefrom, if desired. In the form of the invention shown in Figures 4 and 5, the structure is such that the supplementary handle is attached to the pail in the same manner as described above. However, the section 25 is shaped to extend across the rim 13 and in lieu of the loop 22 for engaging the side of the bead 14, is provided with a pair of studs 26. The member 25 may also have an integral lug 27 for limiting the pivotal movement of the handle 16 past the proper position as the section 16 is swung clockwise from the dotted line position to the full line position of Figure 5.

The form shown in Figures 6 and 7 comprise a main handle section 16 pivotally attached at 28 to the clamping section 29 having an up-turned finger-piece 30 at its rear end. The forward end of the member 29 is adapted to extend under the bead 14 of the receptacle, while the forward end 16a of the handle 16 extends over the rim 13 and carries a pair of pins 31 which engage the inner margin of the bead 14 in a manner similar to the pins 26 of Figure 4, or the loop formation 22 of Figure 2.

The handle section 16 in the form shown in Figures 6 and 7 can be sprung down slightly into engagement with the bail 12 of the receptacle 10 as above described for providing a rigid support for the pail, enabling the same to be lifted and tilted with one hand.

The form of the supplemental handle shown in Figures 8 to 14 inclusive, is designed for engagement with the rim of the friction top receptacle without cooperation with the receptacle bail. This form of supplemental handle is, therefore, adapted for use with receptacles having no bail such as, for example, the smaller size paint cans. As shown in Figures 8 to 10, the device comprises a handle section 32 having its forward end shaped to form a hook 33 for engaging the inner bead 15 of the can rim 13. A pair of pins 34 project downwardly from the section 32 for engaging the inner periphery of the bead or seam 14. Pivoted at 35 to the lower side of the handle section 32 is a clamping handle section 36 having its forward end 37 offset for interlocking with the lower margin of the seam 14, as shown clearly in Figure 9. The extreme forward end of the offset portion 37 is preferably upwardly curved in its longitudinal center as shown in Figure 10, to permit the same to slide under the margin of the seam 14 more readily.

To attach the handle to the can the supplementary handle section 36 is swung to an angular position such as is indicated by dotted lines in Figure 8, the hook 33 placed in engagement with the bead 15, and the handle section lowered to the position shown in Figure 9. The handle section 13 is then swung counterclockwise as viewed in Figure 8 into alignment with the handle section 32, causing the end 37 to engage the lower edge of the seam 14 and hold the handle firmly on the can. The can may then be picked up by the handle and manipulated as desired.

In Figures 11 and 12 the operation is similar

to that shown in Figures 8 to 10 but the structure is slightly different. Thus the handle comprises a main handle section 38, the forward end 39 of which may be curved as shown in Figure 11. Pivoted at 40 to the handle section 38 is a section 41 having a hook 42 similar in structure and function to hook 33, but having a downwardly pressed integral lug 43 which engages the inner portion of the seam 14. To attach this form of handle to a pail or can the main section 38 is swung to the dotted line position shown in Figure 11, and the section 41 placed in engagement with the rim 13. The handle section 38 is then swung to the position shown in full lines in Figure 11, to cause the end 39 of the handle to firmly seat beneath the lower end of the seam 14.

In Figures 13 and 14 the main inside section 44 may be provided with a pair of transverse openings 45 leaving an intermediate integral pintle 46 to which is attached the handle section 47. This section as shown in Figure 14 has a forward hook 48 for engaging the bead 15 of the rim 13 and is provided also with a pair of downwardly struck integral lugs 49 for engaging an inner surface of the roll or seam 14.

To attach this handle to a pail the main section 44 may be tilted to the dotted line position shown in Figure 14, after which the section 47 is placed in the position shown in said figure. The handle section 44 is then moved from the dotted line position to the full line position to cause the inner end of the handle to engage the side of the can and the lower edge of the roll or seam 14. As will be seen, the can can then be lifted conveniently by means of the handle section 14.

The supplemental handle shown in Figures 15 and 16 is formed of flexible strap metal and has a hook 50 at its lower end which may be tilted counter-clockwise from the position shown in Figure 16, to enable the hook to be slipped over the flange 13 of the receptacle 10. A downwardly struck lug 51 will engage the seam 14 of the receptacle and prevent horizontal movement of the lower end of the handle to the left as viewed in Figure 16, and thereby become disengaged from the can. The upper end of the handle may then be raised to cause the hook 52 to engage the bail 12.

A spring catch member 53 is shown attached to the handle above the hook 52 and having a shoulder 54 which springs back over the bail as shown in Figure 16, to prevent accidental disengagement of the hook and bail. To release the supplementary handle it is only necessary to press on the lower end 55 of the catch to move it to the right as viewed in Figure 16, and then depress the supplementary handle to disengage the bail after which a tilting counter-clockwise movement enables the handle to be removed from engagement with the flange 13.

Figures 17 to 20 inclusive, represent a supplementary handle similar to that shown in Figures 15 and 16 except that it is made of wire. The handle 56 is formed of two strands of wire twisted together as at 57 which terminate at their lower ends in a hook 58 arranged to be slipped over the flange 13 as described above. Adjacent the upper end of the handle 15 the two strands are also twisted together as at 58 and then terminate each in a hook 60 for engaging the bail 12 of the receptacle, not shown.

A latch 61 may also be provided and consists of a wire which is pivotally retained by eyes 62 formed in the wire of the handle above the hooks 60, and is shaped to form shoulders 63 which frictionally engage the bail 12 and prevent accidental disengagement of the hooks 60 from the bail.

To release the bail the latch 61 may be moved to or toward the dotted line position shown in Figure 17, whereupon by depressing the handle the bail can be disengaged from the hook 60 and the handle then removed from the receptacle 10.

In Figures 21 and 22 the supplementary handle 64 may be formed of flexible strap material having a hook 65 at its lower end for engaging the flange 13 of the pail 10. In this form of the invention lugs 66 are formed by cutting short transverse kerfs 67 in opposite edges of the handle and then bending downwardly the portions of the metal between the kerfs. As shown in Figure 22 the ends of the lugs 66 engage the seam 14 of the receptacle to prevent movement of the lower end of the same to the left as viewed in said figure. The upper end of the handle may terminate in a hook 68 for receiving the bail 12 of the receptacle, not shown.

If desired, any suitable latch may be provided adjacent the hook 68 to prevent accidental displacement of the handle from the hook or a pin 69 may be passed through registering openings in the hook to prevent displacement of the handle.

Figure 23 shows fragmentarily the lower end of a supplementary handle 70 which at its upper end may be constructed as the previously described handles which engage the bail of the pail while its lower end terminates in a smaller hook 71 which engages the edge 15 only of the flange 13. Pins 72 or integral lugs are provided for abutting the seam 14 to prevent movement of the lower end of the handle to the left and the disengagement of the hook 71 from the roll or edge 15. To place this handle in engagement with a receptacle, the handle is tilted counter-clockwise from the position shown in Figure 23 to enable the hook 71 to engage the roll 15. It is then turned clockwise until the pins or lugs 72 are positioned against the seam 14, at which time the upper end of the handle is pressed into engagement with the bail of the receptacle, as described above.

In Figure 24 a supplementary handle 73 is shown which at its lower end terminates in an inverted U 74 carrying a set screw 75. The lower end of the handle can be slipped over the plain rolled edge 76 of a pail 77 and the screw 75 turned inwardly into engagement with the pail beneath the edge of the roll. The handle extends upwardly and over the pail and terminates in a hook for engaging the bail, not shown, in the manner above described. This type of supplementary handle, as will be seen, is useful for pails or receptacles not having the conventional friction top rim but terminating in a simple reinforcing roll or bead at its upper edge.

In Figures 25 and 26 I have illustrated a supplementary handle 78 formed of wire and terminating in an offset 79 at its lower end. The receptacle 10 is of the conventional friction top type, but midway between the conventional bail ears 11 is provided with an auxiliary ear 80 which may have a transverse slot 80a therein for receiving the inwardly and downwardly offset portions of the handle. In using the supplemental handle, the lower end is inserted in the slot in the ear, after which it is swung counterclockwise until the handle engages the upper edge or roll 14 of the receptacle, after which the handle is sprung downwardly at its upper end sufficiently to enable the bail 12 to be placed in engagement with the

hook 81. As shown in Figures 25 and 26, a sheet metal hand grip 82 may be secured to the separated portions of the wire handle, if desired.

Figures 27, 28, and 29 illustrate a supplementary handle which is similar to that shown in Figures 25 and 26, except that it is formed of resilient strap metal instead of resilient wire. The handle is indicated by the numeral 83, and has an inwardly and downwardly offset lower end 83a which is adapted to be passed through a slot 84 in the auxiliary ear 85 which is soldered or welded to the can midway between the conventional ears, as shown in Figure 25. The handle, at the portion 86 where it engages the roll or seam 14 of the receptacle 10, preferably is formed with a concavity at its inner surface whereby the edges 87 of the portion 86 will contact with the roll 14 to inhibit tendency of the handle to slip. The upper end of the handle may be provided with a hook 88 for engaging the conventional bail 12.

In Figures 30 and 31 I have shown a metal loop 89 which may be welded or soldered at its ends 90 to the receptacle 10 midway between the conventional bail ears, not shown. The supplementary handle 91 has its lower end 92 shaped for engagement with the loop 89 when in the position shown in Figure 30, to prevent upward sliding movement thereof. The upper end of the handle may be provided with a hook 93 for engaging the bail 12 of the receptacle, as will be understood. In this particular form of the supplemental handle the strap material of which it is formed may be shaped to provide an eye 94 adjacent the hook 93 for pivotally receiving a latch member 95 to prevent disengagement of the bail from the hook when the latch is in the full line position.

While I have shown, in some of the figures, latches for preventing accidental disengagement of the bails from the handles, it will be understood that where the bail engaging supplementary handles are sprung downwardly to enable the bail to be interlocked with the hooks, the use of the latches is not essential. However, as a precaution, any suitable latches may be used with any of the forms of the bail engaging handles described and illustrated. It will be seen that the rigid three point suspension provided by all the forms of supplementary handles which engage the pail bails, cooperates with the bails whereby each member is rigidly held in a given position with respect to the pail. It is preferred to so shape the supplementary handles that the bails will be disposed at a slight angle from the normal upright position, whereby when the pail is supported from the rung of a ladder it will tilt slightly to one side and thus enable the paint brush to be inserted more freely therein without obstruction by the bail, as indicated by dotted lines in Figure 1.

When a paint pail equipped with my supplementary handle is to be used on a ladder, the upper end of the handle can be placed over a rung and the bail brought readily into engagement therewith to tilt the pail preferably toward the user, whereby more ready access to the paint is provided than where a pail is hung pendant from the bail. It will also be seen that the engagement of the handle with the bail forms a rigid means which enables the pail to be picked up by the handle and tilted as desired in pouring the contents therefrom. This is of particular advantage where one is mixing his paints, since he can pour from one pail into another by the use of one hand only while the other hand is used for stirring the paint during the pouring operation.

It will be noted also that the use of the supplementary handle is not restricted for use with paint pails.

While I have described and illustrated certain embodiments of my improvements for the purpose of illustration, I do not wish to be restricted specifically thereto except as so limited by the appended claims.

I claim:

1. A supplementary handle for a receptacle having an upper flange secured to the body of the receptacle by a roll comprising a pair of pivotally connected members one of which is provided with a hook arranged to hook over the inner edge of said flange and the other member having an end adapted to engage the lower surface of the top roll of the receptacle and clamp said first member to said flange.

2. A supplementary handle for a bailed receptacle having a flange at the upper end comprising a pair of pivotally connected members one of which has means extending over said flange and into engagement therewith, said other member having a lower end arranged for engaging the outer surface of said receptacle for clamping said first member to said flange, said second member having its opposite end extended upwardly and over said receptacle and terminating above the same and having means for attachment to said receptacle bail whereby said bail and handle are mutually supported in rigid position relative to said receptacle.

3. A supplementary handle for a bailed receptacle having a flange adjacent the upper end comprising a member having the lower end thereof arranged to extend radially over said flange into engagement therewith, a lever pivoted to said member and having an end adapted to be swung into engagement with an exterior portion of said receptacle adjacent the upper end thereof to clamp a portion of said flange between said ends of said members, and a bail-engaging means on the upper end of said first mentioned handle member disposed above the receptacle.

4. A handle for a friction top receptacle having an inwardly directed flange seamed to the top of the receptacle body comprising a member arranged to extend radially over and engage a portion of said flange, and a second member pivotally connected to said first member arranged to be swung into abutting relation with the lower edge of said seam to retain said first member in engaging relation with said flange.

5. A supplemental handle for a bailed receptacle having a flange at the upper end thereof comprising a member having a clamp at the lower end for attachment to said flange against upward dislodgment therefrom, said member being supported by said clamp and shaped to extend upwardly and over said receptacle, and an upwardly open hook at the upper end of said member disposed initially above the path of travel of the bail, said member being flexible whereby the upper end thereof can be depressed for effecting the engagement under tension of the hook with the bail whereby said bail supports the upper end of the handle against upward movement relatively to the receptacle, and the bail and handle are mutually restrained against relative movement to provide a rigid three point suspension for the receptacle.

WALTER L. ORR.