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DISPENSING CONTAINER
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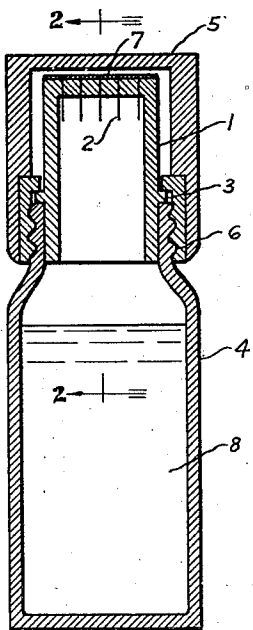


Fig. 1

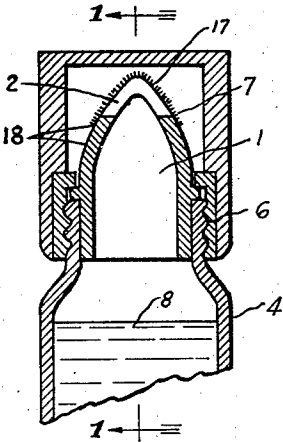


Fig. 2

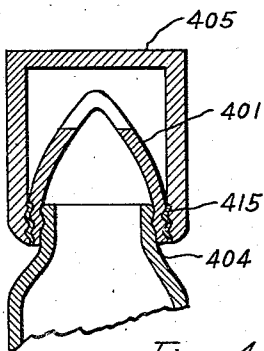


Fig. 4

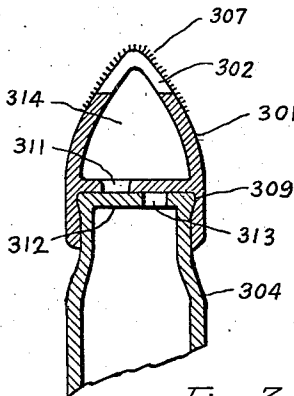


Fig. 3

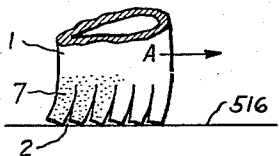


Fig. 5

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DISPENSING CONTAINER

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3 Claims. (Cl. 15—139)

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This invention relates to dispensing devices, and more particularly to devices applicable for dispensing liquids, emulsions and the like.

An object of this invention is to provide a device which will dispense the contained liquid or emulsion when the dispenser is drawn laterally across a surface and which will spread the discharged liquid or emulsion when it is drawn in a longitudinal direction.

Another object of this invention is to provide a dispensing device which will automatically seal itself when not in use so that it may be carried in a pocket or purse.

A further object of this invention is to provide a dispenser which may discharge a predetermined quantity of the liquid or emulsion.

A still further object of this invention is to provide a dispensing device which is simple to assemble to the container and inexpensive to manufacture.

A feature of this invention resides in the construction of the dispensing head.

Another feature of this invention resides in the manner of controlling the dispensing of a predetermined quantity of the liquid or emulsion.

Other objects and features will become apparent from the following descriptions and drawing in which like numerals indicate similar parts and in which:

Fig. 1 is a longitudinal sectional view of a container having one embodiment of our invention thereon;

Fig. 2 is another sectional view of the same embodiment of this invention;

Fig. 3 is a sectional view of another embodiment of this invention wherein the dispensing head is provided with a valve; and

Fig. 4 is a sectional view of still another embodiment of this invention having a different method of attaching the head to the container.

Fig. 5 is an elevation showing the action of the invention in dispensing the fluid.

The former devices of this character were made so that downward pressure was necessary to release and dispense the contained fluid. However, this was found entirely inadequate and detrimental because, in applying any fluid of the aforementioned character, the acts of dispensing and spreading were coincident and could not be separated.

In applying whitening or other suspensions to shoes, or other surfaces, it is necessary to dispense a quantity of the fluid, and then to spread the same over a substantial area without adding any more of the fluid to the surface.

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It is also necessary, if the dispenser is to be carried in a pocket or purse, to be able to provide a predetermined, small quantity of the fluid to the head of the dispenser, and then to dispense this quantity until it is all used up, so that no accidental discharge can occur.

This invention performs the before mentioned functions by providing a dispenser head of elastic material, such as rubber, plastic or the like, in the shape of an elongated dome having transverse cuts across the ridge of the dome.

When the dispenser head is drawn substantially parallel to the ridge of the dome, the elastic material is flexed in such a way that the cuts will open up, allowing a quantity of the fluid to be discharged. When the pressure is released, the cuts will close up and seal the fluid within the dispenser.

The discharged quantity may then be spread by drawing the dispenser head along the surface in a direction substantially at right angles to the ridge. This will carry the fluid, which has been discharged, along the surface without opening up the slots and hence will not dispense any more fluid until the head is again drawn along the surface in the direction substantially parallel to the ridge.

Referring to the drawing, the dispensing head 1 has a rectangularly shaped cross-section in Fig. 1, and a dome-shaped cross section in Fig. 2. The two cross sections are mutually perpendicular.

The dispensing head 1 is provided with cuts across the ridge 17, and extending to the transition portion 18 forming lines which remain closely adjacent to each other because of the elastic nature of the material. The flange 3 is provided to prevent the head from being pushed too far into the container 4 and serves as a gasket for the retaining ring 15 and cover 5 which are attached to the container 4 by means of the threads 6. A plush or felt spreader 7 is attached to the head 1 by vulcanizing or adhesive and has cuts corresponding to the cuts 2 in the head. The contents 8 are dispensed by removing the cover 5, tipping the container 4 and drawing the head 1 along the surface as shown in Fig. 5 and as will be described later.

In Fig. 3 the dispensing head 301 is made to fit over the container 304 and is held in place by means of a lip 309 and is provided with cuts 302 and a transverse membrane 310 having an eccentric hole 311. The container 304 is provided with a transverse baffle 312 having an eccentric hole 313.

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The eccentric holes 311 and 313 are so positioned that, when the container is inverted and the head 301 is rotated, they are in line and the fluid may flow from the container 304 to the chamber 314. The head 301 is again rotated and the holes 311 and 313 are not in a line, forming a valve-like seal. When the fluid in the chamber 314 is used up another quantity of fluid is allowed to enter the chamber by inverting the container and rotating the head. This embodiment may be provided with a plush or felt spreader 307.

In Fig. 4, the dispensing head 401 is attached to the container 404 by means of a ferrule 415 which is pressed in the form of threads and compresses the shank of the dispenser against the neck of the container 404. The cover 405 is provided with threads to correspond with the threads on the ferrule.

In Fig. 5, the action of the dispensing head 1 is shown. As the ridge of the head 1 is drawn across a surface 516 in the direction of the arrow A, the friction between the surface and the head tends to deform the head so that the cuts 2 open up and allow the fluid to discharge. Any fluid which has dried in the cuts will be broken off by the deformation of the elastic material. When the pressure in the direction of the arrow A is released, the head will resume its relaxed position and no more fluid will flow.

Having thus described our invention, we wish it distinctly understood that, while we have illustrated and described the simplest elements adapted to perform the functions set forth, changes and variations may be made, both in form and in minor details of construction, without sacrificing any of the principles or departing from the spirit of the invention.

What we claim and desire to secure by Letters Patent is:

1. A dispensing device for applying a fluid to work comprising a supply vessel and a closure for the latter; said closure comprising a longitudi-

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nally rounded shank portion, a transition portion and a laterally rounded ridge portion; said ridge portion being segmented into a plurality of tines normally closed together and adapted to be spread apart by flexing said tines in a direction substantially parallel to said ridge portion and thereby providing communication between said supply vessel and said work for enabling contents within the supply vessel to be discharged between said tines to said work.

2. A dispensing device for applying a fluid to work comprising a supply vessel and a closure for the latter; said closure comprising a longitudinally rounded shank portion, a transition portion and a laterally disposed ridge portion; said ridge portion being provided with a cloth spreader and segmented into a plurality of tines normally closed together and adapted to be spread apart by flexing said tines in a direction substantially parallel to said ridge portion thereby providing communication between said supply vessel and said work and to remain closely abutting each other when flexed in a direction lateral to said ridge portion.

3. A dispensing device for applying a fluid to work comprising a supply vessel and a closure for the latter; said supply vessel having a transverse baffle across its open end provided with an eccentric hole; said closure comprising a longitudinally rounded shank portion, a transition portion and a laterally rounded ridge portion provided with closely abutting resilient tines adapted to be spread apart by flexing the said tines in a direction substantially parallel to said ridge portion; said shank portion having a transverse membrane provided with an eccentric hole and adapted to rotatably embrace the neck of said supply vessel to juxtapose the said baffle to said membrane.

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