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3,369,854 CONTAINER WITH APPLICATOR AND SUPPORT THEREFOR

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ABSTRACT OF THE DISCLOSURE

A combined liquid container and applicator for the contents of the container. The container has a discharge opening at its bottom end leading to a storage chamber for the discharged liquid. The applicator device includes a brush with a tubular shank supported on the storage chamber, the brush adapted to be immersed in the liquid in the storage chamber. The shank leads to the bristles of the brush and there is a recess and bulb on the other end of the shank adapted to suck up the contents of the chamber.

This invention relates to a container with an applicator and support for the container.

It is a common experience among users of paint, nail polish, rubber cement and other liquid or semi-liquid materials which are packaged in cans or small bottles or like containers and are used, a little at a time, by means of a brush, roller or similar applicator, that it is difficult to remove the last portion of the material from the container. Thus, when the level of liquid becomes insufficient to permit adequate immersion of the brush, etc., it becomes necessary for the user to hold the bottle in one hand and tilt it to an angle from the vertical, so as to cause the liquid to collect in one corner of the bottom, in order that the brush, held in the other hand, can be adequately immersed. Since the first mentioned hand is the one to which the nail polish is being applied, it is readily apparent that it is inconvenient repeatedly to use that hand for tilting the bottle. In addition, there is the danger of smearing the newly-applied nail polish and of tipping over the bottle during the repeated tilting and setting down thereof. It is also common experience that, even with the nail polish bottle sufficiently full to permit it to be used in conventional upright position, there is considerable danger of accidentally tipping over the relatively small and not too stable bottle during insertion of the brush, and, as a result, it is almost universal practice to use one hand repeatedly for holding the bottle when the brush is inserted.

Accordingly, it is an important object of the present invention to provide a new and useful support for a container or nail polish bottle securely in normal vertical position with the applicator in a tilted or inclined position.

Conventional rubber cement dispenser bottles employ a cap with an adjustable brush to enable the user to maintain the brush at the immersion level. The cement causes the brush handle to jam, resulting in much inconvenience and loss of time. Another object of the present invention is to automatically keep the brush at the immersion level, requiring no adjustment.

Another object of the invention is to provide means for positioning the container at the angle which is most convenient for withdrawing the applicator and for applying it to the person's fingernails, the inclination of the container being in visual alignment to permit the user to readily insert the applicator into the container.

Another object according to a modification of the invention is to provide a support for a paint container whereby a roller applicator may contact the lowermost level of liquid in the container.

For further comprehension of the invention and of

the objects and advantages thereof, reference will be had to the following description and accompanying drawings and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

FIGURE 1 is a perspective view of a container with an applicator and support for the container embodying one form of the invention.

FIG. 1a is a side elevational view of a modification of the invention on a reduced scale.

FIG. 2 is a vertical sectional view taken on the plane of the line 2—2 of FIG. 1.

FIG. 3 is a vertical sectional view of the stopper and applicator assembly removed from the container.

FIG. 4 is a sectional view taken on the plane of the line 4—4 of FIG. 2.

Referring now in detail to the various views of the drawings, the form of invention illustrated in FIG. 1 comprises a base or support 10, a substantially square-shaped body 11 formed integrally with the base, an inverted bottle or container 12 and an applicator and cap assembly 14.

The base or support 10 comprises a flat rectangular shaped plate 16 of glass, plastic or other suitable material having a downwardly extending flange 18 therearound, with integral sockets 20 formed at the corners for supporting feet 22 for resting on a horizontal supporting surface 24.

The side walls of the body 11 taper upwardly and inwardly as indicated at 28, terminating in a round reduced neck portion 30 internally screw threaded.

The container or bottle 12 shown for illustrative purposes only as comprising a flat four-sided body with an externally screw threaded neck portion 15 mounted in the neck portion 30 of the body 11 so as to mount the bottle in an inverted position. The side walls 26 of the bottle taper upwardly and outwardly as indicated at 32, terminating at the top in an integral flat top wall 34. The container or bottle 12 may of course be round or cylindrical.

One of the side walls 28 of the body 11 is open and formed with an auxiliary bottle structure 36 formed integrally with the side wall and projecting outwardly therefrom at an angle to the vertical as viewed in FIG. 1. The auxiliary bottle structure 36 is four sided terminating at the outer end in a reduced neck portion 38 constituting an open mouth end. The neck portion is externally screw threaded. The auxiliary bottle structure has no bottom or base, communicating with the opening in the wall 28 and with the interior of the body 11 and container 12 as best seen in FIG. 2. The base 10, body 11, bottle or container 12 and auxiliary bottle structure 36 may be molded separately to accommodate standard bottles or jars as used by the rubber cement manufacturers for mounting on the neck portion 30 of the body 11.

The applicator and cap assembly 14 comprises an elongated metal tube 40 having an enlarged integral solid head 42 at one end thereof for supporting clusters 44 of hair depending therefrom. The central bore of the tube extends through the head and fitted in said head and bore, there is a short flexible plastic tube 46 projecting outwardly of the head, between the clusters of hair. At its other end, the tube 40 is formed with an enlarged recess 48 communicating with the bore thereof. A rubber bulb 50 with a hollow bulbous body portion 52 and an elongated neck portion 54 closes the open top end of the recess 48, the neck portion of the bulb being stretched over the recessed end of the tube. The neck portion 54 is formed with an inwardly extending bead 56 which seats in an annular groove 58 formed in the tube 40 adjacent an annular flange 60. A flanged cap 62 is formed

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integrally with the tube 40 intermediate its ends, the annular flange 64 of the cap being internally screw threaded, the peripheral portion of the body of the cap being adapted to seat upon the mouth edge of the neck of the auxiliary bottle while the threaded flange 64 under screw action thereof upon the neck seals the cap or cover peripherally about the mouth or open end of said auxiliary bottle. A sealing washer 66 is interposed between the mouth edge of the neck of the auxiliary bottle and the body of the cap.

When the cap 60 is threadedly engaged with the neck of the auxiliary bottle, as shown in FIG. 1, with the applicator therein, the applicator will be centered in the auxiliary bottle. With the cap screwed into sealing position, a seal is effected for closing the bottle as best seen in FIG. 2.

By reason of the construction herein, the auxiliary bottle 36 is positioned at an inclined angle or slope, which is the most convenient angle at which the applicator can be withdrawn from the auxiliary bottle and applied to the fingernails. It is also in visual alignment so that the user can see how to insert the applicator into the auxiliary bottle. The inclination of the auxiliary bottle also permits the applicator and the brush end thereof to be positioned closely adjacent the bottom of the auxiliary bottle and the bottom of the container or bottle 12 and immersed within the liquid contents even when there is only a small residue of the liquid left in the container or bottle 12. The increased area of the supporting base 10 provides the container or bottle with a greater stability. The bottle or container is not subjected to being overturned accidentally or otherwise while in position for use.

In use, the contents 39 of the container or bottle 12 pours into the body 11 and into the bottom of the auxiliary bottle 36 by gravity as seen in FIG. 2. When the applicator and cap assembly 14 are in sealing position on the neck 38 of the auxiliary bottle 36 as seen in FIGS. 1 and 2, by manually squeezing the bulb 50, the liquid will be withdrawn by suction outwardly of the auxiliary bottle 36 into the recess 48. The assembly is then unscrewed from the neck of the auxiliary bottle and the bulb 50 squeezed forcing the liquid in recess 48 through the tube 40 onto the bristles 44 and applied to the nails of the user, for example, by means of the bristles. It is preferred that the cap 62 be loosely mounted on the neck 38 in order to facilitate sucking of the liquid.

The present invention also contemplates a main container or bottle 12' provided with dual auxiliary bottles 36' on opposed sides thereof as illustrated in FIG. 1A.

A modified applicator structure 14'' is shown in FIG. 8 comprising a metal tubular member 40'' with enlarged head 42'' supporting depending brush bristles 44'' at one end thereof. The other end of the tubular member 40'' is formed with a flaring mouth 70. Another brush device 72 is removably mounted in the bore 74 of the tubular member 40'' and comprises an elongated cylindrical body portion 76 having a head 78 at one end supporting brush bristles 80 depending therefrom. The other end of the body portion is formed with an enlarged tapered handle 82 seated in the flaring mouth 70 of the tubular member. The dimensions of the applicator structure 14'' are such

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as to permit it to be inserted through the auxiliary bottle 36 of FIG. 1 for immersing the brush bristles 44'' and 80 into the liquid in the auxiliary bottle.

While I have illustrated and described the preferred embodiments of my invention it is to be understood that I do not limit myself to the precise constructions herein disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claim.

What is claimed is:

1. In combination, a supporting base, a container for liquid vertically mounted on the base, said container having an outlet opening at the bottom end thereof, for discharging the contents thereof by gravity, means associated with the base for holding the liquid discharged through said outlet opening ready for withdrawal and an applicator device for withdrawing the held liquid and applying same to work, the container being multi-sided and the discharge outlet being in one of said sides and the means associated with the base for holding the liquid discharged through the outlet opening including a bottle structure communicating at its bottom end with the outlet opening, said bottle structure disposed at an angle to the vertical, said bottle having an open top end, said applicator comprising an elongated tube extending axially through said bottle structure, a brush head on the bottom end of the tube inside the bottle structure, adapted to be immersed in said liquid, a bulb on the other end of the tube exteriorly to the bottle structure for withdrawing the liquid through the tube by suction, the brush head including an enlargement at the bottom of the tube, clusters of hair bristles depending from said enlargement, a flexible plastic tube member fitted in central bore of the tube at the bottom end thereof and projecting through the bristles, said tube having an enlarged hollow portion at its other end forming a recess open at its top end for holding a supply of liquid withdrawn from the container, said bulb sleeved around the recessed top end of the tube for sucking liquid into the recess and for later forcing liquid out of said recess through the tube onto the bristles.

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