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A. J. WEISS

2,287,209

DEVICE FOR DISPENSING FLUID FROM CONTAINERS

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Fig. 1

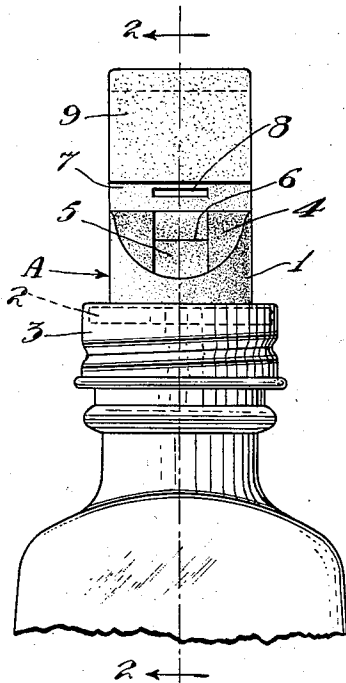


Fig. 2

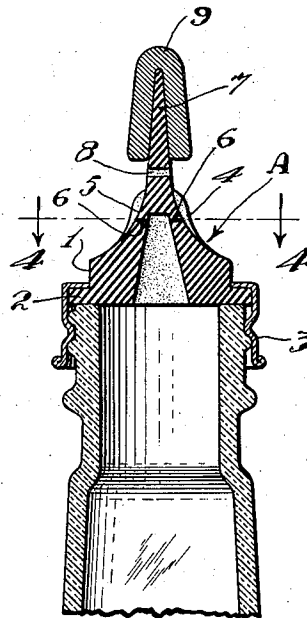


Fig. 3

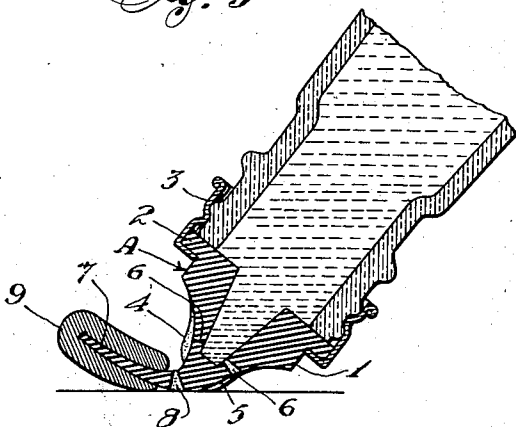
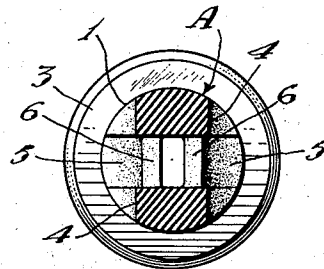


Fig. 4



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DEVICE FOR DISPENSING FLUID FROM
CONTAINERS

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3 Claims. (Cl. 15-139)

This invention relates to devices for dispensing fluids from containers, and more particularly to the provision of a combined dispenser and applicator especially adapted for dispensing definite quantities of a fluid on to a surface, and smoothly applying the fluid to the surface.

Heretofore, applicators have been provided for dispensing liquids, such as mucilage, etc., from bottles, which applicators have generally comprised a rubber nipple fitted over the mouth of a bottle, and having a slit therein for dispensing the liquid. But such devices have been objectionable in that the flow of the liquid is not positively controlled at all times, and no means have been provided for applying the liquid smoothly and evenly to a surface. Applying means heretofore provided have been in the nature of a stiff stub, having an applying action similar to that of a worn paint clogged brush. When such an applicator is used to apply "whiting" for white shoes, the desired smooth and even finish is not obtained. Also dispensing devices provided with flap valves, etc., enable the liquid to flow at all times, and there is no control of the quantity of liquid being applied. That is, during the spreading of the liquid, there will be a continual flow of the liquid. This is objectionable in that it prevents the forming of a smooth and even surface, and also it causes an unnecessary waste of the liquid.

It is, therefore, an object of this invention to provide a device for dispensing liquids from containers, which device has means for definitely controlling the flow of the liquid, and is also provided with a flexible spreader for smoothly and evenly applying the liquid to a surface, there being no flow of liquid during the spreading operation.

A further object is the provision of a liquid dispenser in the form of a hollow member adapted to be fitted over the mouth of a bottle or other container and having means in the side walls thereof for automatically controlling the flow of liquid, said member having associated therewith a spreader so arranged and constructed that it will be inoperable for spreading purposes during the flow of liquid from the dispenser.

These and other advantageous objects which will later appear, are accomplished by the simple and practical construction and arrangement of parts, hereinafter described and exhibited in the accompanying drawing, forming part hereof, and in which:

Fig. 1 is a side elevational view of the applicator embodying my invention,

Fig. 2 is a sectional view taken on line 2-2 of Fig. 1,

Fig. 3 is a sectional view showing the applicator in position for dispensing liquid from a container, and

Fig. 4 is a sectional plan view taken on line 4-4 of Fig. 2, looking in the direction indicated by the arrows.

Referring to the drawing, the applicator is shown to comprise a member A having a substantially cylindrical main body 1, having a flange 2, which is received in a cap 3, the body 1 passing through an opening in the cap, which is preferably made of metal and threaded to enable it to be threadedly attached to a bottle or other container. The member has two opposite sides tapered from the body 1 as shown at 4, (see Fig. 2) each tapered side having a channel 5 therein and a slit 6 through the wall of the member to enable the dispensing of liquid. When it is desired to dispense liquid, the device is turned downwardly as shown in Fig. 3 and a side wall 4 of the member A is pressed against a surface to cause one of the slits to open to enable the flow of the liquid. It will be noted that only one slit 6 is open at a time, and such slit will be open only when the side wall 4 of the member A is pressed down on a surface, the slit automatically closing when pressure is relieved.

Integral with the tapered portion of the member A is a relatively thin tapered spreader tongue 7 having flat sides which are covered by a fabric 9, which may comprise a piece of felt, or the like, folded over and attached to the spreader 7 by means of an adhesive or the like.

Just above the connection of the spreader 7 with the member A, the spreader is provided with a transverse slot 8, which gives considerable flexibility to the spreader and enables smooth and even application of a liquid to a surface.

In operation, when it is desired to apply, for example, "whiting" to white shoes, the bottle is tilted as shown in Fig. 3, and pressure applied to cause the flow of a desired quantity of the "whiting" fluid through a slit 6. The fluid is then evenly and smoothly applied by means of the spreader 7. It will be seen that there is no flow of liquid during the spreading action, and consequently, no waste of liquid. By means of this device a smooth and even surface, with no ridges and areas of excess fluid, can be obtained. As soon as pressure is relieved the slit automatically closes to prevent the flow of the fluid.

From the above description, it will be seen that there has been provided a simple and effective applicator for dispensing and applying liquids to surfaces with no waste of liquid. The applicator

body is preferably made of rubber or other flexible material.

The foregoing disclosure is to be regarded as descriptive and illustrative only, and not as restrictive or limitative of the invention, of which, obviously, embodiments may be constructed, including many modifications, without departing from the spirit and scope of the invention herein set forth and denoted in the appended claims.

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

1. A device for dispensing and applying liquids, comprising a member having a cylindrical portion with a cap attached thereto, said cap being threaded to enable it to be attached to a container, said member having a tapered portion with flat walls, each of said walls having a longitudinal channel and a transverse slit in the bottom of the channel to enable the dispensing of liquid, a relatively thin tapered spreader integral with the member, said spreader having a transverse slot immediately above the connection of the spreader with the body member, and fabric attached to and covering the sides of the spreader.

2. A device for dispensing and applying liquids,

comprising a hollow cylindrical body member, means for mounting the member over the mouth of a container, said member having a pair of opposite sides tapered upwardly from the main body, each of said sides being recessed to provide longitudinal channels, said sides having transverse slits in the bottom of the channels for the passage of liquid, a relatively thin tapered spreader integral with and projecting from the member, said spreader having a transverse slot therein to give flexibility, and a fabric covering the spreader.

3. A device for dispensing and applying liquids, comprising a hollow member having a main body, means for mounting the body over the mouth of a container, said member having side walls tapered from the body, said side walls having channels extending longitudinally thereof and transverse slits in the bottom of the channels for the passage of liquid, and a spreader integral with and projecting from the member, said spreader having a transverse slot therein adjacent its connection to the member to provide flexibility, said member and spreader being made of rubber.

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