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(54) **PAINT STORAGE CONTAINER**

Related U.S. Application Data

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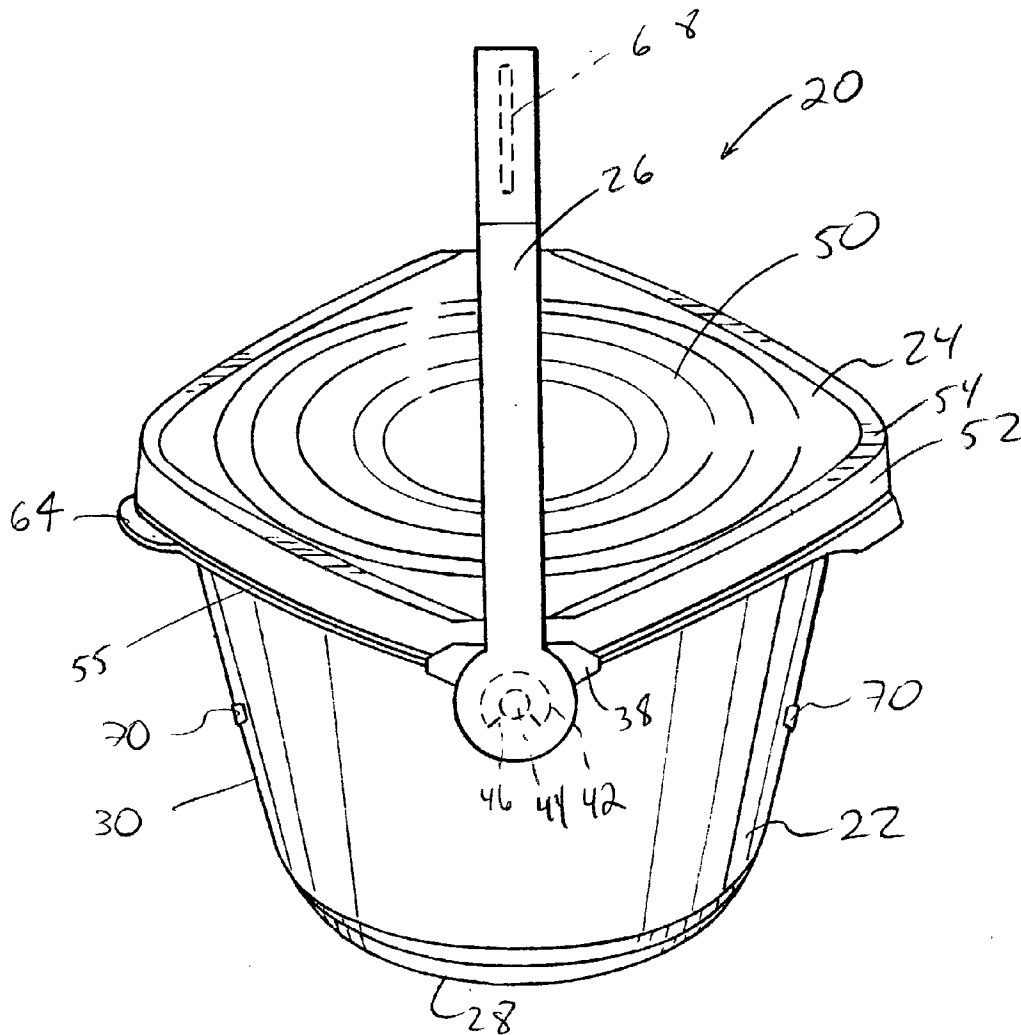
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(57) **ABSTRACT**

A reusable paint container is disclosed which may include a tub to which a lid is removably attached and lockable thereto by a handle pivotably attached to the tub. The tub can be manufactured to include a side wall which flares outwardly and upwardly from a bottom wall to an upper rim. In so doing, the containers are nestable when not in use and easily stackable when in use. Moreover, the upper rim can be provided so as to include built in pouring spouts and brush wiping edges to facilitate use of the container.



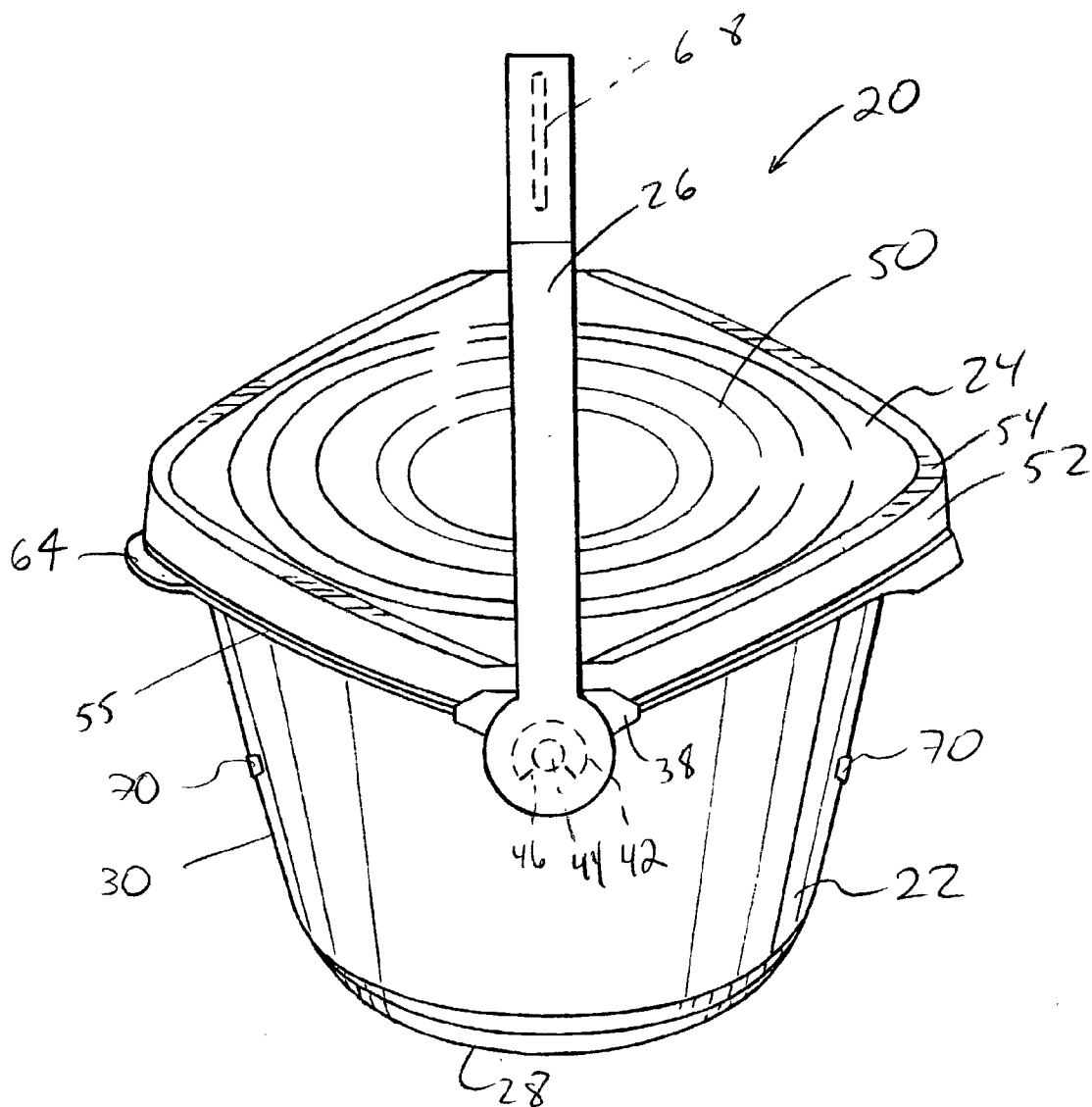


Fig 1

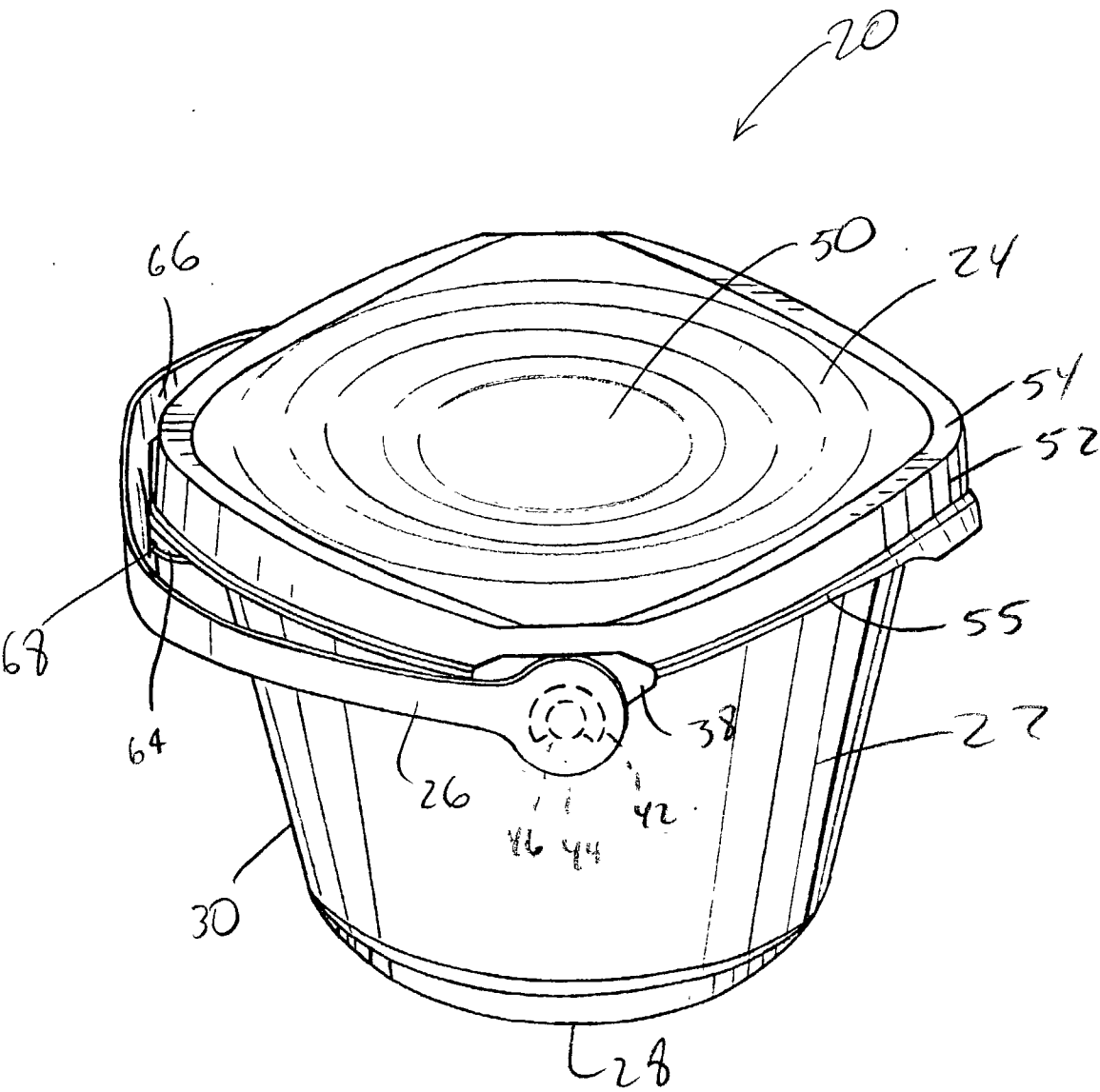


Fig 2

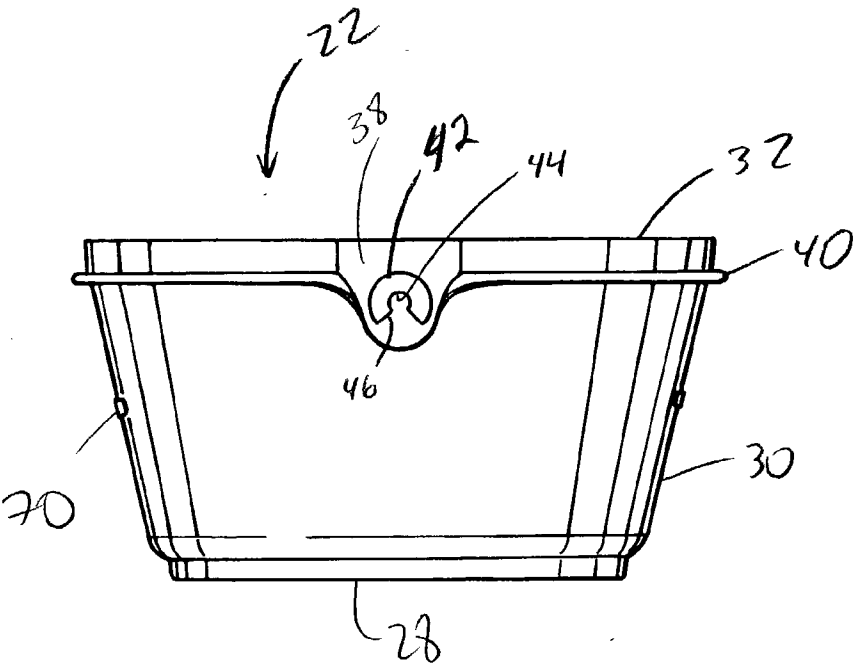


Fig 3

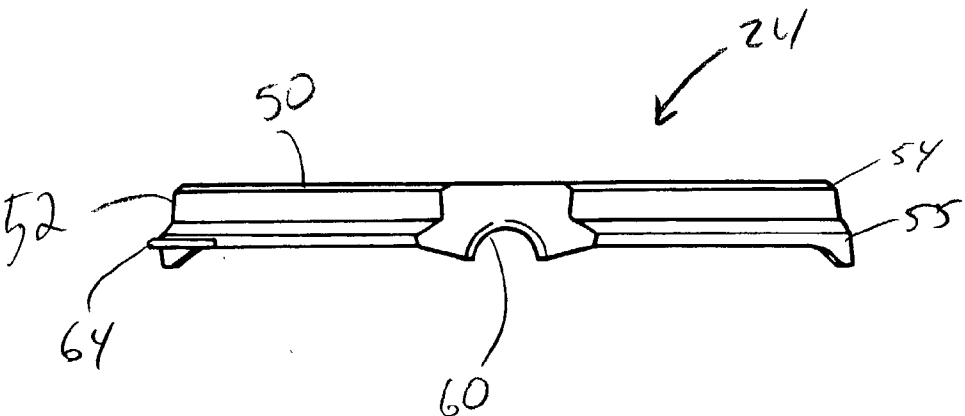


Fig 4

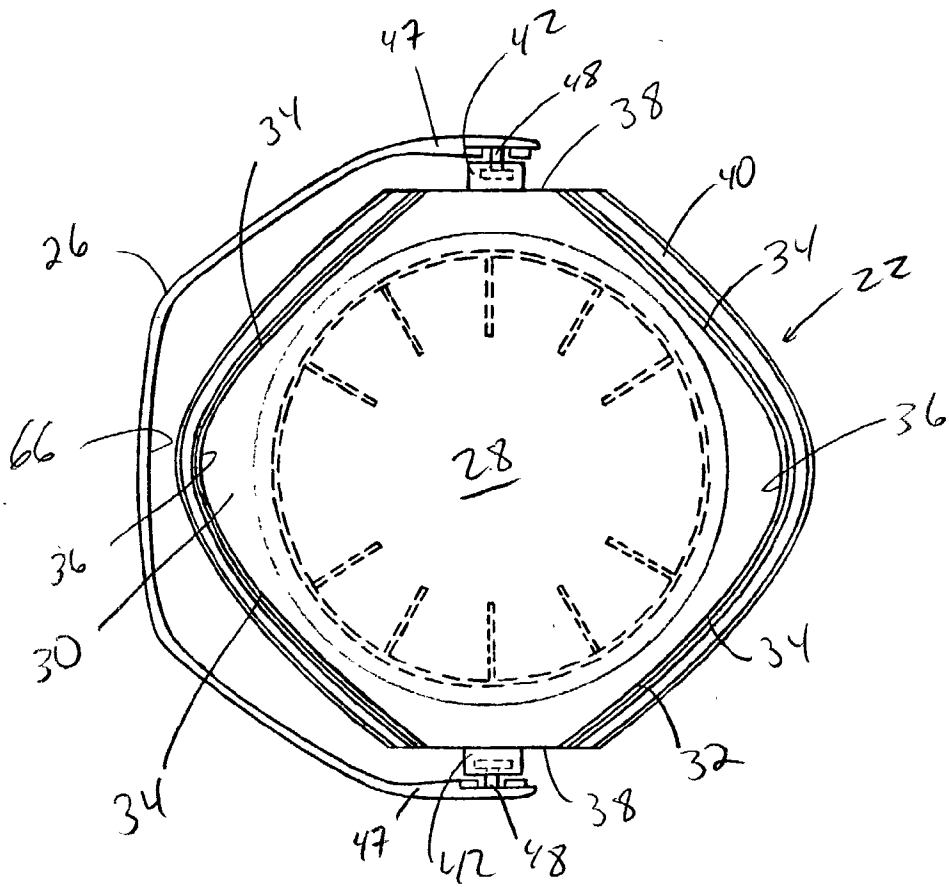


Fig 5

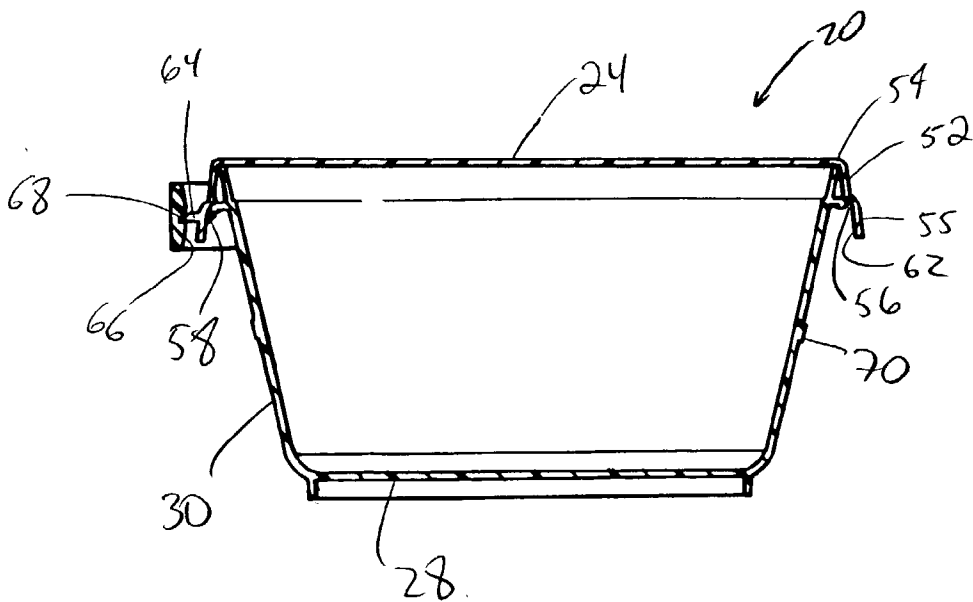


Fig 6

PAINT STORAGE CONTAINER

CROSS REFERENCE TO RELATED APPLICATION

[0001] This application claims the priority benefit of U.S. Provisional Patent Application No. 60/337,237 filed on Dec. 5, 2001.

FIELD OF THE DISCLOSURE

[0002] The disclosure generally relates to painting apparatus and, more particularly, relates to containers for storing paint after initial use.

BACKGROUND OF THE DISCLOSURE

[0003] After completion of a typical painting job, home owners or professionals are confronted with the prospect of storing the unused paint left over from completion of the job. In almost all current instances, such storage consists of reattaching a metal lid to a metal paint can. More specifically, the metal paint can typically includes a circular bottom wall from which a cylindrical side wall upwardly extends and terminates in an upper lip having a circumferential groove. The lid is manufactured to be substantially planar but to include a circumferential rim adapted to be received in the lip of the can. If sufficient pressure, i.e., hand pressure or that from the tapping of a hammer, is applied, the lid can be forced into the can lip to create an effective seal.

[0004] While such a system is effective, it does suffer from a number of drawbacks. For example, painting, be it through use of a brush, a roller or the like, typically results in substantial drippage of the paint over the side of the can. For example, when pouring the paint from the can into a paint tray for use of a roller, the cylindrical nature of the can does not lend itself to clean, drip-free pouring. Accordingly, the outside of the can becomes covered in dried paint thereby covering valuable information printed on the label of the can, such as brand or color. At the very least, such dried paint is messy and unattractive. This is especially so when reattaching the lid to the can, in that paint residing in the circumferential top rim of the can will splatter outwardly when the lid is tapped closed.

[0005] Moreover, while such a metal lip to metal lid does create a seal, its effectiveness is directly related to the degree of care exercised by the user when storing the paint. Such cans are also often difficult to open, either at initial purchase, or after initial use. In either event, a separate tool such as a screwdriver or the like is needed to pry the lid from the can at various locations.

[0006] In addition, as such cans are typically manufactured from metal, they are necessarily opaque thereby preventing the user from immediately identifying the color of the paint stored within the can. The use of metal also lends itself to the creation of rust, especially when the cans are typically stored in basements or other damp environments which can lead to oxidation of the metal.

[0007] Finally, given the cylindrical nature of such cans, they are not directly stackable in that the diameter of the base of one can directly corresponds with the diameter of the top of another can, and thus if not perfectly balanced, will not stack. This problem is accentuated if the lids are not fully and completely tapped down, thus resulting in a non-flat surface upon which to stack.

SUMMARY OF THE DISCLOSURE

[0008] In accordance with one aspect of the disclosure, a reusable paint container is disclosed which may include a tub, a lid, and a handle. The tub may include a bottom wall from which a side wall upwardly extends and terminates at a rim defining an open top. The lid may be removably attached to the top rim and include a flange. The handle may be pivotably attached to the tub and include a groove. The handle may be movable between locked and open positions with the flange being held within the handle groove when in the locked position, and being removed from the groove when in the open position.

[0009] In accordance with another aspect of the disclosure, a method of storing paint is disclosed which may include the steps of pouring paint into a tub, attaching a lid to the tub and substantially sealing the paint therein, and locking the lid onto the tub by rotating the handle, pivotably mounted to the tub, into engagement with the lid.

[0010] In accordance with yet another aspect of the disclosure, a reusable paint container is disclosed which may comprise a tub, a lid removably attached to the tub, a handle pivotably attached to the tub, and means associated with the handle for locking the handle onto the tub.

[0011] These and other aspects and features of the disclosure will become more apparent upon reading the following detailed description when taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] **FIG. 1** is a perspective view of a reusable paint container constructed in accordance with the teaching of the disclosure, and depicted in a first locked configuration;

[0013] **FIG. 2** is a perspective view similar to **FIG. 1**, but with the container depicted in a second locked configuration;

[0014] **FIG. 3** is a side view of the tub of the container of **FIGS. 1 and 2**;

[0015] **FIG. 4** is a side view of the lid of **FIGS. 1 and 2**;

[0016] **FIG. 5** is a top view of the tub of **FIGS. 1 and 2**;

[0017] **FIG. 6** is a sectional view of the container of **FIG. 2**, taken along line 6-6 of **FIG. 2**.

[0018] While the disclosure is susceptible to various modifications and alternative constructions, certain illustrative embodiments thereof have been shown in the drawings and will be described below in detail. It should be understood, however, that there is no intention to limit the disclosure to the specific forms disclosed, but on the contrary, the intention is to cover all modifications, alternatives constructions, and equivalents falling within the spirit and scope of the invention as defined by the appended claims.

DETAILED DESCRIPTION OF THE DISCLOSURE

[0019] Referring now to the drawings, and with specific reference to **FIG. 1**, a paint container constructed in accordance with the teachings of the disclosure is generally referred to by reference numeral **20**. While the container **20** will be described herein for use in conjunction with paint, it is to be understood that in the detailed description that

follows, as well as the appended claims, the term “paint” is defined as any type of material adapted to be applied to a surface for protection or decoration thereof. Accordingly, “paint” as used herein includes not only paint, but stain, lacquers, varnishes, sealants, and the like. Moreover, while the drawings depict a container 20 having a given size, it is to be understood that the teaching of the disclosure can be used to construct containers of a variety of different sizes including, but not limited to, pints, quarts, half-gallons, and gallons.

[0020] Referring again to FIGS. 1 and 2, the container 20 is shown to include a tub 22, a lid 24, and a handle 26. The lid 24 is adapted to be removably attached to the tub 22 and the handle 26 is adapted to pivot about the tub 22. More specifically, the handle 26 can pivot to a first locked position above the tub when it is desired to carry the container 20, and to pivot into alignment with the lid 24 to a second locked position to lock the lid 24 onto the tub 22 as will be described in further detail herein.

[0021] Referring now to FIGS. 3 and 5, the tub 22 is shown to include a bottom wall 28 from which a side wall 30 upwardly extends. The side wall 30 terminates in an upper rim 32 and flares outwardly from the bottom wall 28 to the rim 32 in that it increases in diameter from the bottom wall 28 to the rim 32. Moreover, as will be appreciated from FIG. 5, the side wall 30 progresses from a circular shape at bottom wall 28 to a substantially rectangular shape at the upper rim 32. As defined herein “substantially rectangular” is used to connote the unique shape of the upper rim 32 in that it includes four discernable side walls or edges 34. The rim 32 further includes two pouring spouts 36, and two handle attachment points 38. Moreover, while the upper rim 32 may be described herein as being “substantially rectangular” and including side edges 34, it will be noted from FIG. 5 that the side edges 34 are in fact not linear but are slightly arcuate.

[0022] The tub 22 further includes a flange 40 which radially extends outwardly from the tub side wall 30 proximate the upper rim 32. The tub 22 further includes first and second handle pivots or hubs 42 which extend outwardly from the handle attachment points 38. As will be noted, the handle pivots 42 are of a conventional design in that they include a pivot recess 44 accessible by a wedge recess 46. Accordingly, by manufacturing the handle 26 to have ends 47 with axles 48 of a similar or slightly greater diameter than the pivot recess 44 extending therefrom, when the axles 48 are snapped into the pivot recesses 44, the handle 26 is retained onto the tub 22 and able to pivot thereabout. The axles 48 may each include retainers 49 at ends thereof to limit lateral movement of the handle ends 47 as shown best in FIG. 5.

[0023] Referring now to FIGS. 1 and 4, the lid 24 is shown to include a shape matching that of the upper rim 32. In addition, the lid 24 includes a planar top surface 50 from which the mounting lip 52 downwardly extends at a circumference 54 thereof. A retaining rim 55 further extends downwardly from the mounting lip 52 and therebetween defines a retention notch 56, as shown best in FIG. 6, adapted to frictionally receive the flange 40 therein when the lid 24 is attached to the tub 22. Moreover, when the lid 24 is attached to the tub 22, and the flange 40 is received in the notch 56, mounting cleats 58, or other similar structure,

provided on the retaining rim 55 snap over the flange 40, and thus reside below the flange 40 to thereby provide a positive means for retaining the lid 24 onto the tub 22 until significant force is applied to the lid 24 for removal thereof.

[0024] As will also be noted from FIG. 4, the lip 52 is provided with first and second semi-circular recesses 60 adapted to be mounted over the handle attachment pivots 38. In addition to providing a notch 56 on an inside surface 62 of the mounting lip 52, the lid 24 is provided with a radially outwardly extending locking ledge 64. The locking ledge 64 serves not only as a surface which can be easily grasped by a user for removing the lid 24 from the tub 22, but is also provided to interact with the handle 26 in locking the lid 24 onto the tub 22 as described in further detail herein. Moreover, the recesses 60 provide a surface adapted to interact with the handle ends 47 to hold the lid 24 to the tub 22 when in a first locked position.

[0025] Referring now to FIG. 5, as well as FIG. 2, the second locking position of the handle 26 is shown in detail. An inside surface 66 of the handle 26 is provided with a locking channel 68 adapted to receive the locking ledge 64 of the lid 24 when the lid 24 is locked onto the tub 22. By providing the locking channel 68, and appropriately dimensioning the handle 26, the handle 26 is placed under significant tension and into the locked position, thereby holding the lid 24 onto the tub 22. Only when sufficient and relatively significant force is exerted by the user upon the handle 26, is the handle 26 dislodged from the lid 24, thereby freeing the lid 24 for removal from the tub 22 by the user. In alternative embodiments, it is to be understood that alternative means for locking the lid 24 onto the tub 22 are certainly envisioned and encompassed within the scope of the present invention. Such means may include, but are not limited to, threaded arrangements, snaps, clips, and ties.

[0026] As far as material selection is concerned, the container 20 can be manufactured from any suitable type of material, but given the desire for the container 20 to be reusable, easily washable, and to provide a surface to which paints are not likely to stick, any number of polymers are suitable candidates, including but not limited to polypropylene. Such materials can be transparent, translucent, or opaque.

[0027] While the structure and use of the container 20 has been described above in terms of a user desiring to store unused paint therein, the structure described above is also advantageous to retailers or other vendors of such containers. For example, by providing the side wall 30 so as to flare outwardly from the bottom wall 28 upwardly toward the upper rim 32, the tubs 22 are easily nestable one within another, thereby conserving shelf space, as well as limiting transportation and storage costs.

[0028] In operation, the structure described above can be used to construct a paint storage container 20. Such a container 20 can be used whenever desired by the user, but perhaps most advantageously after completing a painting job, and it is desired to store the remaining paint from typical conventional metal paint pans. In addition, excess paint poured into a paint roller tray or the like can be easily poured into such a container for subsequent storage and use. After such paint is poured into a tub, the lid 24 can be secured onto the upper rim such that the groove 56 of the mounting lip 52 is fully surrounding the flange 40 of the tub 22. The handle

26 can then be rotated from the first locked position depicted in **FIG. 1**, to the second locked position depicted in **FIG. 2**, such that the groove **62** in the handle **26** receives the locking ledge **64** of the lid **24** therein. If used in conjunction with other similar containers **20**, such containers **20** can be easily stacked in that since the side wall **30** is tapered so as to flare upwardly the bottom wall **28** is sized to be received in the lid **24** in an easily stackable fashion.

[0029] By manufacturing the container **20** from suitable polymers such as polypropylene and manufacturing the container to relatively high tolerances, the lid **24** can be secured to the tub **22** in a substantially sealed fashion thereby ensuring the effectiveness of the paint stored therein. Once the user again wishes to use the paint stored in the container, the handle **26** can be rotated to remove the locking ledge **64** from the groove **62**, thus enabling the user to remove the lid **24** from the tub **22**. Once in such an open configuration, the shape of the tub **22** provides certain additional advantages. For example, the built-in pouring spouts **36** of the tub **22** enable the user to easily pour from the tub **22** in an accurate fashion with less likelihood of any spillage.

[0030] In addition, the side edges **34** of the upper rim **32** are provided in a substantially linear shape to provide a suitable surface against which a brush can be wiped to thus accurately meter the paint provided on the brush and do so in a clean fashion. Preferably, the material from which the container is manufactured is transparent to thus enable the user to easily identify the contents contained within the container **20**. To further assist the user in identifying the contents of the container **20**, any number of stickers, labels, or the like can be provided for attachment to the container **20** or lid **24**. For example, the user can transfer information from the original container from which the paint is sold to thereby providing such information as brand, color, pigment formula, date of storage, or the like. The tub **22** may further be provided with a number of graduations **70** to provide indicia to the user as to the volume of paint held within the container.

[0031] From the foregoing, one of ordinary skill in the art will readily appreciate that the teachings of the disclosure can be used to construct a paint storage container enabling paint to be stored in a clean, easily stackable, easily storable, easily identifiable fashion, and to do so in a container which enables the paint stored therein to be easily poured or metered therefrom. Moreover, the paint container is provided with an effective, user friendly locking device for ensuring the lid remains attached to the tub while stored.

What is claimed is:

1. A reusable paint container, comprising:

- a tub, the tub having a bottom wall from which a side wall upwardly extends and terminates at a rim defining an open top;
- a lid removably attached to the tub rim, the lid including a flange; and
- a handle pivotably attached to the tub, the handle including a groove and being movable between locked and open positions, the flange being held within the handle groove when in the locked position, the flange being removed from the groove when in the open position.

2. The reusable paint container of claim 1, wherein the tub sidewall is substantially cylindrical proximate the bottom wall, and substantially rectangular proximate the rim.

3. The reusable paint container of claim 1, wherein the rim includes at least two arcuate corners defining pouring spouts.

4. The reusable paint container of claim 1, wherein the rim includes at least one substantially linear edge defining a brush wiping surface.

5. The reusable paint container of claim 1, wherein the tub further includes a locking flange radially extending outwardly from the tub sidewall proximate the rim, and the lid includes planar top surface from which a lip downwardly extends, the lip including a circumferential notch adapted to receive the tub locking flange when the lid is attached to the tub.

6. The reusable paint container of claim 5, wherein the lid further includes a plurality of locking cleats extending radially inward from the lid lip below the notch, the locking cleats engaging a bottom surface of the tub locking flange.

7. The reusable paint container of claims 1, wherein the handle hubs extend from the tub sidewall at corners of the rim between the pouring spouts, the handle is pivotably attached to the handle hubs, and the lid lip includes first and second recesses adapted to receive the handle hubs.

8. The reusable paint container of claim 1, wherein the tub side wall includes graduation indicia.

9. The reusable paint container of claim 1, wherein the tub side wall flares upwardly from the bottom wall.

10. The reusable paint container of claim 1, wherein the reusable paint container is manufactured from plastic.

11. The reusable paint container of claim 10, wherein the plastic is transparent.

12. A method of storing paint, comprising:

pouring paint into a tub;

attaching a lid to the tub and substantially sealing the paint therein; and

locking the lid onto the tub by rotating a handle, pivotably mounted to the tub, into engagement with the lid.

13. The method of claim 10, wherein the lid includes a top surface from which a lip downwardly extends from a perimeter thereof, a locking ledge extends radially outwardly from the lip, and the handle includes a locking channel, the locking step being performed by rotating the handle so as to engage the locking ledge in the locking channel.

14. The method of claim 10, wherein the pouring step is performed by pouring paint from a manufacturer's can into the tub.

15. The method of claim 10, wherein the pouring step is performed by pouring paint from a paint roller tray into the tub.

16. A reusable paint container, comprising:

a tub; and

a lid removably attached to the tub;

a handle pivotably attached to the tub;

means associated with handle for locking the lid onto the tub.

17. The reusable paint container of claim 16, wherein the means includes a channel adapted to pinch the lid.

18. The reusable paint container of claim 17, wherein the channel is provided in the handle.

19. The reusable paint container of claim 16, where the tub includes a bottom wall from which a side wall flares upwardly.

20. The reusable paint container of claim 19, wherein the side wall includes an upper rim, the upper rim including first and second pouring spouts.

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