June 5, 1956 B. W. FROMSON 2,748,988

SOAP DISPENSER

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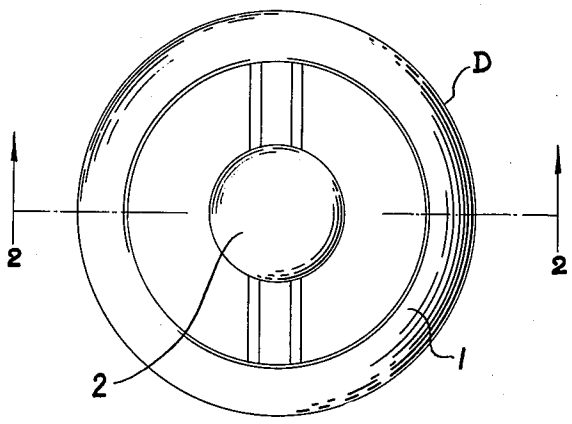


Fig. 1

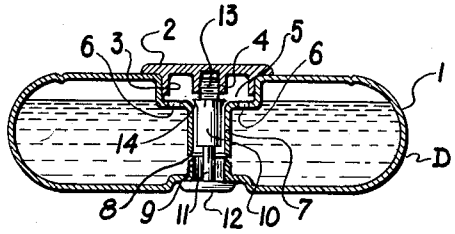


Fig. 2

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SOAP DISPENSER

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3 Claims. (Cl. 222—207)

This invention relates to a dispensing container for liquid and paste-like soaps, and detergents.

Known dispensers for liquid and paste-like soaps (known commercially as cream soaps) and detergents are usually made in the form of receptacles such as glass or metal and fixed in position or alternatively as plastic tubes or bottles which are not fixed and from which the soaps are ejected by pressure. In the former case, the fixed receptacle is refillable but in the latter case the container is usually discarded. In both cases the containers do not present the pleasing appearance of a new tablet of soap and are therefore rarely found in the house for toilet and kitchen use. The exception being tubes of cream used exclusively for shaving and dental purposes.

Solid soaps are decorative only when new and soon become soft and unpresentable in appearance. Furthermore solid soaps being heavier than water will sink in a lavatory basin or bath and tend to dissolve away at a rate much faster than would be the case with actual use for toilet purposes. Even in cases of solid soaps which float, the waste is much greater than the amount used. In addition to other disadvantages, solid soap has been known to cause accidents in the home when persons have slipped in the bathtub or on the floor.

The object of my invention is to provide for liquid and paste-like soaps, and detergents, a dispensing container which will permanently retain the appearance of a new tablet of soap in the various designs now known such as the usual tablet form in varied shapes and colours and the novelty type such as childrens' soaps in the form of animals, fruits, fairy-tale characters and the like.

Special sizes and designs could also be produced for hotels, restaurants, etc. for economy and for advertising purposes.

In the following descriptions and specifications, "dispensing container" will be referred to as "container" and the various types of liquid and paste soaps and detergents as "soaps" or "liquid."

Further objects of this invention are:

1. To provide a container which may be refilled easily from a bulk receptacle or from individual cartridge-type refills.

2. To provide a container which will float even when filled.

3. To provide a container which will deliver by finger pressure the minimum requirement of soap so as to eliminate waste.

4. To provide a container which may permanently be marked for advertising purposes or for recognition by an individual for his personal use.

5. To provide a container which when not in use may have the dispensing aperture sealed to prevent leakage.

One example of the invention is as follows: A dispensing container made of a resilient material of suitable thickness of circular shape having opposed end faces connected by a continuous side face and resembling a tablet of soap is provided with an opening on one flat side or end face

through which the soap will pass when the opposed flat sides of the container are lightly compressed, this compression releasing a recessed valve which ordinarily remains closed by the outward pressure of the container sides. The container is further provided with filling apertures at the bottom of a well-like depression on the flat end face opposite the valve.

An airlock formed between the bottom of the well and the upper surface of the container gives buoyancy to the container when filled.

A central tube in two parts forming aligned tubular walls joins the bottom of the well to the valve recess and houses a valve, the stem of which passes through the well. A closure cap for the well has an inside threaded central boss which engages the threaded top end of the valve stem. The tube is in two portions, the opening between permitting the soap to enter the tube from the body of the container. The ends of the tube at the opening are reciprocally bevelled so that pressure closes the tube and opens the valve permitting only the small amount of liquid in the tube to pass the valve head. Thus the amount of liquid ejected at each pressure of the sides may be regulated.

In the accompanying drawings:

Fig. 1 is an exterior plan view of the container.

Fig. 2 is a cross section along the line 2—2 through the centre of Fig. 1.

As shown in Fig. 1, the container D is composed of the casing 1 and the well closure cap 2.

As shown in Fig. 2, the container D has a well 5 in the upper part of the casing 1 with filling apertures 6. The tube 7 is open at 8, the ends of the tube being bevelled. The valve recess 9 at the bottom of the container houses the head 12 of the slidably mounted valve stem 10 with a reduced diameter neck 11 to accommodate a limited amount of liquid in the tube 7. The threaded top 13 of the valve stem 10 is engaged by the inside threaded boss 4 of the closure cap 2 the side wall 3 of which fits tightly against the sides of the well 5. It will be seen that the closure cap 2 may be turned to draw the valve head 12 upwards so that the opening 8 will close and thus prevent leakage of the liquid even though the sides may be compressed accidentally. A retaining flange 14 is provided on the valve stem 10 to prevent the valve from sliding out of the tube when the closure cap 2 is removed to fill the container.

The invention is obviously not limited to all the details of construction of the examples above described, some of which may be modified without departing from the nature of the invention. As examples: The container may be provided with more than one opening for the liquid to pass more freely. A container for cream soap could be made with an opening on the surface in which a cartridge-type refill could be inserted. The container could be made in two parts and locked by means of turning as with a screw or bayonet type fitting; the container could then be filled with paste or liquid soap from a bulk receptacle when open.

I claim:

1. A dispensing container for liquid or paste materials, comprising a main container body of resilient material having a confining wall including opposed spaced apart end faces interconnected by a side face, said faces bounding an enclosure forming a hollow material storage chamber, a centrally arranged first tubular wall connected to one of said end faces and extending through said chamber part way to the other end face, a second centrally arranged tubular wall connected to the said other end face and extending inwardly into said chamber in co-axial alignment with said first wall, the inner ends of the said walls being normally spaced apart when the container

end faces are relaxed but adapted to be seated one on the other when the opposed container end faces are pressed towards one another, said aligned tubular walls defining a material measuring and delivery passage, with said first tubular wall being shaped at one end to provide an enlargement to said passage adjacent one of said end faces, a closure cap mounted in said material passage enlargement and in sealing contact with said one end face, said second tubular wall being shaped to provide an enlargement to said passage adjacent to said other end face, a valve stem having one end centrally and threadably connected with said closure cap and having the other end provided with a valve head adapted to seat in the said passage enlargement adjacent said other end face, said valve stem extending through said material passage leaving a clearance between the stem and said tubular walls thereby to allow material to pass through said passage, said first tubular wall being provided with at least one opening leading to said storage chamber, the said valve head being adapted to close the other end of said material passage when said end faces are in relaxed condition and adapted to allow material to pass from said passage to the exterior of said container when the said opposed end faces are pressed towards one another.

2. A dispensing container as claimed in claim 1 wherein the length of said valve stem is adjustable by rotation of said closure head whereby said valve closure head can be securely closed to prevent the accidental leakage of the contents.

3. A dispensing container as claimed in claim 1 wherein said valve stem is shaped to have a portion of reduced diameter adjacent said valve closure head whereby an annular space of greater area than said annular fluid delivery passage constitutes a material measuring chamber.

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