

T. D'A. ROCHE.
LIQUID DISTRIBUTING BRUSH.
APPLICATION FILED MAY 3, 1910.

980,678.

Patented Jan. 3, 1911.

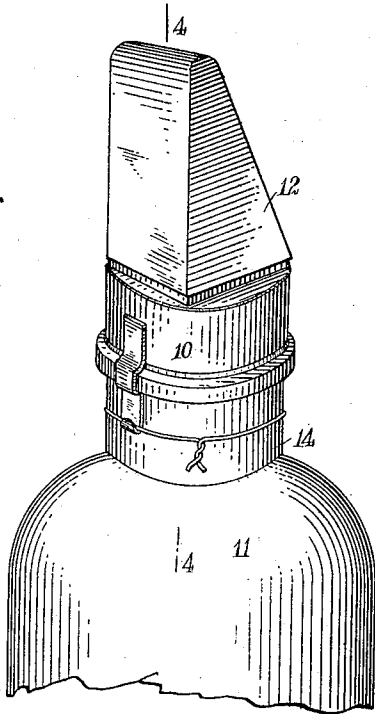


Fig. 1.

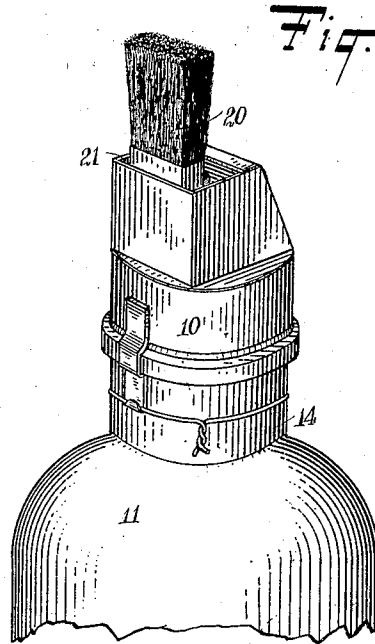


Fig. 2.

Fig. 3.

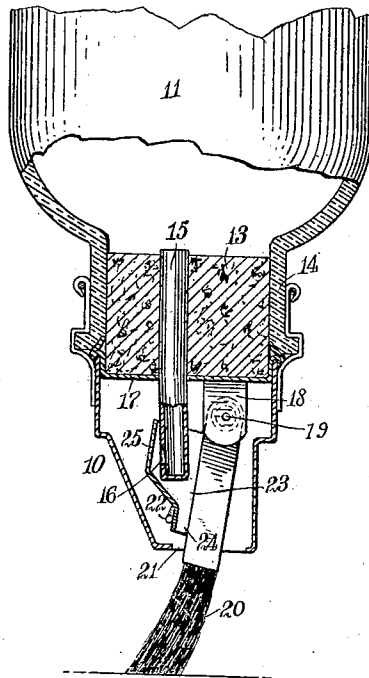
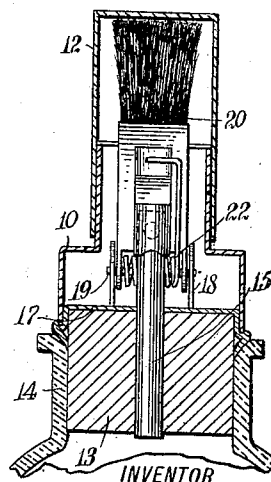


Fig. 4.



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LIQUID-DISTRIBUTING BRUSH.

980,678.

Specification of Letters Patent.

Patented Jan. 3, 1911.

Application filed May 3, 1910. Serial No. 559,160.

To all whom it may concern:

Be it known that I, THOMAS D. ROCHE, a citizen of the United States, and a resident of Cambridge, in the county of Middlesex and State of Massachusetts, have invented a new and Improved Liquid-Distributing Brush, of which the following is a full, clear, and exact description.

An object of the invention is to provide a device for attachment to bottles, for evenly and automatically distributing the liquid contents of the bottle when the same is to be used on any surface, and for effectively regulating the flow of the liquid from the bottle onto the brush.

For the purpose mentioned, use is made of a casing provided with a cover and adapted to be removably attached to a bottle, and a spring-controlled brush mounted in the casing and extending exteriorly thereof, and a stopper in the casing and provided with a conduit for conducting the liquid in the bottle to a regulating receptacle secured to the brush, and from which the liquid is evenly fed onto the brush and then distributed over the surface, to which the liquid is to be applied.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference denote corresponding parts in all the views, and in which—

Figure 1 is a perspective view of my device attached to the top of a bottle and having the cover in place thereon; Fig. 2 is a similar view, but showing the cover removed; Fig. 3 is a partial sectional view showing my device in operative position; and Fig. 4 is a sectional view taken on the line 4—4 in Fig. 1, showing a view at right angles to that shown in Fig. 1.

Referring more particularly to the views, I employ a casing 10, for removable attachment to the neck of a bottle 11, and provided with a removable cover 12. A stopper 13 is secured in the casing 10 and engages the neck 14 of the bottle 11. Extending through the stopper is a conduit 15, having an end thereof closed and an aperture 16 in the side of the conduit adjacent the closed end. A plate 17 is fitted over the stopper 13, and mounted on the plate are bearings 18, having pivotally mounted thereon by means of a pin 19, a brush 20. The brush 20 extends outwardly through an opening 21 to the exterior of the casing, and

mounted on the pin 19, to control the brush 20, is a spring 22. A regulating receptacle 23, is mounted on the brush 20 and provided with a nozzle end 24, the said conduit 15 being so mounted as to extend into the regulator 23.

In the use of my device, the brush 20 normally assumes a position in longitudinal alinement with the bottle 11, and when in this position the aperture 16 of the conduit 15 faces against the side 25 of the regulating receptacle 23. When the bottle is standing upright, it will be readily seen that no liquid can issue from the top of the bottle and likewise when the bottle is inverted the action of the spring 22 holds the regulator receptacle 23 against the aperture 16, so that no liquid can escape from the bottle. When, however, the brush is applied as shown in Fig. 3, the side 25 is disengaged from the conduit 15 and the liquid contained in the bottle 11 flows through the conduit 15 and the aperture 16, into the receptacle 23, from which it feeds onto the brush 20, through the nozzle 24, and is distributed by the brush over the surface to which it is to be applied. By varying the angle of the brush, by a slight pressure on the same, it will be seen that the flow of liquid can be varied to suit the operator.

Although my device can be conveniently applied to bottles containing various liquids such as mucilage, water, acids, etc., it is particularly adaptable for applying liquid blacking to shoes and the like.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A device of the class described, comprising a casing for removable attachment to the neck of a bottle and having an opening therein, a cover for the casing, a stopper in the casing and engaging the bottle, a conduit on the stopper and extending from the interior of the bottle into the casing, a spring-controlled brush hingedly mounted in the casing, and a regulating receptacle mounted on the brush and adapted to engage the conduit to control the flow of a liquid from the conduit onto the brush.

2. A device of the class described, comprising a casing for removable attachment to the neck of a bottle and having an opening therein, a cover for the casing, a stopper in the casing and engaging the bottle, a conduit extending through the stopper into

the casing and having an opening in one
side of the same, a spring-controlled brush
hingedly mounted in the casing, and extend-
ing through the opening thereof, and a
5 regulating receptacle mounted on the brush
and adapted to engage the conduit to con-
trol the flow of a liquid from the conduit
onto the brush.

In testimony whereof I have signed my
name to this specification in the presence of 10
two subscribing witnesses.

THOMAS D'ARCY ROCHE.

Witnesses:

WILLIAM J. LYNCH, Jr.,
EDWARD A. HARERTY.