

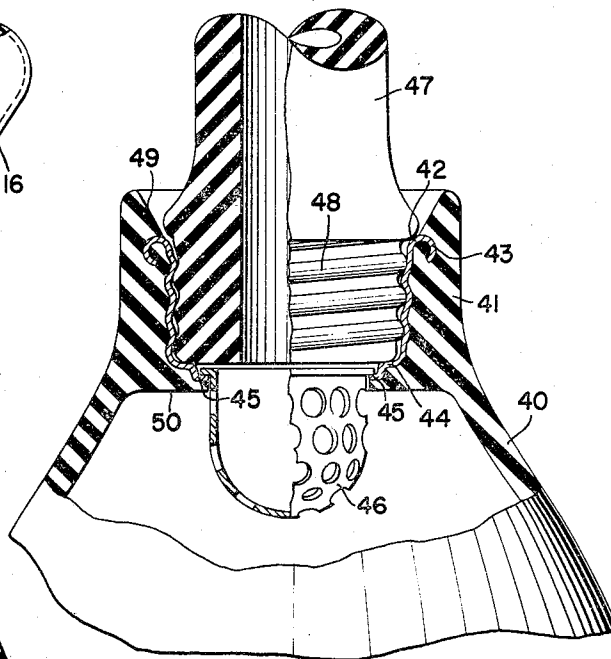
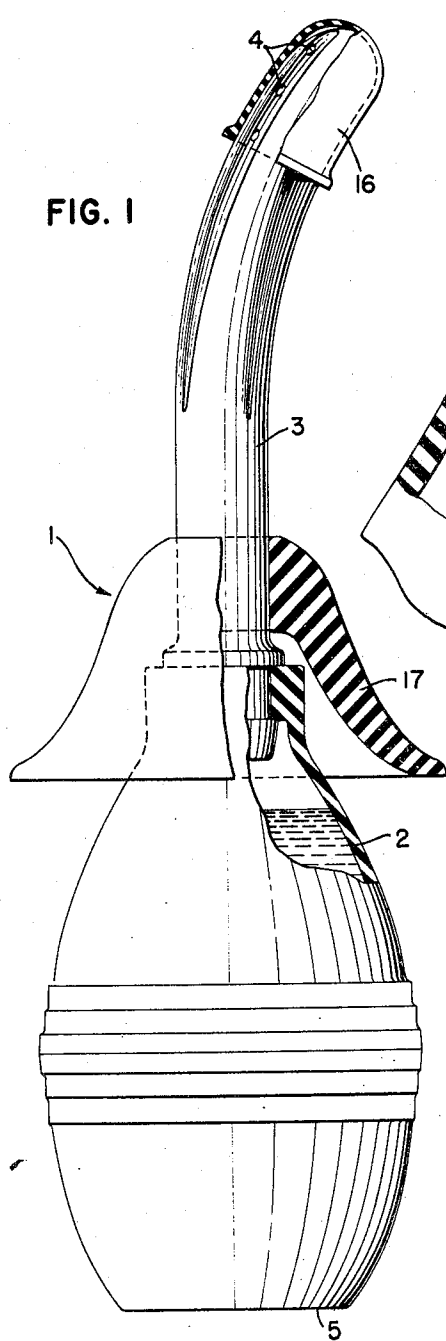
Jan. 7, 1958

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2,818,863

FEMININE SYRINGE

Filed Nov. 25, 1955



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FEMININE SYRINGE

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Application November 25, 1955, Serial No. 549,212

3 Claims. (Cl. 128—251)

This invention relates to feminine syringes, and especially to a feminine syringe which is especially adapted to be filled in a sanitary manner and which is adapted to be completely filled with liquid.

Heretofore various types of feminine syringes have been made but they all have basically comprised substantially the same elements or members. These syringes have included a bulb member to which a tubular discharge member is secured. The discharge member has a plurality of apertures therein for release of liquid therefrom when the syringe is being operated for cleansing purposes. One problem which has been inherent in all previous types of feminine syringes that have been made, insofar as we are aware, is that it is difficult to fill the bulb of the syringe completely with liquid, as the filling previously has been by suction action, so that when collapsing the bulb portion of the syringe for discharge of liquid, air will discharge along with the water, and such discharged air is objectionable since it reduces the flow of cleansing liquid, and because the air may become entrapped in body openings and retain water in such openings. This air and water will flow from the body openings at a later time and cannot be controlled by the person, so that such discharge is objectionable. Also, air pockets within the body reduces the effectiveness of the syringe action, regardless of whether it is being used for cleansing or enema purposes.

The general object of the present invention is to provide a new and improved type of a feminine syringe which is characterized by its ability to be completely filled from a water tap or faucet without the use of any separate container for cleansing liquid.

Another object of the invention is to provide a new type of a feminine syringe which can be easily cleaned and which is particularly hygienic to use.

Yet another object of the invention is to provide an inwardly extending sleeve or neck portion in a flexible bulb wherein such sleeve or neck is of generally funnel shape in section and facilitates filling the bulb with liquid.

Another object of the invention is to provide a feminine syringe wherein a tubular discharge member is removably connected to the bulb of the syringe and wherein the discharge member directly forms a tight seal with the bulb portion of the syringe.

The foregoing and other objects and advantages of the invention will be made more apparent as the specification proceeds.

For a better understanding of the invention, reference should be had to the accompanying drawings wherein currently preferred embodiments of the invention are illustrated, and wherein:

Fig. 1 is an elevation, partly shown in section, of one type of feminine syringe embodying the principles of the invention; and

Fig. 2 is an enlarged fragmentary vertical section of a modification of the feminine syringe of the invention.

The present invention relates to a feminine syringe that comprises a resilient bulb having a base portion and

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an apertured neck, a discharge member engaging the neck of the bulb, a ferrule vulcanized in the neck, a closure engaging the ferrule so that the discharge member and the closure may be disengaged from the bulb to permit passage of cleaning liquid into the bulb, and an apertured basket carried by the ferrule within the bulb.

In the accompanying drawings and specification, corresponding numerals will be used to refer to corresponding parts so that a ready comparison may be made between the drawings and specification.

In order to understand the invention completely, reference must be had to the details of the structure illustrated and described herein and wherein a feminine syringe is indicated as a whole by the numeral 1. The syringe 1 includes a substantially oval-shaped resilient bulb 2, usually made from high grade rubber or other flexible material, and a discharge tube 3 which is of a flexible or rigid construction and which has a plurality of discharge apertures 4 at the free end thereof. Usually the discharge tube 3 is secured to the bulb 2 in a removable manner.

The bulb 2 may have a flat base portion 5 and an inwardly extending sleeve and filling opening (not shown), usually is formed integrally with the wall of the bulb 2.

The apertures 4 have a removable resilient cap 16 provided therefor. A flexible shield 17 is carried by the discharge spout 3 at the base end thereof.

Fig. 2 of the drawings shows a syringe structure of the invention, wherein only one filling opening is provided for the bulb, which filling opening is adapted to receive the discharge tube of the syringe for sealing such opening in the bulb. In this instance, a bulb 40 is provided and it has an integral neck or filling sleeve 41 extending therefrom. Usually, a suitable ferrule 42 is vulcanized to the inner surface of the neck 41 with such a ferrule having an arcuate axially outer flange 43 that is embedded in the material forming the neck 41 to anchor the ferrule in position. The exposed surface of the ferrule 42 is threaded for removable engagement with a closure member, as hereinafter described. The drawing clearly shows that an axially inner flange 44 is provided on the ferrule 42 and it extends radially inwardly of the neck 41 to terminate in an axially inwardly offset cup-engaging flange, or lip 45 which is of reduced diameter with relation to the inner flange 44 and which flange 45 is positioned axially inwardly of the bulb 40 with relation to the flange 44. An apertured cup 46, usually made of metal, is removably engaged with the cup seat flange 45 for receiving an antiseptic tablet or the like, if desired. The neck 41 is sealed by a discharge tube 47 that is provided with a threaded end 48 which engages the ferrule 42. The discharge tube 47 has an end which seats on the flange 44 of the ferrule to close and seal the opening in the neck 41 of the bulb. The discharge tube also acts to retain the cup 46 against any undesired movement. Figure 2 shows that the ferrule 42 terminates short of the outer end of the neck 41, and the inner surface of the neck is slanted at 49 to aid in forming a filling opening in the bulb and to connect to the ferrule 42. The axially inner end of the neck 41 has a shoulder 50 usually provided therein and it is bonded to and reinforces the flanges 44 and 45. The cup 46 has a flange 51 thereon to engage the ferrule flange 45 and seat the cup in position.

It will be realized that any natural or synthetic rubber or rubber-like material, or a suitable plastic material, may be used to make the bulbs of the syringes.

In view of the foregoing, it is believed that a novel type of a feminine syringe has been provided, which syringe is easy to fill, and which can be easily maintained in a hygienic condition. The rubber bulb of the syringe can readily be completely filled with a liquid and a solution

can be directly mixed in the syringe bulb. Accordingly, it is thought that the objects of the invention have been realized.

While several complete embodiments of the invention have been disclosed herein, it will be appreciated that modification of these particular embodiments of the invention may be resorted to without departing from the scope of the invention as defined in the appended claims.

What is claimed is:

1. In a feminine syringe, a rubber bulb having a neck opening for engaging a discharge tube, said neck opening having an end section of generally funnel shape in its inner surface and including a shoulder at its inner end, a threaded ferrule seated in said neck on the inner surface thereof and having a reduced diameter flange engaging said shoulder, a discharge tube engaging said ferrule and bearing on said ferrule flange to seal said bulb, said ferrule having a cup-receiving flange of reduced diameter provided on the end of said flange and positioned axially inwardly thereof, and an apertured cup member having a flange engaging said cup-receiving flange to be positioned thereby.

2. In a feminine syringe, a flexible bulb having a sleeve opening for engaging a discharge tube, a threaded ferrule carried by said sleeve on the inner surface thereof and having a reduced diameter flange thereon adjacent its

axially inner end and with an axially inwardly offset lip thereon, said ferrule having an arcuate radially outwardly directed flange on its axially outer end embedded in the material forming said bulb, a discharge tube engaging said ferrule and bearing on said flange to seal said bulb, and an apertured cup engaging said lip and positioned thereby within said bulb.

3. In a feminine syringe, a flexible bulb having a sleeve opening for engaging a discharge tube, a threaded ferrule carried by said sleeve on the inner surface thereof and having a reduced diameter flange thereon adjacent its axially inner end and with an axially inwardly offset lip thereon and of smaller internal diameter than said flange, a discharge tube engaging said ferrule and bearing on said flange to seal said bulb, and an apertured cup engaging said lip and positioned thereby within said bulb, said discharge tube being spaced from said cup but retaining it in engagement with said bulb and lip.

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