

Nov. 23, 1954

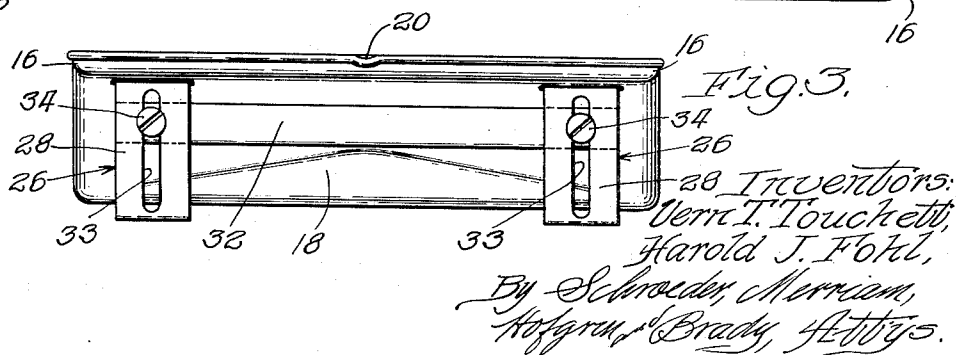
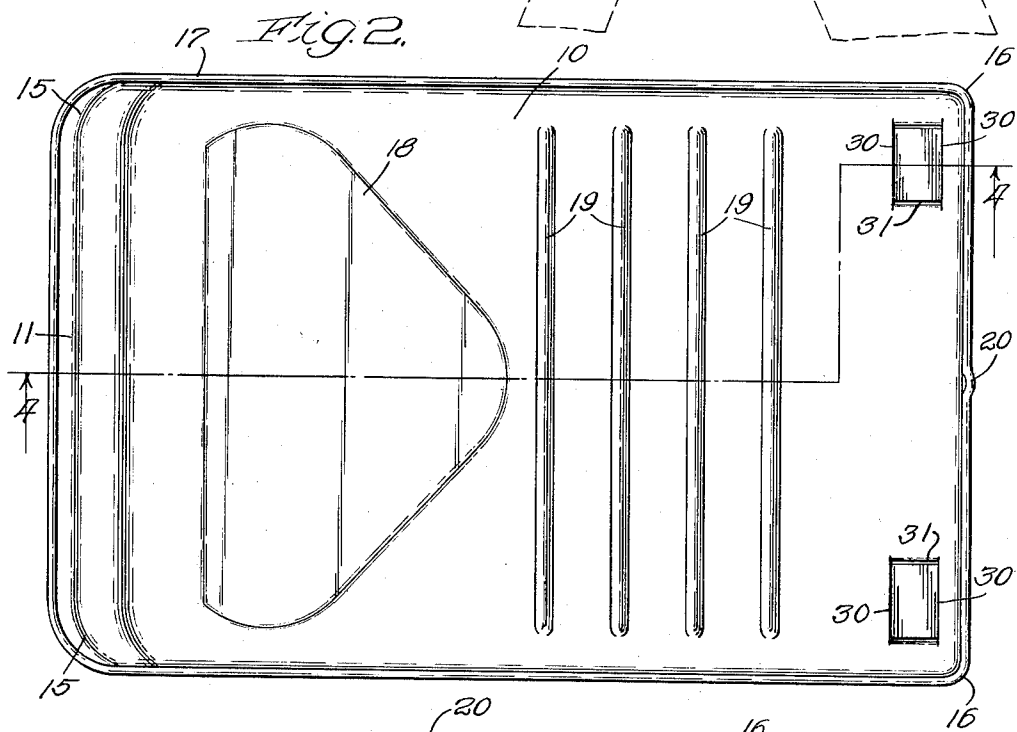
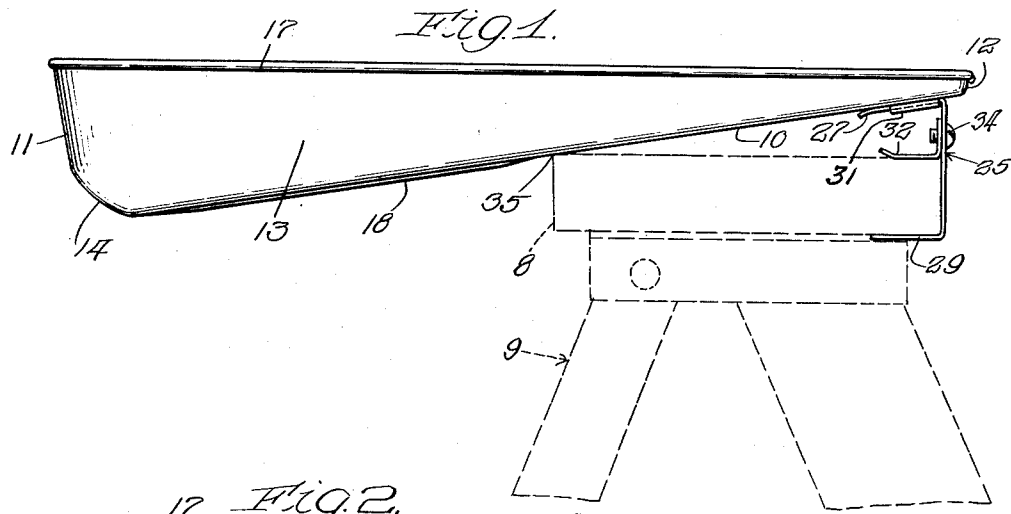
V. T. TOUCHETT ET AL

2,694,825

PAINT TRAY

Filed Nov. 18, 1949

2 Sheets-Sheet 1



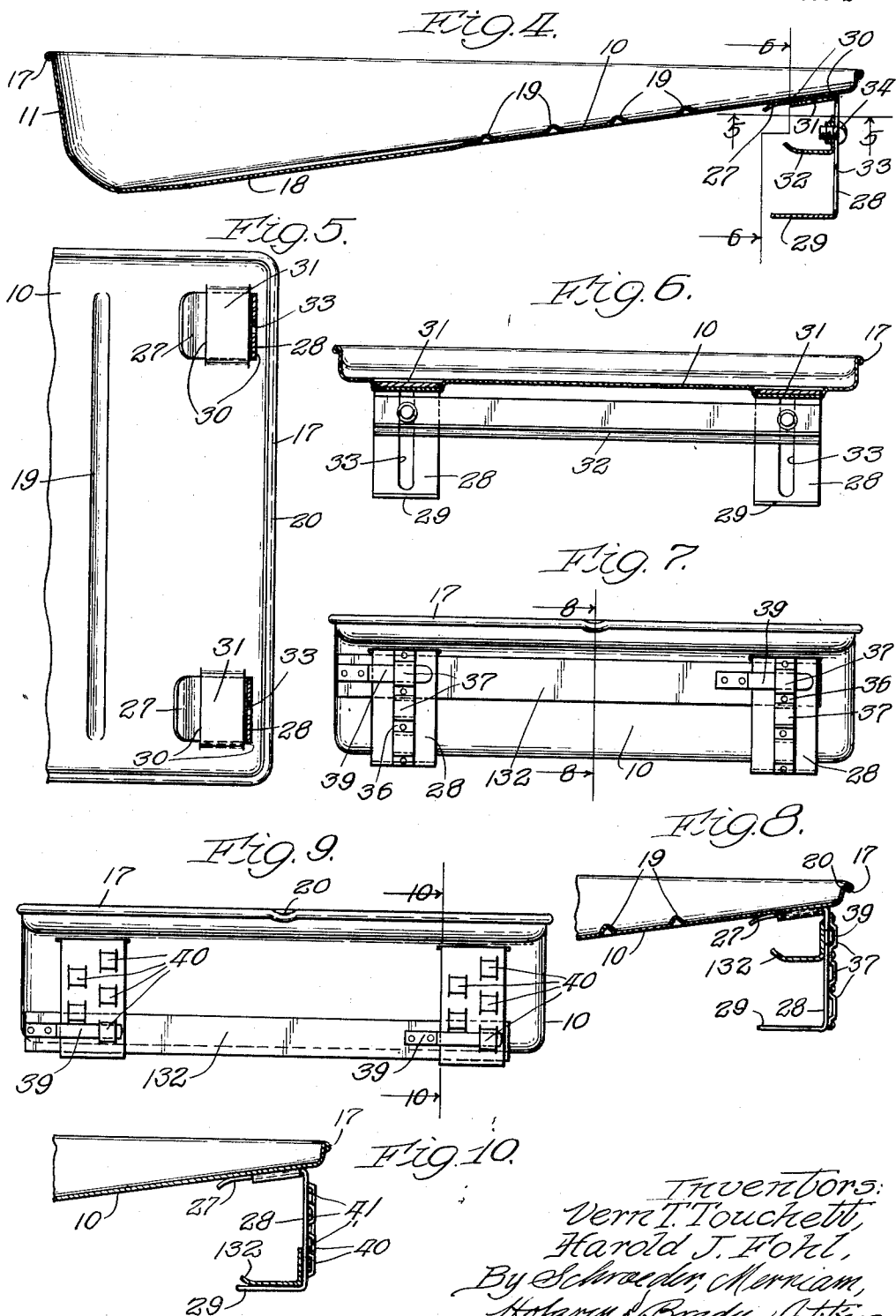
Nov. 23, 1954

V. T. TOUCHETT ET AL
PAINT TRAY

2,694,825

Filed Nov. 18, 1949

2 Sheets-Sheet 2



Inventors:
Vernon I. Touchett,
Harold J. Folt,
By Schraeder, Merriam,
Hofgren, Brady, & Feltz.

1

2,694,825

PAINT TRAY

Vern T. Touchett, Whitefish Bay, and Harold J. Fohl, Milwaukee, Wis., assignors, by mesne assignments, to E Z Paints Corporation, Milwaukee, Wis., a corporation of Delaware

Application November 18, 1949, Serial No. 128,092

4 Claims. (Cl. 15—121.3)

This invention relates to paint trays and more particularly to a paint tray adapted for use with a roller-type paint applicator. With a roller-type paint applicator, it is desirable to have a paint receptacle with which paint may be applied to the roller evenly so that the roller may in turn apply a uniform coating of paint to a wall or the like. The paint tray of this invention is particularly adapted to such use.

An object of this invention is to provide a new and improved paint receptacle of the character described.

Another object of this invention is to provide a paint tray formed of one sheet of material and having rounded edges and corners permitting easy cleaning of the tray.

Another object is the provision of a tray having a sloping bottom and a plurality of raised ribs in the bottom for strengthening the tray and for causing a paint applicator roller to rotate when pulled over the ribs thus removing excess paint from the roller.

A further object of this invention is the provision of a tray of the character described having means incorporated in the bottom to prevent the bottom from suddenly deforming with resultant splashing of paint out of the tray.

Another object is the provision of a paint tray having novel adjustable support means permitting the tray to be placed on a horizontal surface or to be attached to the step of a stepladder or the like while maintaining the upper edges of the tray substantially horizontal.

Other objects and advantages will become apparent with the description of the embodiments illustrated in the drawings in which:

Fig. 1 is a side view of a paint receptacle of this invention illustrated in position upon the top step of a stepladder shown in broken lines;

Fig. 2 is a top plan view of the tray of this invention;

Fig. 3 is an end view taken from the right-hand end of Fig. 2;

Fig. 4 is a cross section of the tray shown in Fig. 2 taken substantially along line 4—4 therein;

Fig. 5 is a partial view of one end of the tray taken substantially along line 5—5 in Fig. 4;

Fig. 6 is a view, partially in section, taken substantially along line 6—6 in Fig. 4;

Fig. 7 is an end view looking toward the shallow end of the tray showing a modification of the supporting structure;

Fig. 8 is a partial cross section taken substantially along line 8—8 in Fig. 7;

Fig. 9 is an end view looking toward the shallow end of the tray showing further modification of the supporting structure; and

Fig. 10 is a partial cross section taken substantially along line 10—10 in Fig. 9.

In applying paint with a roller-type paint applicator, it is desirable that the painter have a paint receptacle particularly adapted to use with such an applicator. To fulfill this specific need paint receptacles have been made with a sloping bottom to provide a deep end and a shallow end so that paint may be placed in the deep end of the tray, the applicator rolled into the paint and pulled back over the sloping bottom surface to remove excess paint from the roller. Heretofore, trays of the above character were made of flat pieces of material joined at the edges and corners so that sharp corners were formed between the walls and between the walls and bottom. Difficulty in cleaning resulted in leaving paint in the corners which added unwanted color to paint of a different color when

2

the tray was used successively for applying different color paints.

Another difficulty encountered with use of former paint trays was the removal of excess paint from the roller applicator. To remove the excess paint, the roller must roll over the sloping bottom with all the area of the roller contacting the bottom. A roller with paint on its surface tends to slide rather than roll. Applicant has overcome these difficulties as will appear more fully below.

In the embodiment illustrated, the paint receptacle is formed from a single sheet of material and has a sloping bottom 10, a relatively deep rear wall 11, a relatively shallow front wall 12 and generally triangular shaped side walls 13. The edge 14 between the bottom 10 and the rear wall 11 is gently curved and the corners 15 are likewise curved between the rear wall 11 and side walls 13 to provide a tray from which paint may be easily cleaned. The remaining corners and edges are curved on a somewhat smaller radius such as the front corners 16, so that any paint which gets into the edges or corners may be easily removed therefrom. A bead 17 is formed in the upper edges of the walls for several purposes. The bead strengthens the tray structure, prevents cutting of the hands, provides edges which are not easily dented and presents a more pleasing appearance to the tray. The tray is generally formed of very thin metal so that the bead 17 has great utility for the reasons stated. A baked enamel finish is preferably placed over the metal of the tray to prevent rusting and to decrease adherence of paint to the metal of the tray.

Since a thin metal sheet shaped in the above manner has a tendency to whip or deform in a direction somewhat normal to the surface, we have provided a slightly indented or dished portion 18 in the bottom near the deep end of the tray having a generally triangular configuration. This slightly dished portion 18 holds the bottom of the tray rigid and prevents any whipping or deforming of the bottom in a direction normal to the surface thereof so that paint will not be inadvertently splashed out of the tray. Further rigidity for the tray is provided by a plurality of ribs 19 formed in the bottom of the tray near the shallow end thereof extending upwardly from the bottom. The ribs 19 also serve the purpose of frictionally engaging the roller of the paint applicator (not shown) to cause the roller to rotate on its axis thus removing excess paint therefrom when the operator draws the roller from the deep end of the tray upwardly along the bottom. The shape of the tray is generally rectangular and the bottom, walls, dished portion 18 and ribs 19 are all formed in one stamping operation. The sloping bottom 10 is designed for the purpose of retaining paint in the deep end of the tray while leaving the upper or front end of the bottom exposed so that the paint applicator (not shown) may be rolled over the exposed portion of the bottom to remove excess paint therefrom.

When a painter is not using a paint applicator and wishes to place the applicator on the tray, he may rest the roller of the applicator on the raised ribs 19 and place the handle of the applicator in a notch 20 formed in the front portion of the bead 17. In this manner the applicator will not roll down the sloping bottom but will remain at rest on the tray and yet out of contact with the paint in the deep end of the tray.

A painter using the paint tray for painting a wall, generally prefers the tray to be set upon a surface (such as a table top or stool) while painting the lower part of the wall but wants the tray in an elevated position while painting the upper portion of the wall. Since the bottom is sloping for the purposes stated, a support generally indicated as 25 is provided at the shallow end of the tray, said support being of a height to allow the tray to be set upon a horizontal surface with the support and deep end of the tray maintaining the upper edges thereof substantially parallel. When the tray is placed or attached to the step of a stepladder or the like the support 25 is so arranged and constructed as to clamp the edge of the step and maintain the upper edges of the tray substantially horizontal.

The support 25 comprises generally a pair of U-shaped brackets 26 having an end portion 27 attached

3

to the underside of the shallow end of the tray, a vertical base portion 28 and a turned-under foot portion 29. For purposes of economy in construction the brackets are attached to the tray without welding, bolts or other separate mechanical means. A pair of parallel slits 30 are formed in the tray bottom near each front corner of the tray and the portion 31 of the bottom between the slits is slightly depressed. The end portion 27 of each bracket is then threaded through the slits 30 and frictionally engaged between the portion 31 and the adjacent portions of the bottom 10. When the brackets are so attached to the tray the foot portions 29 are spaced a distance from the upper edge of the tray substantially equal to the depth of the rear end of the tray.

When it is desired to clamp the tray to the step of a stepladder or the like a horizontal member 32 attached to the vertical portions 28 of the brackets is employed for clamping the step between the foot portions 29 and the horizontal member 32. In the embodiment illustrated in Figs. 3, 4 and 6 the vertical portion 28 of the brackets is provided with a vertically extending slot 33 and a screw 34 extends through the slot and is threaded into the horizontal member 32. It will be noted that the slots 33 extend downwardly to near the turned-under foot portions 29 so that the horizontal member 32 may be positioned adjacent the foot portions 29. When the horizontal member 32 (or 132, as illustrated in Figs. 7-10) is so positioned one front corner of the tray may overhang the edge of a table or the like without toppling off the table thus spilling the paint. Without the horizontal member 32 or 132 positioned in its lower position against the foot portions 29 one bracket could slip or be placed off the edge of the table and thus cause the tray to spill its contents.

As illustrated in Fig. 1 the horizontal member 32 provides an effective means for clamping the step 8 of a stepladder 9 between the foot portions 29 and member 32 to support the tray. If desired the support may be constructed so that the bottom of the tray will rest against the far edge of the step at the point 35 as illustrated in Fig. 1. However, the support is sufficiently strong to support the tray alone.

In an alternative form of support illustrated in Figs. 7 and 8 a strap 36 is riveted or otherwise fixed to the vertical portion 28 of the bracket and has outwardly extending portions 37 providing openings 38 between the strap and the back of the bracket. A pair of clips 39 are fixed to the horizontal member 132 and are adapted to slidably engage the openings 38 between the strap and bracket to fix the horizontal member in a plurality of positions.

In the further alternative support construction illustrated in Figs. 9 and 10 a plurality of bosses 40 are punched or otherwise formed in the vertical portion 28. The bosses are placed in staggered vertical lines to provide a maximum number of openings 41 into which the clips 39 may slidably engage. The space between adjacent bosses in each vertical line of bosses is just sufficiently large to admit the clip 39. In both embodiments illustrated in Figs. 7-10, openings between the strap and bracket and those provided by the bosses are horizontally aligned on each of the brackets 26 so that in any given position of the horizontal member 132, the clips 39 may engage horizontally aligned openings.

In each of the embodiments shown for attaching the horizontal member 32 to the brackets, the brackets are attached to the shallow end of the tray by threading an end portion thereof through a pair of horizontal slits 30 as previously discussed.

While we have shown and described certain embodiments of our invention, we wish it understood that the same is susceptible of modification and change without departing from the spirit and scope of the appended claims.

I claim:

1. A paint tray adapted for use with a roller-type paint applicator, comprising: a shallow receptacle integrally formed of a piece of thin sheet metal and including side walls, a deep rear end wall, a shallow front end wall and a sloping bottom, the tops of said walls lying in and defining a plane, the side walls and end walls being joined to the bottom by smoothly curved edge portions with the edge portion at the rear end wall having a relatively large radius of curvature, said bottom providing a continuous substantially flat surface be-

4

tween the curved edge portions and having a very shallow dished portion adjacent the rear end wall extending for less than the width of the flat surface to permit removal of paint therefrom by a roller and to resist deformation of the bottom and a plurality of transverse upwardly-extending ribs of which at least some are above the normal paint level adjacent the shallow front end wall; and supporting means on the shallow end of the receptacle, the bottoms of said supporting means and lowest point of said bottom being in a plane that is substantially parallel to the plane defined by the tops of said walls.

2. A paint tray adapted for use with a roller-type paint applicator, comprising: a shallow receptacle integrally formed of a piece of thin sheet metal and including side walls, a deep rear end wall, a shallow front end wall and a sloping bottom, the side walls and end walls being joined to the bottom by smoothly curved edge portions with the edge portion at the rear end wall having a relatively large radius of curvature, said bottom providing a generally continuous flat surface between the curved edge portions having a very shallow dished portion adjacent the rear end wall extending for less than the width and length of the flat surface to permit removal of paint therefrom by a roller and to resist deformation of the bottom and a plurality of transverse upwardly-extending ribs of which at least some are above the normal paint level adjacent the shallow front end wall.

3. A paint tray adapted for use with a roller-type paint applicator, comprising: a shallow receptacle integrally formed of a piece of thin sheet metal and including side walls, a deep rear end wall, a shallow front end wall and a sloping bottom, the tops of said walls lying in and defining a plane, the side walls and end walls being joined to the bottom by smoothly curved edge portions with the edge portion at the rear end wall having a relatively large radius of curvature, said bottom having a very shallow dished portion adjacent the rear end wall to resist deformation of the bottom and a plurality of transverse upwardly-extending ribs of which at least some are above the normal paint level adjacent the shallow front end wall; and supporting means on the shallow end of the receptacle, the bottoms of said supporting means and lowest point of said bottom being in a plane that is substantially parallel to the plane defined by the tops of said walls, said supporting means including a pair of generally U-shaped sheet metal brackets located adjacent the opposite corners at the shallow end of the receptacle, each bracket having its side portions extending toward the rear of the receptacle with one side portion threaded through spaced slits in said bottom, the base of the bracket extending downwardly and the other side portion being substantially parallel to the plane defined by the tops of said walls, and a sheet metal clamping member having one part attached to the base of each bracket, means for selectively attaching said clamping member to said brackets at a plurality of adjusted positions and a second part on said clamping member substantially parallel to said other side portion of each bracket and extending toward the rear of the tray for clamping to the step of a ladder between said second part and said other side portions.

4. A paint tray adapted for use with a roller-type paint applicator, comprising: a shallow receptacle including side walls, a deep rear end wall, a shallow front end wall and a sloping bottom, the tops of said walls lying in and defining a plane; supporting means on the shallow end of the receptacle, the bottoms of said supporting means and lowest point of said bottom being in a plane that is substantially parallel to the plane defined by the tops of said walls, said supporting means including a pair of generally U-shaped sheet metal brackets located adjacent the opposite corners at the shallow end of the receptacle, each bracket having its side portions extending toward the rear of the receptacle with one side portion threaded through spaced slits in said bottom, the base of the bracket extending downwardly and the other side portion being substantially parallel to the plane defined by the tops of said walls, and a sheet metal clamping member having one part attached to the base of each bracket, means for selectively attaching said clamping member to said brackets at a plurality of adjusted positions and a second part of said clamping member substantially parallel to said other side portion of each

5

bracket and extending toward the rear of the tray for clamping to the step of a ladder between said second part and said other side portions.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
685,832	Gender	Nov. 5, 1901
748,052	Doggett	Dec. 29, 1903
934,676	Langslow	Sept. 21, 1909
1,236,061	Dawson	Aug. 7, 1917

Number
1,797,777
1,813,670
1,881,371
1,966,512
2,096,687
2,180,185
2,181,150
2,444,096
2,444,584
2,447,022
2,490,546

6

Name	Date
Krauss	Mar. 24, 1931
Kessler	July 7, 1931
Gilbert	Oct. 4, 1932
Misner	July 17, 1934
Roberts	Oct. 19, 1937
Weiss	Nov. 14, 1939
Pittenger	Nov. 28, 1939
Faust	June 29, 1948
Touchett	July 6, 1948
McCarl	Aug. 17, 1948
Rubin	Dec. 6, 1949