

Oct. 12, 1965

S. V. SAPIEN

3,211,324

LINER FOR PAINT RECEPTACLE OF PAINT SPRAY GUN

Filed Oct. 10, 1963

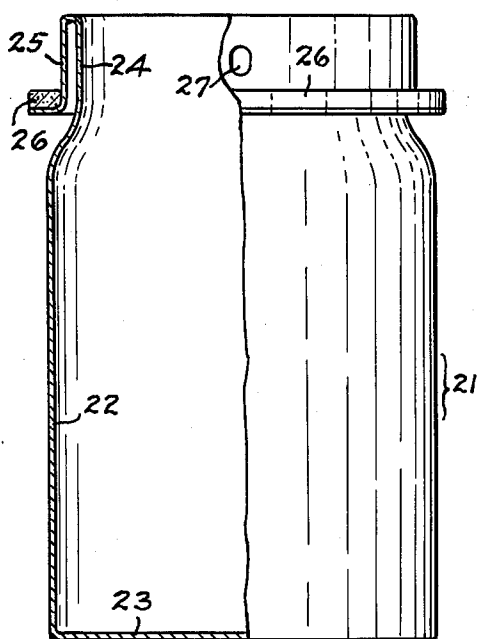


Fig. 1

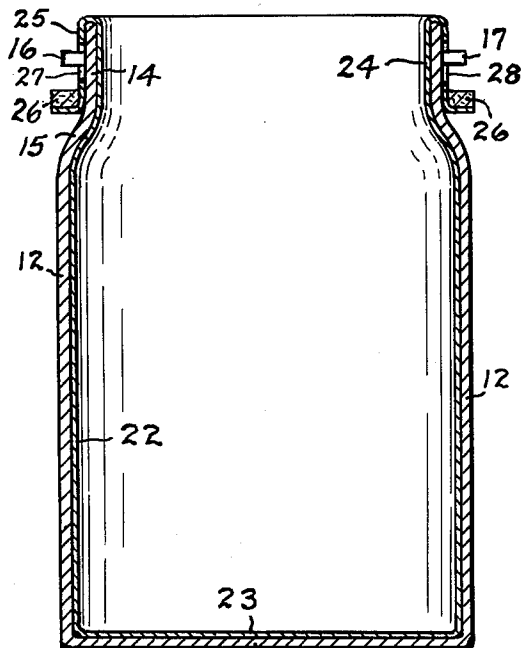


Fig. 2

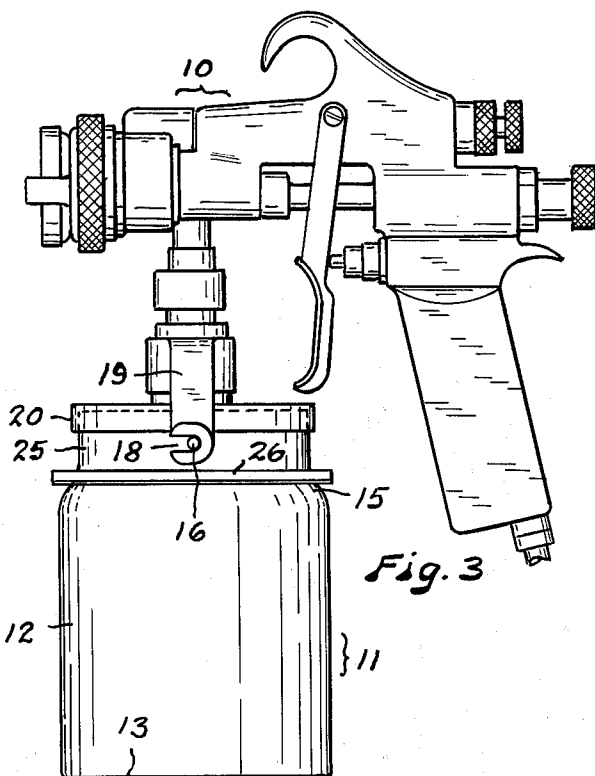


Fig. 3

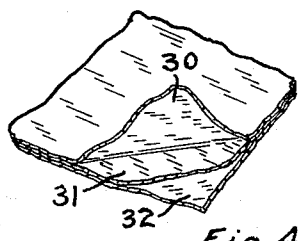


Fig. 4

INVENTOR
Sisto V. Sapien
BY Fred C Matheny
ATTORNEY

1

2

3,211,324

LINER FOR PAINT RECEPTACLE OF PAINT SPRAY GUN

Sisto V. Sapien, Burlington, Wash., assignor of one-half to Raymond C. Henery, Burlington, and one-half to Cipriano Esparza, Sunnyside, Wash.

Filed Oct. 10, 1963, Ser. No. 315,238

3 Claims. (Cl. 220-63)

My invention relates to a liner for the paint receptacle of a pneumatic paint spray gun.

In commercial paint spray shops where the paint is applied with paint spray guns each having a paint receptacle removably attached to the gun, frequent cleaning of each paint receptacle is necessary. For instance, each paint receptacle must be cleaned each time paint of a different color is to be used therein, and at the end of each work period, and must usually be cleaned when each paint job is finished. Cleaning a paint receptacle is an unpleasant task and it takes time and labor and requires the use of a substantial amount of cleaning solution, which is usually a commercial paint thinner.

An object of my invention is to provide a disposable paint receptacle liner which receives and holds the paint and prevents the paint from contacting and adhering to both the inside and the outside of the paint receptacle, thereby keeping the receptacle clean and free of paint and saving the time and labor and paint cleaning solution ordinarily required to clean these receptacles.

Other objects are to provide a liner for the paint receptacle of a paint spray gun which is made of pliable moisture proof material, is inexpensive to make, and can be discarded after a single usage thereby obviating the danger of mixing paints of different colors, and to provide a liner which is convenient to handle and can be quickly and easily applied to and removed from the paint receptacle of a paint spray gun.

Other objects are to provide a liner of this type which has an annular fold-over lip part provided with openings in the form of perforations or slots suitable positioned to fit over and receive external radial pins on the upper end or neck portion of a paint receptacle, and is further provided with a terminal collar of absorbent material which is carried by the annular lip and is externally positioned when the liner is in used and is adapted to intercept and hold paint which might otherwise tend to run down and collect on the exterior of the paint receptacle.

Other objects of my invention will be apparent from the following description taken in connection with the accompanying drawings.

In the drawings FIGURE 1 is a view partly in elevation and partly in vertical section of a fully expanded paint receptacle liner constructed in accordance with my invention.

FIG. 2 is a view in vertical mid-section showing a paint receptacle with one of my liners applied thereto.

FIG. 3 is a view in elevation showing a paint receptacle connected with a paint spray gun and showing the annular folded over top lip portion of one of my liners extending down over the neck part of the receptacle, the liner being disposed within the receptacle.

FIG. 4 is a fragmentary perspective view illustrative of three ply material used in the construction of a liner of modified form.

Like reference numerals refer to like parts throughout the several views.

In the drawings the respective numerals 10 and 11 indicate, in a general way, a conventional paint spray gun and a paint receptacle used in connection with said gun. The receptacle 11 has cylindrical side walls 12, a flat bottom 13, and a cylindrical neck portion 14. The neck

portion 14 is smaller than the main part of the receptacle 11 and is connected with said main part by converging walls 15. Two diametrically opposite pins 16 and 17 are rigid with the neck portion 14 and extend radially outward therefrom and are adapted to engage within notches 18 of a cross yoke 19 to connect the receptacle 11 with the spray gun 10. One end portion of the cross yoke 19 is shown in FIG. 3 and it will be understood that the other end portion of said cross yoke is similar except that the notch therein faces in the opposite direction from the notch 18 shown in FIG. 3. A shallow cover member 20 is carried by the spray gun 10 and is spanned by the yoke 19 and fits over the top of the neck portion 14 of the paint receptacle 11.

My liner, indicated generally by 21, comprises a bag formed preferably of single ply pliable material which is impervious to paint. This bag is composed of side walls 22, a bottom 23, a neck 24 of smaller diameter than the side wall portion, and an annular out-turned fold over lip portion 25. An annular collar 26 of paint absorbent material is secured to the terminal portion of the lip 25 and extends outwardly therefrom in a suitable position to intercept and collect and hold paint which tends to run down around the outside of the annular lip 25. This collar will absorb and hold a substantial amount of paint thereby preventing this paint from running down and collecting and drying or hardening on the outside of the receptacle 11. The annular lip 25 has two perforations or slots 27 and 28 positioned above the collar 26 at diametrically opposite locations. The perforations 27 and 28 are of suitable shape and size to fit over the respective pins 16 and 17 on the neck 14 of the receptacle 11 and the collar 26 is sufficiently elastic so that these perforations can be fitted over the pins 16 and 17 in applying the liner to the receptacle 11. When the liner is within the receptacle 11 the annular fold-over lip portion 25 will extend downwardly over the neck 14 of said receptacle, the slots 27 and 28 will fit over the pins 16 and 17 and the fold-over lip 25 and collar 26 will fit snugly around the receptacle neck 14.

The cap or cover 20 of the paint gun can be easily fitted over the upper end of the receptacle neck 14 and the notches 18 in the yoke 19 engaged with the pins 16 and 17 by rotative movement of said yoke 19 relative to the receptacle 11 to connect the receptacle and paint gun. The cover 20 makes fairly tight contact with the part of the liner neck 24 which doubles over the top edge of the receptacle neck 14 and this minimizes paint leakage. Any paint which does leak out from a vent hole in the cover 20 will be intercepted and absorbed by the collar 26 and thus prevented from collecting and drying on the exterior of the receptacle 11.

I prefer to construct my liner of a single ply of fairly heavy, pliable, paint impervious material, such as fairly tough plastic. However, to provide a liner of greater strength I may use laminated material composed of three adhered or bonded together plies 30, 31 and 32, as shown in FIG. 4. In this three ply construction the two outer plies 30 and 32 are preferably strong heavy paper, which may be treated or impregnated to render it less paint absorbent, and the intermediate ply 31 is preferably a metal foil, such as tin or aluminum foil, but it can be plastic. When the three ply material shown in FIG. 4 is used in constructing liners, the bottom, side walls, neck, and out-turned lip of the liner are all made of this three ply material.

My liners, being formed of pliable material, can be folded flatly and compactly for shipment and storage. They do not need to be sized to exactly fit the interior of the paint receptacle but can be over-size or even slightly under-size and their bottom ends do not need to

3

be flat but can be shaped in a way that is most convenient to manufacture. Also said liners, being formed of readily available and inexpensive material are cheap enough so that the liner can be disposed of each time it is desired to change the paint in the receptacle or obtain a new supply of paint. When a liner is removed from the receptacle 11 it is ordinarily discarded and quickly and easily replaced by a new liner to receive a fresh supply of paint. This does away with the necessity of frequently cleaning the paint receptacle, thereby saving time and labor and a substantial amount of cleaning solution or paint thinner.

The foregoing description and accompanying drawings clearly disclose preferred forms of my invention but it will be understood that this disclosure is merely illustrative and that changes may be made within the scope of the following claims.

I claim:

1. A liner for the paint receptacle of a pneumatic paint sprayer comprising a structure formed of pliable sheet material and shaped to closely fit the interior of a paint receptacle, said structure having an open end and a bottom wall closing its other end and adapted to rest on the bottom end wall of an associated paint receptacle and having a folded over lip provided at its open end and adapted to receive the neck of an associated paint receptacle; and an annular collar of absorbent material of substantial bulk and thickness secured to the outer wall of the terminal part of said lip and extending outwardly therefrom in spaced relationship to the open end of said liner.

2. A liner for the paint receptacle of a pneumatic paint sprayer comprising a structure formed of pliable sheet material and shaped to closely fit the interior of a paint receptacle, said structure having an open end and a bottom wall closing its other end and adapted to rest on the bottom end wall of an associated paint receptacle and having a folded over lip secured to its open end and adapted to receive the neck of an associated paint receptacle; and an annular collar of absorbent material of substantial bulk and thickness secured to the outer wall of the terminal part of said lip and extending outwardly therefrom in spaced relationship to the open end of said

4

liner, said liner having walls formed of sheet material of laminated construction including inner and outer layers of high structural strength and an intermediate layer of paint impervious material securely bonded to said inner and outer layers.

3. A liner for a cylindrical paint receptacle of a pneumatic paint sprayer, said receptacle being closed at its bottom end terminating at its top end in an open cylindrical neck portion of slightly smaller diameter than the receptacle, said neck portion having two diametrically opposite spray gun attachment pins protruding outwardly therefrom, comprising a liquid tight pliable plastic bag of approximately the same diameter as the interior of said paint receptacle, said bag being open at its top end and having at least two diametrically opposite perforations in its upper end portion adjacent its open top end and all portions of said bag below said perforations being tight and impervious to the passage of paint therethrough; and an annular collar of paint absorbent pliable material of substantial bulk and thickness secured to the inner wall of said bag adjacent the open top end of the bag and outwardly from said perforations and extending continuously entirely around the bag between the open end of the bag and said perforations, said collar and at least the upper end portion of said bag being sufficiently pliable and elastic so that when the bag is in the paint receptacle the upper end portion of the bag can be folded outwardly and downwardly over the neck portion of the receptacle providing a protective lip over said neck portion with said annular absorbent collar externally positioned at the lower end of said lip and with the perforations in the folded over lip portion of the bag fitting over the outwardly extending pins on the neck portion of the receptacle.

References Cited by the Examiner

UNITED STATES PATENTS

2,671,907	3/54	Sterling	220—65
2,678,764	5/54	Carlson	220—63
2,788,926	4/57	Morrison	220—65
3,128,904	4/64	Reilly	220—65

Theron E. Condon, *Primary Examiner*.