Jan. 29, 1963

A. J. RUFO

3,075,229

LIQUID SHOE POLISH APPLIER

Filed Dec. 8, 1958

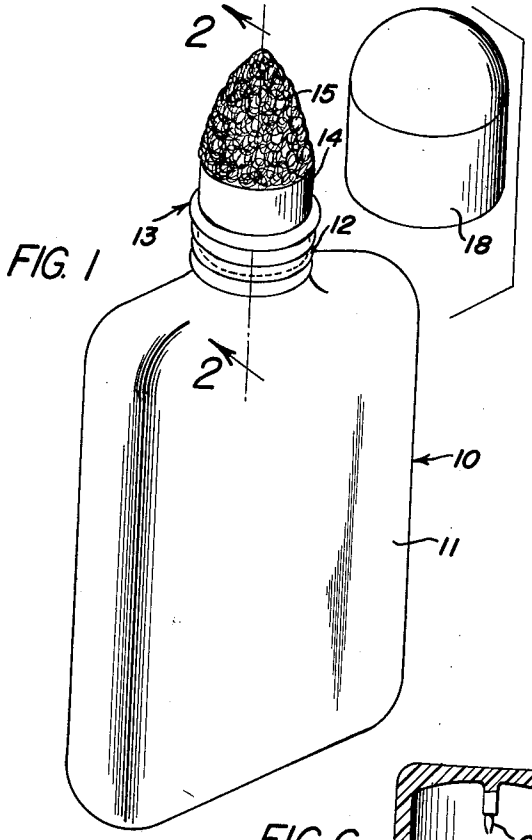


FIG. 1

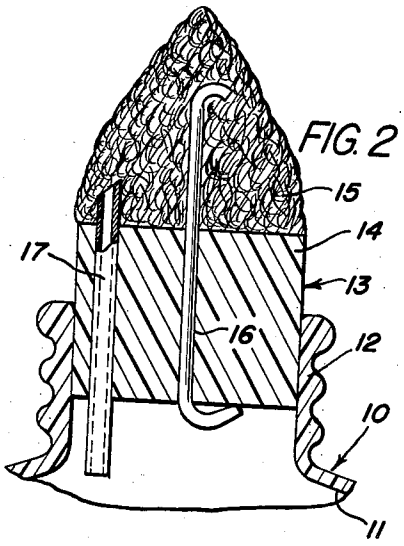


FIG. 2

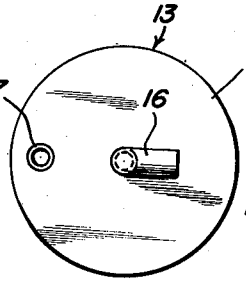


FIG. 3

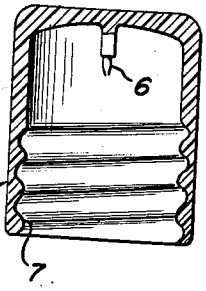


FIG. 6

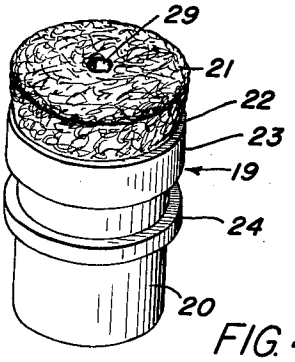


FIG. 4

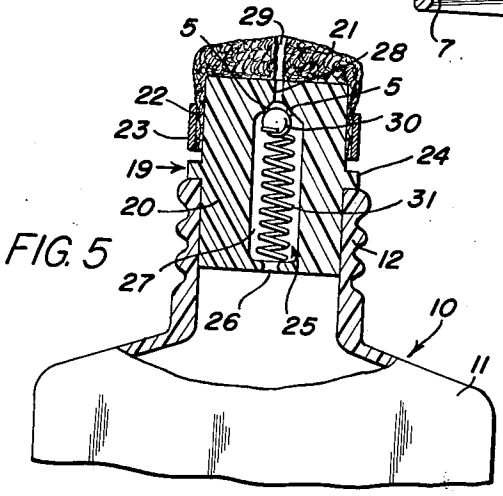


FIG. 5

INVENTOR.
ARTHUR J. RUFO

BY Victor J. Evans & Co.

ATTORNEYS

United States Patent Office

3,075,229

Patented Jan. 29, 1963

3,075,229

LIQUID SHOE POLISH APPLIER

Arthur J. Rufo, Lorain, Ohio, assignor, by mesne assignments, to L. S. Kaufman & Sons, Inc., Cleveland, Ohio, a corporation of Ohio

Filed Dec. 8, 1958, Ser. No. 778,829
4 Claims. (Cl. 15—543)

This invention relates to the application of a liquid or fluid, and more particularly to a means for applying liquid shoe polish to a person's shoes.

The object of the invention is to provide a device which facilitates the application of liquid shoe polish to shoes, as for example when said liquid shoe polish is arranged in a squeeze type bottle or container.

Another object of the invention is to provide a liquid shoe polish applicator which consists of a soft spreader that is adapted to receive liquid shoe polish from a suitable source of supply whereby the polish can be conveniently and readily spread onto the desired area or surface being cleaned or polished.

A further object of the invention is to provide a liquid shoe polish applicator or applying device which is extremely simple and inexpensive to manufacture.

Other objects and advantages will be apparent in the course of the following description.

In the accompanying drawing, forming a part of this application, and in which like numerals designate like parts throughout the same.

FIGURE 1 is a perspective view illustrating the present invention.

FIGURE 2 is a fragmentary sectional view taken on line 2—2 of FIGURE 1.

FIGURE 3 is a bottom plan view of the closure in FIGURES 1 and 2.

FIGURE 4 is a perspective view illustrating one preferred embodiment.

FIGURE 5 is a fragmentary sectional view taken to the right of FIGURE 4.

FIGURE 6 is a sectional view illustrating a closure.

Referring in detail to the drawing, and more particularly to FIGURES 1, 2, and 3 of the drawing, the numeral **10** indicates a container such as a container of plastic or the like, or squeezable soft material which includes a main body portion **11** and a neck **12**.

The applicator of the present invention is indicated generally by the numeral **13** and includes a plug or support member **14** which is snugly seated in the neck **12**. The numeral **15** indicates a spreader of soft material such as a soft fabric, and the spreader **15** is arranged contiguous to the outer end of the support member **14**. The numeral **16** indicates a wire like holding member which provides a means for maintaining the spreader **15** connected to the support member **14**.

There is further provided a hollow open ended tube **17** which is threaded through the support member **14**, and one end of the tube **17** communicates with the spreader **15**, and the other end of the tube **17** communicates with the interior of the container **10**. Thus, when the container **10** is inverted and manual pressure is applied to the body portion **11**, the shoe polish within the container **10** will be forced out through tube **17** and onto the spreader **15**, whereby the spreader can then be used for applying the shoe polish to the shoes being cleaned or polished. The numeral **18** indicates a cap which is adapted to be arranged over the spreader **15** when the device is not being used, and the cap **18** can be readily removed when the shoe polish is to be applied.

Referring now to FIGURES 4 and 5 of the drawing, there is illustrated a modified applicator which is indicated by the numeral **19** and the applicator **19** includes a support member **20**, there being a spreader **21** arranged contiguous to the outer end of the support member **20**. The spreader **21** is made of any suitable soft material and has a portion **22** held in place contiguous to the side of the member **20** by means of a retaining collar **23**. Extending outwardly from the support member **20** is an annular lip **24** which abuts the outer end of the neck **12** when the parts are in the position shown in FIGURE 5.

As shown in FIGURE 5 there is provided in the support member **20** a longitudinally extending passageway or port **25** which includes a reduced diameter end portion **26** and an intermediate enlarged portion **27** as well as a further reduced end portion **28**. The numeral **29** indicates the applicator opening which is arranged in the spreader **21** and which registers with the aperture or portion **28**, and a ball valve **30** is arranged as shown in the drawing and has a coil spring **31** arranged in engagement therewith.

From the foregoing, it is apparent that there has been provided a device which is especially suitable for use in applying liquid shoe polish to shoes or the like. When using the device of FIGURES 1, 2, and 3, the container **10** is adapted to be filled or provided with liquid shoe polish of any desired type or color, and then the assembly **13** is positioned in the neck **12** of the container **10**. Normally the cap **18** is arranged over the spreader **15**. However, when it is desired to apply shoe polish to the shoes, the cap **18** is removed, and the container **10** is inverted and then manual pressure is applied to the portion **11** of the container **10** so that the shoe polish will flow out through the tube **17** and on to the spreader **15**. The polish on the spreader **15** can then be spread over the surface of dirty portions of the shoes or shoe as desired. The number **16** serves to fasten the spreader **15** to the support member **14**.

The support member **14** is positioned in the neck **12** with a snug fit. Thus, when desired, the support member **14** can be remove from the neck **12** whereby the device can be arranged in any suitable type of container, squeeze bottle or the like.

In the assembly shown in FIGURES 4 and 5, the support member **20** is adapted to be snugly seated in the neck **12** of the container **10**, and the collar **23** retains the spreader **21** connected to the support member **20**. Then, by inverting the device, and applying pressure to the body portion **11**, fluid can pass out through the passageway **25** and through an aperture **29** so that the spreader **21** can be used for spreading the shoe polish over the area being polished or cleaned.

The parts may be made of any suitable material and in different shapes and sizes.

If desired the spreader may be held in place by means of a suitable adhesive or cement.

The interior of the tube **17** is of such a size that the shoe polish will not flow therethrough until manual pressure is applied to the container **10**. A suitable cap may be provided for use with the device in FIGURES 4 and 5. The spreader **21** may be made of a suitable material such as mohair. The member **14** and the member **20** may be made of rubber, plastic, or the like.

The device of the present invention is constructed so that there will be no dripping when the bottle is turned upside down and there will be no clogging or plugging when the device is stored away for any length of time.

In use, the support member **14** or the support member **20** is inserted in the neck of the plastic bottle or container and when using the device of FIGURES 4 and 5, the ball **30** will help control the dispensing or discharging of liquid shoe polish. Liquid will not flow out of the outlet **28** when the bottle is turned upside down due to the ball **30** which is held in place by the

light tension spring 31. Thus, the outlet 28 will remain plugged so that there will be no dripping when the bottle is inverted.

To operate the device, the bottle or container 10 is squeezed so that liquid will flow into the area 27 and around the ball 30, then through the opening 28 and onto the spreader or pad 21. After the polishing operation is completed, a suitable cap is arranged over the device and such a cap may be provided with a pin 6 which fits through the opening 29 so as to keep the outlet opening clean when the cap is removed, ready for the next application, and this helps insure against clogging or plugging of the outlet.

The squeeze bottle may be made of any suitable material such as plastic, rubber, or the like.

Thus, it will be seen that there has been provided a device which will permit shoes to be readily polished with liquid polish simply by inserting the applier into the neck of the plastic container and then squeezing the polish out in order to polish shoes as required. This will eliminate messy hands, spilling, rubbing as well as excessive use of polish.

When the device in FIGURES 1, 2, and 3 is being used, it is only necessary to invert the bottle and squeeze so that the polish will pass out through the tube 17. The inner diameter of the tube 17 is small enough so that when the bottle is inverted, polish will not accidently run out or pass therethrough since it is necessary to squeeze the bottle in order to dispense the liquid shoe polish.

Referring now to FIGURE 6 of the drawings, the numeral 8 indicates a closure or cap which can be used for the device such as the device shown in FIGURE 5, and the closure 8 includes a threaded portion 7 as well as a pin 6 which can be used for helping retain the openings or passageways clear or for preventing the openings from becoming clogged.

As shown in FIGURE 5, there is provided projections 5, and the ball 30 is adapted to set on the projections or points 5 in the tapered hole instead of being directly seated in it so as to have a slight clearance of about .002 inch between the ball 30 and the wall of the tapered hole which is part of the passageway 25. This permits liquid to flow more easily when the bottle is squeezed.

Minor changes in shape, size, and rearrangement of details coming within the field of invention claimed may be resorted to in actual practice, if desired.

I claim:

1. In a liquid applier, a container including a body portion of squeezable material, a neck extending from said body portion to provide a cylindrical bore, a flanged support member snugly seated in the bore, the support being provided with a fluid passageway therethrough defining an annular transverse shoulder seat intermediate its ends and facing in a direction opposite the outer end of the support, a reciprocal valving member disposed within the passageway in a position opposed to the shoulder seat and spring pressed in a direction towards the seat, means to maintain the valving member slightly spaced from the shoulder member, when said valving member is in the closed position, and spreader means of soft material mounted on the outer end of the support member and provided with an aperture therethrough in substantial registry with the fluid passageway.

2. Structure as defined in claim 1 characterized in that the means for maintaining the valving member in slightly spaced relationship from the shoulder includes a plurality of projection means on the shoulder adapted to abut the valving member when in closed position.

3. Structure as defined in claim 1 wherein the means for maintaining the valving member in slightly spaced relationship from the shoulder member includes a plurality of projections provided on one of the members and adapted to abut the other when the valving member is in closed position.

4. In a liquid applier, a container including a body portion of squeezable material, a neck extending from said body portion, a support member snugly seated in the neck, the support being provided with a fluid passageway therethrough defining an annular transverse shoulder seat intermediate its ends and facing in a director opposite the outer end of the support, a reciprocal valving member disposed within the passageway in a position opposed to the shoulder seat and spring pressed in a direction toward the seat, means to maintain the valving member slightly spaced from the shoulder member, when said valving member is in the closed position, and spreader means of soft material mounted on the outer end of the support member and provided with an aperture therethrough in substantial registry with the fluid passageway, a cap for cooperation with the neck to close the container when not in use, the cap including an elongated longitudinally extending pin which, when the cap is in position on the neck, is received within the fluid passageway to abut the valving member and force the same in a direction away from the shoulder.

References Cited in the file of this patent

UNITED STATES PATENTS

564,614	Cunn	July 28, 1896
775,411	Wheeler	Nov. 22, 1904
823,298	Smith	June 12, 1906
868,609	Martin	Oct. 15, 1907
906,742	Roberts	Dec. 15, 1908
1,933,893	Clark	Nov. 7, 1933
2,113,695	Krannak	Apr. 12, 1938
2,197,052	Lowen	Apr. 16, 1940
2,210,206	Fisher	Aug. 6, 1940
2,731,299	Bramming	Jan. 17, 1956
2,761,469	Hansen	Sept. 4, 1956
2,820,234	Rigney	Jan. 21, 1958