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

One of the objects of this invention is to provide a container and applicator for use in connection with nail polish and the like.

Another object of this invention is to provide a bottle and applicator and means for supporting the bottle in a tilted or inclined position.

Another object of this invention is to provide a structure in the container and an applicator wherein the applicator is supported in the container to be in contact with the lowest level of the liquid in the bottle, and wherein the precipitation of the liquid in the bottle is positioned to one side of the applicator so that the applicator does not come in contact with the precipitation.

Another object of the invention is to provide a structure in the container to be in position, showing the cap in closed position.

The invention includes a base or supporting member, a bottle, an applicator, and a cap. The bottle generally indicated at 10 comprises a bottom 12 with an inwardly inclined side wall 14 which inclines inwardly from the bottom towards the top, and a neck portion generally indicated at 16. The bottom of the bottle has an annular upwardly and inwardly inclined wall 18. Approximately midway of the height of the body of the bottle the inclined side wall 14 is sharply curved inwardly to provide an annular shoulder 20. A tapered sleeve 22 is positioned over the upper half of the body portion of the bottle with the lower edge of the sleeve resting on the shoulder 20. The upper inwardly extending flange 24 of the sleeve engages the lower end of the neck portion of the bottle. The sleeve 22 is maintained in a fixed position relative to the body of the bottle.

The neck 16 of the bottle is exteriorly threaded as at 26. The uppermost portion of the neck is provided with an annular flat top outer rim 28 which forms the outermost portion of the bottle. Extending inwardly and below the top rim is an internal shelf 30 which is provided with a central opening 32 forming the mouth of the bottle. The central opening 32 has an outward taper which is complementary to the taper of the stem of the applicator, presently to be described.

Between the outer rim 28 of the neck and the shelf 30 there is an annular recess 34 to accommodate the ring or disc on the applicator. An annular bead 36 is formed on the shelf between the inner vertically extending wall of the rim of the neck and the opening of the bottle. The inside wall of the neck portion below the shelf has a generally bell-shaped configuration generally indicated at 38, terminating in an annular sharp edge 40 at the inner wall of the opening 32.

The applicator, generally indicated at 40 comprises a stem portion 42 to the lower end of which is secured the bristles in the conventional manner. The upper end of the stem tapers outwardly as at 44 and is shaped complementary to the tapered shape of the mouth opening 32. Extending upwardly of the stem is the handle portion 46, and between the stem and handle there is an outwardly extending ring, flange or disc 48. The flange 18 has a certain degree of resiliency. Outwardly beyond the disc the handle portion is curved or tapered inwardly and then outwardly to provide a stylus so that same may easily and conveniently held by the hand.

A cap or closure member generally designated at 50 is internally threaded as at 52 to engage the externally threaded neck 16 of the bottle. The cap 50 has a central enlarged opening 54 to accommodate the handle 46 and the interior of the cap is provided with an annular ring or head portion 56 extending below the bottom wall 58 of the top of the cap, and a recess 60 is provided between the ring 56 and the inner wall of the cap. When the cap is threaded engaged with the neck of the bottle, as shown in FIGURE 3, with the applicator therein, the applicator 40 will be centered in the bottle by virtue of the complementary shaped tapering of the stem 44 and opening 32.

The disc or flange 48 of the applicator rests on the annular bead 36 and the internal ring 56 of the cap engages the top of the flange 48 of the applicator, with the upper rim 28 of the neck positioned within the annular recess 60 of the cap. With the cap screwed into a sealing position a seal is effected for closing the bottle, as best seen in FIGURE 3. The resiliency of the flange 48 permits the flange to be compressed between the cap and the annular bead 36. Merely placing the applicator in the position shown in FIGURE 1, in which the flange 48 of the handle engages the head surface 35 without applying the closure cap will close the bottle against the volatile loss of the liquid. To use the applicator, the cap 50 must be unthreaded from the neck of the bottle and removed from the neck.

The supporting base for the bottle is best shown in FIGURES 1 and 2 and is generally designated by the numeral 64. It is of annular shape and comprises a bottom wall 66 and an upwardly extending annular wall 68. The upwardly extending annular wall 68 is inclined inwardly on one side and outwardly on the opposite side and gradually increases in height on the outwardly sloping side. The outwardly sloping side is indicated by the numeral 70 and the inwardly sloping side is indicated by the numeral 72. The inwardly sloping side 72 terminates just above the bottom wall 66 and the opposite outwardly sloping side 70 terminates a substantial distance above the bottom wall 66, as best seen in FIGURE 1, to provide a base which supports the bottle in an inclined or sloping position.

The top or upper rim 74 of the upwardly extending side wall has a continuous concave-shaped seat 76 and just below the seat is an inner annular recess 78 which is shaped complementary to the inclined bottom wall 18 of the bottle. The bottom of the bottle is seated on the concave-shaped seat 76 with the tapered outer bottom wall 18 of the bottom of the bottle supported within the recess 78. As best seen in FIGURE 1, the rim portion above the outwardly sloping side 70 is inclined inwardly in the direction toward the opposite sloping side 72.
3. By virtue of the construction herein, the bottle is positioned at an inclined angle or slope, which is the most convenient angle at which the applicator can be withdrawn from the bottle and applied to the finger-nails. It is also in visual alignment so that the user can see how to insert the applicator into the bottle. The inclination of the bottle also permits the applicator and the brush end thereof to be positioned closely adjacent to the bottom of the bottle and be immersed within the liquid contents even when there is a small residue of the liquid left in the bottle. Also, any precipitation in the liquid which would normally settle in the bottom of the bottle is, by virtue of the inclination or tilt of the bottle, directed to the side of the bottle and away from the brush end, thus, the brush does not pick up any precipitation which would be characteristically true in connection with bottles which are supported on a horizontal base. The increased diameter of the supporting base provides the bottle with a greater stability. The bottle is not subjected to being overturned accidentally or otherwise while in position for use.

As the applicator is withdrawn from the bottle with the liquid adhering to the bristles, the brush end of the applicator is moved against the edge 40 at the lower end of opening 32 to squeeze or press out some of the surplus liquid on the brush. The annular bead 36 on the upper portion of the neck of the bottle provides a sealing ring or an annular point contact with the flange 48 of the applicator. Any surplus liquid which might drip from the brush and which might normally deposit on the shelf 30 would not be deposited and remain on the annular bead 36. This leaves the bead 36 clean at all times for sealing contact with the flange 48.

It will be understood that various changes and modifications may be made from the foregoing without departing from the spirit and scope of the appended claims.

What is claimed is:

1. In combination, a supporting base, a container positioned on said supporting base, a cap and an applicator, said supporting base having means for permanently supporting said container at a fixed inclined angle, said container having an externally threaded neck, an outer rim at the upper end thereof, a recessed portion inwardly of said outer rim and an annular bead inwardly and below said rim, a mouth opening inwardly and below said bead, an applicator having a handle and an annular flange which flange rests on said bead with the flange supported within said recess, a cap having internal threads engaging the threaded neck of said container with the cap resting on said flange to secure said applicator in a position so that said flange seals said bottle opening, said cap having a central opening through which the handle of the applicator extends.

2. A structure defined in claim 1 in which the cap is provided with an inner annular ring to engage the flange of the applicator and in which the flange is formed of resilient material.

3. A structure defined in claim 1 in which the cap has an inner ring engaging the upper portion of the flange on the applicator.

4. A structure defined in claim 1 in which the bottom of the container has a tapering portion and the base has a rim shaped complementary to the bottom of the container to interlock therewith and to secure said bottle to said base.

5. A structure defined in claim 1 in which the bottom has an inclined upper rim and in which the bottom of the container has means engaging the upper rim so that the container is supported at an inclined angle.

6. In combination, annular supporting base, a container for a liquid positioned on said supporting base, said container having an inwardly inclined side wall which inclines inwardly from the bottom towards the top, said container having an externally threaded neck, a cap having internal threads for engagement with said neck, said cap having a central opening, an applicator having an annular flange resting on said neck with the handle of the applicator extending through said cap opening, said applicator having a brush at the lower end extending substantially to the bottom of said container, said supporting base having means permanently supporting said container at a fixed inclined angle so that the precipitation of the liquid in the container is positioned to one side of the brush so that said brush does not come in contact with the precipitation, said annular base having an annular bottom wall and an upwardly extending annular wall which is inclined to slope inwardly on one side and inclined to slope outwardly on the opposite side and gradually increases in height on the outwardly extending sloping side, with the inwardly sloping side terminating just above the bottom wall and the opposite outwardly sloping side terminating a substantial distance above the bottom wall.

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