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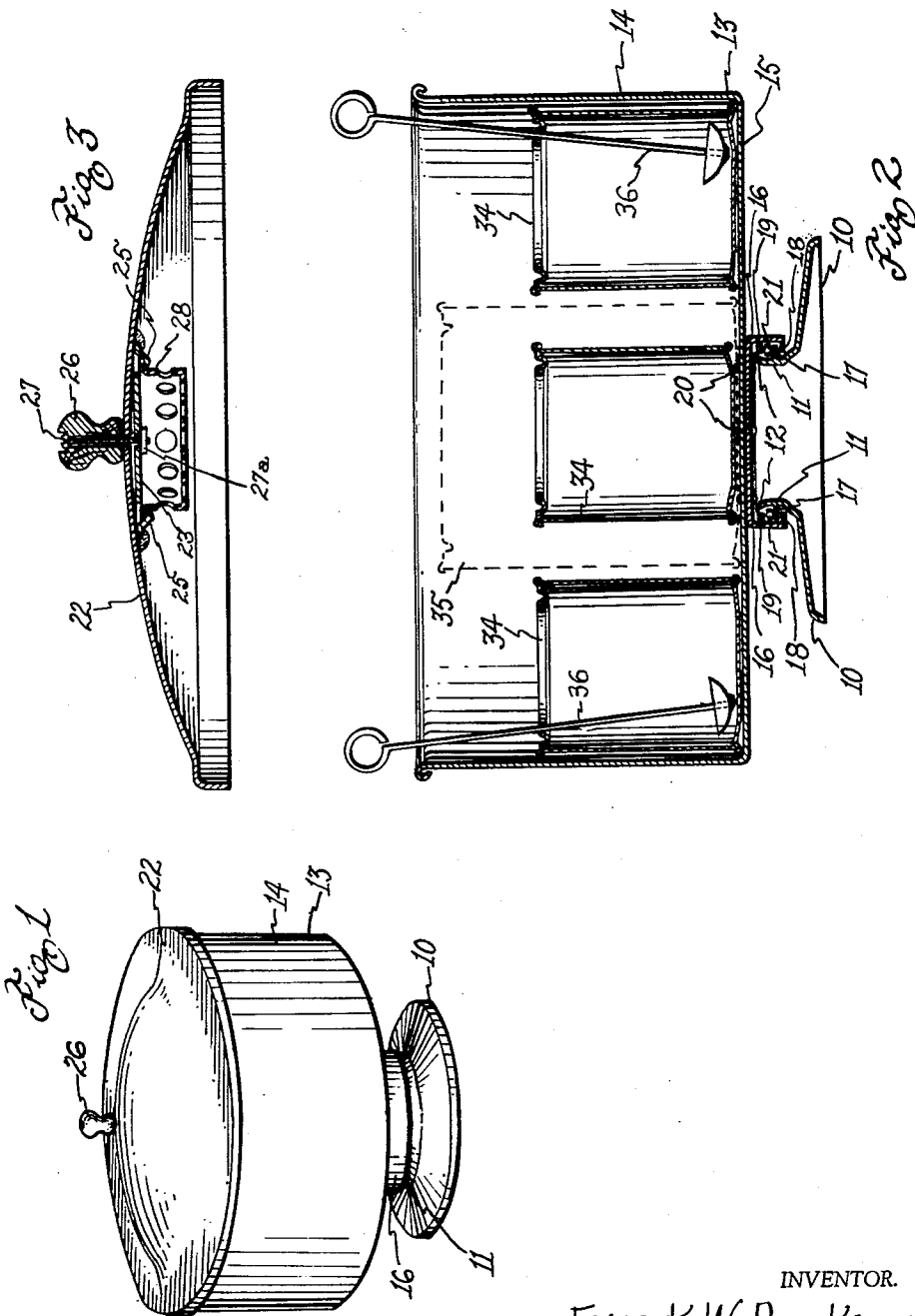
F. W. BROKAMP

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DEVICE FOR MIXING PAINT COLORS

Filed Dec. 26, 1957

2 Sheets-Sheet 1



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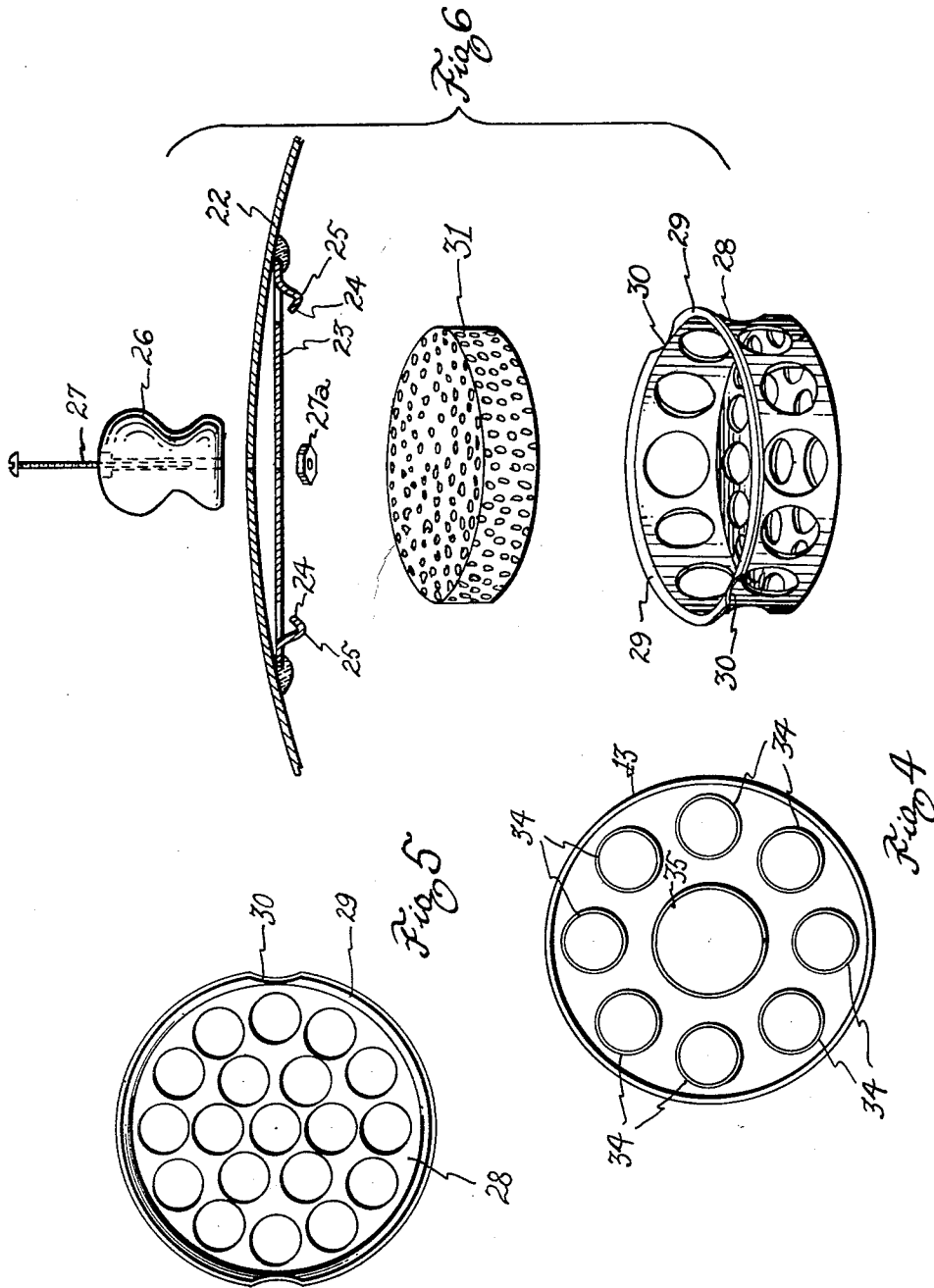
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## DEVICE FOR MIXING PAINT COLORS

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1 Claim. (Cl. 312—31.1)

This invention is directed to novel dispensing and holding devices adapted for retaining a plurality of color containers and for facilitating the mixing of liquid colors in various forms of paints for the purpose of quickly and easily producing different and varying shades of colors of paints.

It is an important object of my invention to provide a rotatably mounted receptacle connected to a suitable base by bearing means and adapted to hold a plurality of containers of smaller size, preferably in a circumferential path, and providing a middle space for a separate receptacle, in which the mixing and blending of the desired paint is to be performed; and having a suitable removable closure or cover, said cover having means for disseminating, within said receptacle and in the area of said containers, a suitable volatile anti-skinning material which will normally prevent the formation of skin upon the liquid colors in said containers.

It is a further object of my invention to provide a device for holding, rotatable mounting and maintaining a plurality of paint colors in adjacent positions within a chamber to facilitate color mixing; said device including a base; a receptacle rotatably mounted on said base; a series of containers arranged in the outer portions of the chamber of said receptacle, said containers being adapted to hold liquid coloring materials therein; said receptacle providing a middle compartment for a separate container in which the mixing and blending is adapted to be performed; and having a metal cover removably mounted on said receptacle, and having sponge holding means removably mounted on said cover adjacent the inside face thereof, a sponge in said removable retainer being adapted to absorb and slowly evaporate preventative material within said receptacle to prevent formation of skin or crust on colors and paints in said receptacle.

Other and further important objects of my invention will be apparent from the following description and appended claim:

As shown on the drawings:

Fig. 1 is a perspective view of the color mixing and holding device embodying my invention.

Fig. 2 is a cross section taken on a vertical plane through the device with the removable cover removed.

Fig. 3 is a cross section of the removable cover taken on a vertical plane.

Fig. 4 is a top plan view of my device with the cover removed.

Fig. 5 is an enlarged top view of the removable absorbent material retainer which is removed from the inside of the cover.

Fig. 6 is an exploded enlarged view of a segment of the cover and a perspective of the absorbent member and its perforated retainer.

As shown on the drawings:

Numeral 10 is a flanged metal base which is preferably stamped out or spun from a sheet of rigid metal and which has an integral annular flange 11 whose upper periphery or lip 12 is bent outwardly as indicated and pro-

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viding an annular track about said flange as shown in Fig. 1. Said flange 11 has an outwardly extending annular flange 17 secured thereon a short distance below lip 12 (see Fig. 2).

Numeral 13 represents an upwardly opening flanged housing or receptacle defined by a continuous wall 14 which is integral with a substantially flat bottom 15. Said bottom 15 is centrally apertured. A metal cup-shaped flanged bearing mounting member 16, as shown in Fig. 2, which has a peripheral inwardly extending flange 18 and a spaced inwardly extending flange 19, is secured by rivets 20 or the like centrally on the bottom of housing 13. A ball bearing 21 is mounted between said flanges 18 and 19 and engages flange 17 to rotatably mount said housing 13 relative to said base 10.

Referring to Figs. 3 and 6, numeral 22 designates a metal closure or cover having a peripheral integral flanged lip or rim. Said cover 22 is preferably of arcuate cross section as shown. A centrally apertured flanged metal mounting disk or plate 23 having a pair of inwardly extending teeth, projections 24 struck from the annular rib or flange 25, as shown in Fig. 6.

A grippable passaged handle or knob 26 is secured to the outer face of the cover 22 by a bolt 27 which extends therethrough and through said cover and said plate 23, and is secured by a nut 27a.

A perforated metal cup-like retainer or holder 28 having an upper integral flange 29 has two diametrically opposite recesses 30 formed in said flange, as shown in Figs. 5 and 6. Said retainer 28 is adapted to be positioned and mounted removably against the mounting plate 23 with the teeth 24 passing through said recesses whereupon said retainer is slightly rotated to cause teeth 24 to releasably engage the flange 29 and hold the said retainer adjacent the inner face of cover 22.

Before such mounting of retainer 28, a body of yieldable porous absorbent material 31, which is first immersed in an anti-skinning liquid volatile compound, for example, cresylic acid, mineral spirits, terpenes, or cleaners naphtha, is placed into said retainer 28 so as to suspend and hold said body to absorbent material 31 under said cover 22.

The liquid anti-skinning material will very slowly volatilize and spread throughout the normally closed area of the chamber formed by the receptacle 14 and its cover 22 to contact the surfaces of liquid color in the respective cans 34 and also of any mixed or partially mixed paint in central can 35 to prevent the formation of a skin, crust or top coat thereon which skin would otherwise have to be repeatedly removed and discarded with consequent waste of color and paint. Said body of absorbent material is illustrated in perspective in Fig. 6.

The immersion of said body 31 and absorption of said volatile material may be periodically repeated, though I have found that one such absorption in said material will continue to cause evaporation of said material for at least several days.

Numerals 34 designate a plurality of upwardly opening cans, preferably at least ten, positioned on the bottom 15 of receptacle 13, preferably in a circumferential path, as illustrated in Fig. 4. This provides a central space in which a central can 35 is placed and in which mixing or blending is performed.

The user will usually start by placing a predetermined quantity of white paint in the central can 35, which quantity is substantially less than the capacity of said can. The user, in accordance with a predetermined formula designed to produce a given and desired shade or color paint, will then dip and remove the prescribed quantities of liquid colors which are in the respective outer cans 34, said outer cans being suitably labeled and marked as to their respective contents of colors of different densities and shades.

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In Fig. 2, I have illustrated a preferred form of metal dippers 36, which are shown, and each of which include a receptacle of predetermined size and a connected elongated grippable handle of a length substantially greater than the depth of said cans.

In practice, the user is presented with a color card or a large number of color cards, for example, several hundred, and he picks the shade or color desired. The formula to be followed in producing paint of such selected color is printed on the card on or adjacent the selected shade, and specifies the quantity, in number of dippers, of the different basic colors to be mixed with a specified quantity of paint. The user by following the formula and instructions will produce the mixed paint of the desired color and shade.

Inasmuch as many changes could be made in the described construction, and as many apparently widely different embodiments of the invention within the scope of the claim could be constructed without departing from the spirit and scope thereof, it is intended that all matter contained in the accompanying specification shall be interpreted as being illustrative and not in a limiting sense.

I claim:

A closure for a paint mixing receptacle having an

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upper opening comprising an annular peripherally flanged cover; an apertured and perforated mounting disk secured adjacent to the inner face of said cover; said disk having inwardly extending teeth; a perforated metal cup-like holder having a recessed peripheral flange releasably mounted on said disk, said flange of said holder engaging said teeth and a porous vapor-diffusing member removably mounted in said cup; said vapor-diffusing member being adapted to emit volatile vapor through the perforations of said cup-like holder.

#### References Cited in the file of this patent

##### UNITED STATES PATENTS

15	966,259	Souchrek	Aug. 2, 1910
	1,630,469	Cecil	May 31, 1927
	1,987,373	Shapiro	Jan. 8, 1935
	2,267,295	Balton	Dec. 23, 1941
	2,270,593	Korath	Jan. 20, 1942
20	2,819,135	Shapiro	Jan. 7, 1958

##### FOREIGN PATENTS

	248,223	Great Britain	Mar. 4, 1926
	251,935	Great Britain	Aug. 5, 1926
25	274,578	Great Britain	July 25, 1927