PAINT BRUSH FOR OPENING A CAN

In accordance with an embodiment of the present invention, a paint brush is adapted for opening a paint can. The paint brush comprises a handle having a built-in tip opposite the brush's bristles and substantially thinner in at least one dimension normal to the brush's axis than portions of the handle intended to be gripped by the user. The tip is thin enough to fit in a gap between a lip disposed along an outer circumference of a lid of the paint can and an upper edge of a container of the paint can.
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TECHNICAL FIELD OF THE INVENTION

[0001] The present invention relates generally to the field of hand tools, and more particularly to a paint brush for opening a can, for example a paint can.

BACKGROUND OF THE INVENTION

[0002] Typically a paint brush comprises a bunch of bristles attached to a handle. In use, a user clasps the handle and manipulates the brush as desired. Typically, the handle is made of wood or plastic. The handle of a typical paint brush has a uniform thickness throughout its length and is of a shape and size that is comfortable to hold and that prevents it from breaking or bending during painting.

SUMMARY OF THE INVENTION

[0003] Cans in which interior and exterior wall and trim paint are stored and sold typically include a container and a removable lid that forms a secure, air-tight seal with a top edge of the container. The lid typically includes a lip along its outer circumference. When the paint can is shut tight, there is a gap between the lip of the lid and the perimeter of the top edge of the container. The gap is typically just big enough to permit a flat end of a screw driver or a specialized tool to be inserted in the gap.

[0004] When the user desires to open the can, the user uses the tool to remove the lid of the paint can. The user inserts the flat end of the tool in the gap and uses the tool as a lever and the edge of the container as a fulcrum to impart a generally upward force on the lip of the lid. By applying force to the end of the tool away from the can in a generally downward direction, a generally upward force may be applied to the lip of the lid causing the lid to disengage from the container. However, the special tool is easily lost or forgotten, and a screw driver is not always handy or available when painting.

[0005] In accordance with an embodiment of the present invention, a paint brush is adapted for opening a paint can. In the preferred embodiment, the paint brush comprises a handle having an integrally formed tip opposite the brush’s bristles and substantially thinner in at least one dimension normal to the brush’s axis than portions of the handle intended to be gripped by the user. Preferably, a distal end of the handle has at least one tip formed therein to define an integrated tip portion thin enough to fit in the gap between the lip of the lid and the top edge of the container.

[0006] A paint brush with a uniformly flat handle throughout its length and thin enough to be inserted under the lip of a closed paint can lid is not suitable as the handle may break or bend during use. Furthermore, if the entire handle is uniformly flat like a ruler, it would be uncomfortable to hold as the edge of the handle may hurt the user’s hand.

[0007] Other aspects and features of the invention will become apparent to those ordinarily skilled in the art upon review of the following description of specific embodiments of the invention in conjunction with the accompanying figures.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] For a more complete understanding of the present invention, the objects and advantages thereof, reference is now made to the following descriptions taken in connection with the accompanying drawings in which:

[0009] FIG. 1A is a front elevational view of a paint brush in accordance with a first embodiment of the present invention and FIG. 1B is a side elevational view of the paint brush of FIG. 1A;

[0010] FIG. 2A is a front elevational view of a paint brush in accordance with a second embodiment of the present invention and FIG. 2B is a side elevational view of the paint brush of FIG. 2A;

[0011] FIG. 3A is a front elevational view of a paint brush in accordance with a third embodiment of the present invention and FIG. 3B is a side elevational view of the paint brush of FIG. 3A; and

[0012] FIG. 4A is a front elevational view of a paint brush in accordance with a fourth embodiment of the present invention and FIG. 4B is a side elevational view of the paint brush of FIG. 4A.

DETAILED DESCRIPTION OF THE DRAWINGS

[0013] The preferred embodiment of the present invention and its advantages are best understood by referring to FIGS. 1 through 4 of the drawings.

[0014] A conventional paint can comprises a container and a removable lid that forms a secure, air-tight seal with an edge of an opening in the top of the container. The lid includes a small lip along its outer circumference. When the paint can is shut tight, there is a gap between the lip of the lid and the edge of the container. The gap is just wide enough to permit a flat end of a screw driver or a specialized tool to be inserted in it.

[0015] FIG. 1A is a front elevational view of a paint brush 10 having wide bristles suitable for painting large surfaces, such as walls and trims and FIG. 1B is a side elevational view of paint brush 10. Paint brush 10 comprises a handle 12 having a proximal end 14 and a distal end 18. Paint brush 10 also comprises a bristle portion 14 coupled to proximal end 16 of handle 12. If desired, bristle portion 14 may be removable or permanently attached with proximal end 16 of handle 12.

[0016] As illustrated, distal end 18 of handle 12 comprises a tip 20 that is integrally formed in handle 12. Tip 20 is substantially thinner than the remainder of handle 12 particularly the middle part of the handle that is intended to be gripped by the user. The tip is adapted to remove the lid from the paint can. Handle 12 has a thickness, which is defined along a first axis (X-axis) and a second axis (Y-axis) normal to a longitudinal axis (Z-axis) of handle 12. The thickness of handle 12 along the first and second axes is sufficient to prevent the handle from breaking or bending when paint brush 10 is used to paint or when it is used to open the paint can. Furthermore, handle 12 is sufficiently thick along the first and second axes that it is comfortable to hold in a typical hand. Handle 12 may be of the same or different thickness along the first and second axes. Tip 20 is of a smaller dimension, for example smaller thickness, than the rest of handle 12. Preferably, the dimension of tip 20 is substantially smaller than the rest of handle 12 in a direction normal to the Z-axis. At least a portion of tip 20, for example an apex 22 of tip 20, is of a predetermined thickness that allows
it to be inserted in the gap between the lip of the lid and the top edge of the container to facilitate opening of the paint can upon application of force on handle 12.

[0017] It is desirable that tip 20 be thick enough so as to prevent it from breaking due to application of force on handle 12. Preferably, the thickness of tip 20 at the point of contact with the rest of handle 12 is approximately half the thickness of the rest of handle 12. If desired, to prevent tip 20 from breaking due to application of force, a reinforcing plate (not shown), for example a metal plate, may be coupled to or inserted into tip 20. Alternatively, the reinforcing plate may be coupled to or inserted into apex 22 only. Coupling or inserting the reinforcing plate only into apex 22 reduces the cost of manufacturing paint brush 10 because a smaller piece of metal is needed than if the reinforcing plate was coupled to or inserted into tip 20.

[0018] Handle 12 may be further adapted to facilitate storage or display of paint brush 10, for example by hanging it. In the illustrated embodiments, a channel 24 is provided in handle 12. Preferably, channel 24 is located near distal end 18 of handle 12 and is substantially orthogonal to a longitudinal axis of handle 12. However, if desired, channel 24 may be provided anywhere along the length of handle 12 and may be oriented at any angle to the longitudinal axis. Paint brush 10 may be stored or displayed by inserting an elongated tool, for example a peg, a nail, a screw, and/or the like, in channel 24. Handle 12 may be made of wood, plastic, metal, and/or any other suitable material or mixture thereof. Preferably, the entire handle 12 including tip 20 is made of the same material.

[0019] When it is desirable to open the paint can, tip 20 is inserted into the gap between the lip of the lid and the top edge of the container with proximal end 16 of handle 12 facing away from the paint can. Handle 12 acts as a lever and the top edge of the container acts as a fulcrum. Upon application of a generally downward force near proximal end 16 of handle 12, a generally upward force is exerted by tip 20 on the lip of the lid causing the lid to disengage from the container. The lid may then be removed from the container by the user.

[0020] In the embodiment of FIGS. 1A and 1B, the orientation of tip 20 is such that a first surface 26 of tip 20 is in a plane substantially parallel to the plane of bristle portion 14. If desired, and as shown in FIGS. 2A and 2B, tip 20 may be oriented such that first surface 26 of tip 20 is substantially orthogonal to the plane of bristle portion 14.

[0021] In the embodiment of FIGS. 1A and 1B and FIGS. 2A and 2B, tip 20 is shaped such that a first surface 26 of tip 20 is substantially flat and a second surface 28 of tip 20 is curved. In an alternative embodiment, the tip may be such that it is of a smaller dimension than the rest of the handle and curves into an apex so that it may be easily inserted in the gap. Thus, as illustrated in FIGS. 3A and 3B and FIGS. 4A and 4B, tip 20 may be shaped such that a first surface 26 and a second surface 28 of tip 20 are both curved. An advantage of having first surface 26 curved is that it makes it easier to insert tip 20 under the lip of the can.

[0022] A technical advantage of an exemplary embodiment of the present invention is that the user does not have to use a tool separate from the paint brush to open a can, for example a paint can.

[0023] While the invention has been particularly shown and described by the foregoing detailed description, it will be understood by those skilled in the art that various other changes in form and detail may be made without departing from the spirit and scope of the invention.

What is claimed is:

1. A paint brush comprising a handle having a distal end, said distal end comprising an integrally formed tip for opening a can, said tip being substantially thinner than a portion of the handle intended for gripping by a hand, the tip being adapted to fit in a gap between an upper edge of a container of said can and a lip disposed along an outer circumference of a lid of said can.

2. The paint brush of claim 1, wherein said tip is formed by defining at least one notch in said distal end of said handle.

3. The paint brush of claim 2, wherein at least one of said notches is defined by removing a portion of the distal end of the handle after the handle is formed.

4. The paint brush of claim 2, wherein at least one of said notches is integrally formed during formation of the handle.

5. The paint brush of claim 1, further comprising a bristle portion coupled to a proximal end of said handle.

6. The paint brush of claim 5, wherein a first surface of said tip is substantially parallel to said bristle portion.

7. The paint brush of claim 5, wherein a first surface of said tip is substantially orthogonal to said bristle portion.

8. The paint brush of claim 1, wherein said handle comprises a channel substantially orthogonal to a longitudinal axis of said handle and operable to interface with an elongated tool for display of storage of said paint brush.

9. A paint brush, comprising:

a handle having a distal end with an integrally formed tip for opening a can, said tip extending outwardly from said distal end and sized to fit into a gap between a top edge of a container of said can and a lip disposed along an outer circumference of a lid of said can; and

a bristle portion coupled to a proximal end of said handle.

10. The paint brush of claim 9, wherein said tip comprises a first surface and a second surface, said first and second surfaces extending outwardly from said distal end and culminating into an apex for insertion into said gap.

11. The paint brush of claim 10, wherein said first surface is planar and said second surface is curved.

12. The paint brush of claim 10, wherein said first and second surfaces are curved.

13. The paint brush of claim 9, wherein said tip comprises a reinforcing plate.

14. The paint brush of claim 9, wherein said tip is formed by defining at least one notch in said distal end of said handle.

15. The paint brush of claim 14, wherein the at least one notch is defined by removing a portion of the distal end of the handle after the handle is formed.

16. The paint brush of claim 14, wherein the at least one notch is integrally formed during formation of the handle.

17. The paint brush of claim 9, wherein said tip is substantially thinner than a portion of the handle intended for gripping by a hand.

18. A paint brush, comprising:

a handle with an integrally formed tip extending outwardly from a distal end of said handle for opening a
paint can, said tip having a thickness less than a thickness of a portion of said handle intended for gripping by a hand to facilitate insertion of said tip in a gap between an upper portion of a container of said paint can and a lip disposed along a circumference of a lid of said paint can; and a bristle portion coupled to a proximal end of said handle.

19. The paint brush of claim 18, wherein said tip is formed by defining at least one notch in said distal end of said handle by removing a portion of the distal end of the handle after the handle is formed.

20. The paint brush of claim 18, further comprising a reinforcing plate coupled to a surface of said tip.

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