July 20, 1943. G. E. WEISSERT 2,324,747

DRUM RACK

Filed June 10, 1940

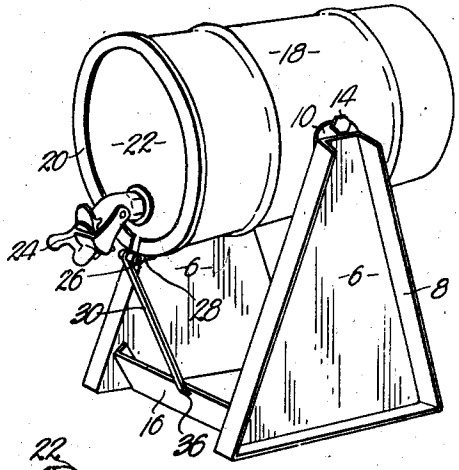


Fig. 1.

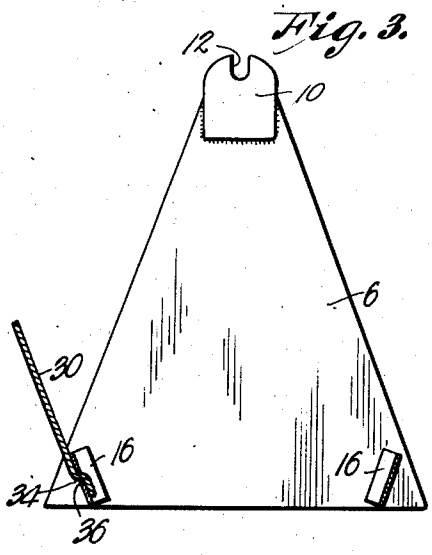


Fig. 3.

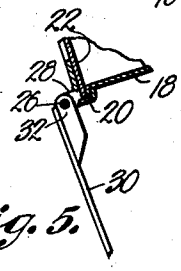


Fig. 5.

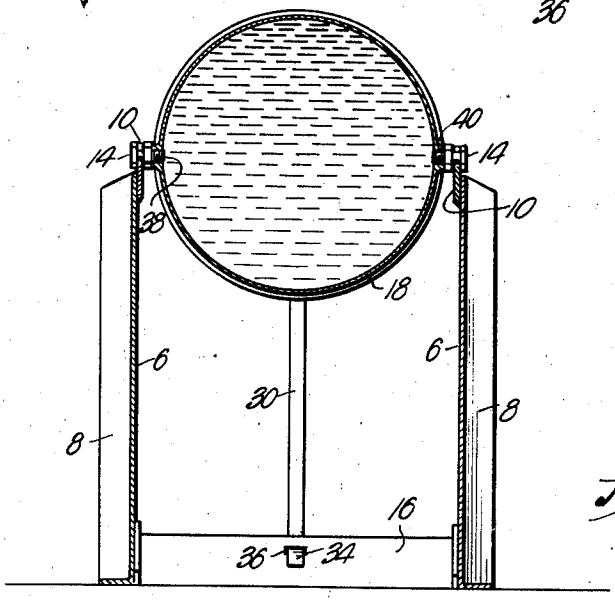


Fig. 2.

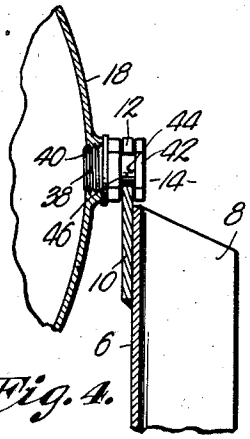


Fig. 4.

INVENTOR.
Gerald E. Weissert
BY Harvey & Hamilton
ATTORNEYS

Patented July 20, 1943 2,324,747

UNITED STATES PATENT OFFICE

2,324,747

DRUM RACK

Gerald E. Weissert, Kansas City, Mo., assignor to Sewall Paint & Varnish Company, Kansas City, Mo., a corporation of Missouri

Application June 10, 1940, Serial No. 339,726

1 Claim. (Cl. 248—142)

This invention relates to paint and lacquer handling equipment and particularly a rack for drums wherein such substances are stored, and the primary object is to provide efficient means for disposing the drum in a position where liquid may be either withdrawn therefrom or agitated therein.

One of the important aims of the instant invention is the provision of a drum rack which comprises strong inexpensive and efficient structure for holding a drum of paint or the like, so that the contents may be withdrawn or agitated to suit requirements and desires of the operator.

A still further object of the invention is to provide a drum rack for paint and lacquer containers that has quickly releasable means for bracing the drum against movement in either direction about a pair of diametrically opposed trunnions, and parts which utilize the drum itself as an element for establishing rigidity.

Further objects of the invention will appear during the course of the following specification, wherein:

Figure 1 is a perspective view of a drum rack made in accordance with the present invention, and supporting thereon a cylindrical metal drum adapted to contain paint.

Fig. 2 is a vertical central sectional view through the assembly shown in Fig. 1.

Fig. 3 is a fragmentary sectional view showing the inner face of one of the standards.

Fig. 4 is an enlarged fragmentary detailed sectional view through one of the trunnions; and

Fig. 5 is a fragmentary sectional view through the zone of connection between the brace and fixture.

Heretofore quantities of paint or lacquer in greater than five gallon lots have been hard to handle because of the absence of suitable supporting racks for the cans. It is desirable to distribute lacquer or paint in at least fifteen gallon drums not only to avoid waste by evaporation and oxidation, but to eliminate container expense.

A rack made as illustrated herewith permits economical handling of the aforesaid materials, in relatively large capacity drums, if the drum itself is specially made to cooperate with parts of the supporting structure. As will more fully hereinafter be set down, the rack permits rotating the drum to agitate its contents and securing the drum in an inclined position whereby the contents may be drawn therefrom.

In the preferred embodiment of the invention, shown in the accompanying drawing, the numeral 6 designates opposed spaced apart standards formed of sheet metal and provided with out-turned flanges 8 along three sides of the truncated triangular body.

Standards 6 are made of sheet metal and each is provided with a bearing 10 at the apex or upper end thereof, which bearing has a notch 12 to receive the hereinafter described trunnion shown in detail in Figs. 2 and 4, and generally designated by the numeral 14.

Standards 6 are joined by tie-bars 16 disposed near the bases thereof and these tie-bars are likewise preferably formed to sheet metal.

Drum 18 has a clamping ring 20 at one end thereof to removably secure a closure 22 in place across the end. This closure 22 has a dispensing valve 24 projecting outwardly therefrom through the medium of which the contents of drum 18 may be withdrawn and collected in relatively small containers.

Clamp 20 is in the nature of a split ring, the ends of which are drawn toward each other by a bolt 26 extending through out-turned ears 28 at the end of split ring 20. A brace 30 has an eye 32 at one end thereof through which bolt 26 is passed so that brace 30 is releasably mounted at its one end to one end of drum 18. The other end of brace 30 is loosely positioned to tie-bar 16 by a hook, or analogous member 34, formed thereon to engage an opening 36 created in tie-bar 16.

The length of brace 30 is such as to cause the longitudinal axis of drum 18 to be inclined slightly with respect to the horizontal, to the end that valve 24 is always low enough to discharge contained liquid.

From time-to-time the drum may be violently agitated by turning the same about the aligned axes of trunnions 14, after brace 30 has been released from bolt 26 and allowed to drop away from the path of travel of drum 18. Each trunnion 14 has a threaded portion 38 adapted to fit into diametrically opposite threaded holes 40 formed in the annular side of drum 18 intermediate the ends thereof.

A polygonal head 42 has an annular groove 44 formed therein intermediate its ends for the reception of bearing 10. Notch 12 in bearing 10 engages a cylindrical part 46 of trunnion 14 when the drum is mounted in the rack as distinctly shown in Figs. 2 and 4.

In shipping drum 18, holes 40 may be plugged either with the specially formed trunnions 14 or with screw-threaded plugs that may be removed and replaced with trunnions 14. At any rate, trunnions 14 fit tightly into holes 40 and avoid

the escape of liquid therefrom. A wrench may be applied to one polygonal portion of head 42 when the trunnion 14 is moved to position, and if leakage should occur around the trunnions, while the drum is mounted upon the rack, it is a simple matter to apply a wrench to the outer portion of polygonal head 42 and thereby tighten the trunnion so that any seepage therearound may be stopped without removing the drum from the rack.

The manner of constructing the drum rack is important, for the use of sheet metal parts permits a flat package to be created of the rack when the same is collapsed for shipment, yet in use the necessary strength to allow drum 18 to be rotated is present.

Drum 18 serves as means for holding in place the upper ends of standards 6, thereby eliminating any bracing above tie-bars 16.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

In a rack of the character described, in combination with a drum having diametrically opposed holes and plugs in the holes each provided with annular grooves, a pair of spaced, vertical, triangular plates each having outturned flanges along its face and sides and a bearing notch at its apex; tie-bars joining the bases of said plates to hold the same in fixed spaced apart relation; and means joining one of the tie bars and said drum to prevent rotation of the same about the axes of the plugs when the plugs are engaged within the notches of the plates, the marginal edges of said plates at the notches thereof being within the annular grooves of the plugs whereby the drum and said plugs serve as the means for maintaining the apexes of the plates in fixed spaced apart relation.

GERALD E. WEISSERT.