

[54] **DISPOSABLE DOUCHE**

[75] Inventors: **Stanley Schoenfeld**, Pound Ridge;
Jacob Skolnik, New Rochelle, both
of N.Y.

[73] Assignee: **Richardson-Merrell Inc.**, New York,
N.Y.

[22] Filed: **Aug. 9, 1973**

[21] Appl. No.: **386,882**

[52] U.S. Cl. **128/232, 128/247, 128/251**

[51] Int. Cl. **A61m 1/00**

[58] Field of Search **128/232, 231, 239, 247,**
128/251, DIG. 24; 222/92

[56] **References Cited**

UNITED STATES PATENTS

1,338,464 4/1920 Shafer 128/239

2,299,710 10/1942 Dray 128/239
3,144,866 8/1964 Ellis 128/232
3,557,788 1/1971 Swartz 128/232

FOREIGN PATENTS OR APPLICATIONS

1,288,900 4/1902 France 128/232

Primary Examiner—Richard A. Gaudet

Assistant Examiner—J. Yasko

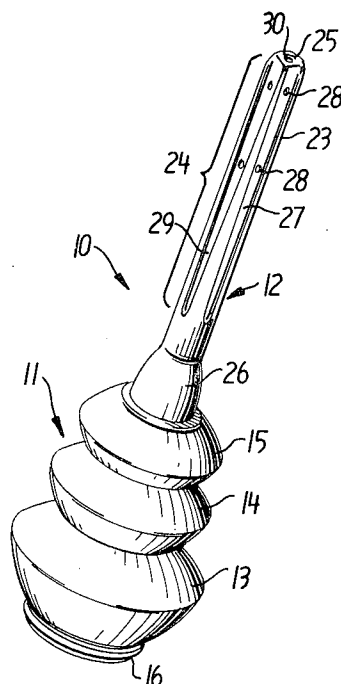
Attorney, Agent, or Firm—George W. Rauchfuss, Jr.;
Eugene O. Retter

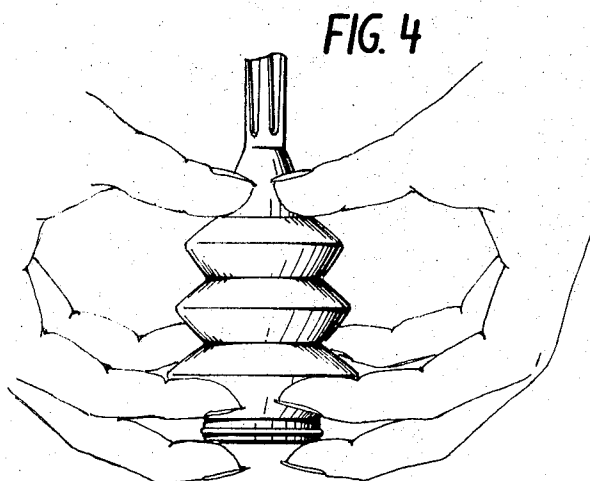
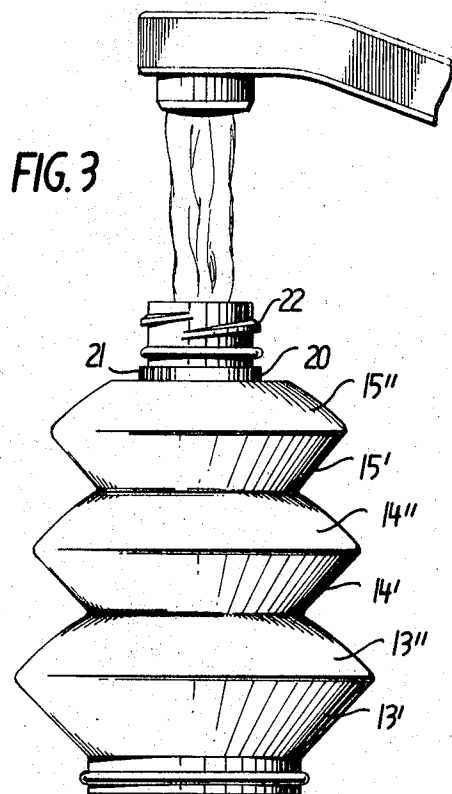
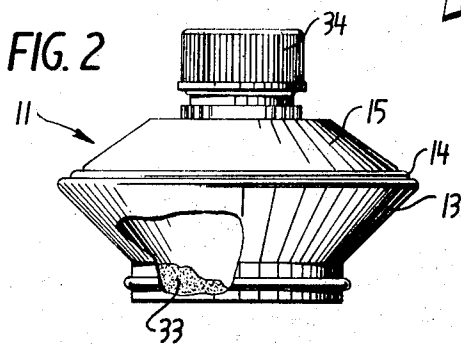
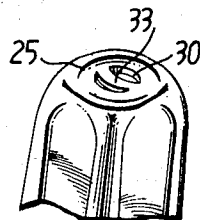
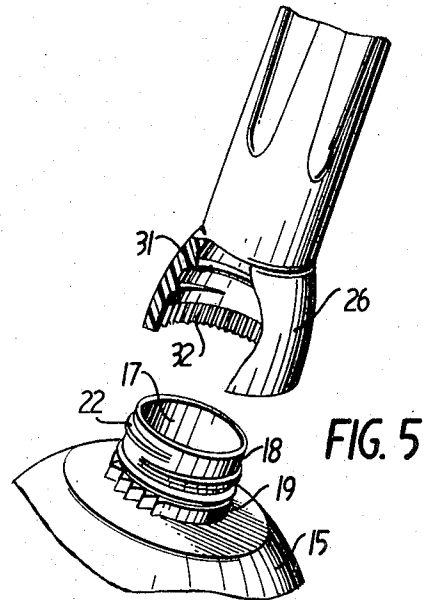
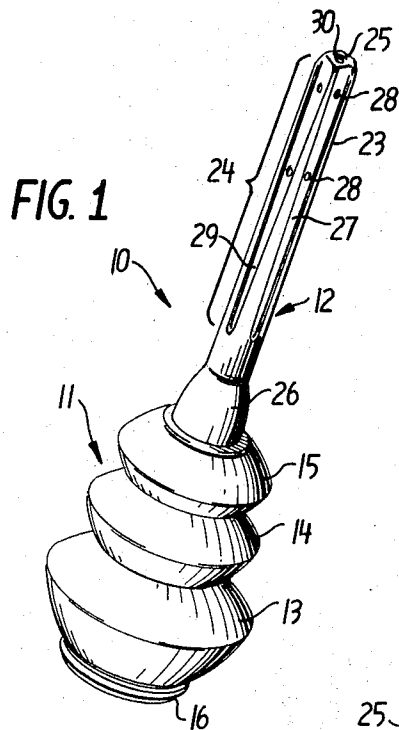
[57]

ABSTRACT

A disposable douche comprised of a collapsible bellows forming a syringe and containing a pre-measured amount of cleansing powder and an elongated dispensing nozzle adapted to be secured to an open end of the bellows.

9 Claims, 6 Drawing Figures





DISPOSABLE DOUCHE

BACKGROUND OF THE INVENTION

Disposable douche kits for feminine hygiene are generally known in the art and the same fall into two categories, the first being a single unitary type with the second being of a type which must be assembled. The latter type, due to the nature of the object, generally includes only two parts, the housing in which the cleansing fluid is contained and the nozzle which serves to discharge the fluid. The douche of the present invention falls in this category.

SUMMARY OF THE INVENTION

The present invention provides a disposable douche formed from a pre-packaged sanitary kit including a collapsible closed bottom-open top bellows syringe formed from a plurality of adjacently connected, decreasing V-shaped chambers, extending from base to opening, and a nozzle adapted to be connected to the open end when the same is to be used. Additionally, a charge of pre-measured water dissolvable cleansing powder is placed in the syringe through the open end and maintained therein by a cover secured to the opening. As is apparent, the design of the douche components can be packaged in small, simple containers such as heat sealed bags or small boxes depending on the quantity involved.

It is therefore an object of the present invention to provide an economical, single use douche.

Another object of the invention is to provide a douche which is easily prepared for use and simple to manipulate.

A further object of the invention is to provide a douche which is compact and can be easily carried in a purse.

A further object of the invention is to provide a douche which is capable of substantially completely delivering the contents thereof to a body opening.

The invention, both as to its organization and method of operation, together with further objects and advantages thereof, will best be understood by reference to the following specification taken in connection with the accompanying drawing.

DESCRIPTION OF THE DRAWING

FIG. 1 is a perspective view of the douche;
FIG. 1a is a perspective detail of a portion of FIG. 1;

FIG. 2 is a view showing the syringe in a collapsed condition with a cut out showing a charge of medicated cleansing powder therein;

FIG. 3 is an elevational view showing the syringe in extended position being filled with liquid;

FIG. 4 is an elevational view showing a preferred method of collapsing the syringe; and

FIG. 5 is an exploded view showing the manner in which the nozzle is secured to the syringe.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to FIG. 1, the douche of the present invention is indicated generally at 10 and is comprised of a bellows type syringe 11 having an elongated dispensing nozzle 12 secured thereto. The syringe 11 is formed from a plurality of adjacently connected, successively

decreasing V-shaped chambers 13 extending from the closed base 16 to a filling opening 17, as is clearly seen in FIG. 5. With continuing reference thereto it is seen that the opening 17 is formed on the smaller chamber as an externally threaded neck portion 18 having threads 22 which permits access to the interior of the syringe 11. Formed integrally on the neck 18 below the lowermost thread is a ring 19 provided with a plurality of spaced sets of annularly disposed locking lugs 20, 21, see FIG. 3, the function of which will become apparent hereinafter.

The nozzle 12, as seen in FIG. 1, is an elongated tubular member 23 generally rectangular in cross section throughout a major portion of its length 24 substantially closed at one end 25 and formed with a bulbous skirt 26 at its other end. Each of the sides forming the rectangular configuration includes a recess 27 coinciding in length with the major portion 24. Spaced discharge openings 28, 28 are disposed in each of the recesses and thereby shielded by their respective surrounding elevated side walls 29, 29 to prevent clogging of the same during use. While only two holes are shown, it is to be understood that any number can be provided. Additionally, a recessed opening 30 is provided in the end wall 25. Preferably said recessed opening 30 is provided with an internally spaced radial cross-member 33 dividing said opening into two substantially equal halves as shown in detail in FIG. 1a. Cross-member 33 also functions to inhibit the speed with which solution is discharged from the douche through opening 30.

With reference to FIG. 5, it is seen that the interior of the skirt 26 is provided with threads 31 and a ring of adjacently annularly disposed locking teeth 32 positioned at the lower extremity of the skirt 26 below the lowermost thread 31. The tips of the locking lugs 20, 21 are angularly orientated in the same direction while the tips of the individual teeth 32 are angularly orientated in a direction opposite to that of the lugs. To assemble the syringe 11 to the nozzle 12 it is only necessary to engage the respective threads 22, 31 and tighten the same whereupon the teeth 32 on the skirt 26 engage the lugs 20, 21 and due to the different orientation of the same, self-lock the syringe to the nozzle to assure a proper seal and inhibit reuse of the disposable douche unit.

While not shown, but as previously mentioned, the syringe 11 and nozzle 12 are packaged in sterile type, small, simple containers such as heat sealed plastic bags or small packages, and to this end, and as seen in FIG. 2, the syringe 11 comprised of the aforementioned V-shaped chambers 13, 14, 15 is capable of collapsing in an accordion type fashion about its longitudinal axis with the smaller sections nesting within the next larger section to accommodate itself to small packages. The V-shaped chambers are comprised of lower and upper frusto-conical portions disposed bases to base. Each of the chambers accommodates themselves to collapsing by the fact that the lower half is formed of frusto-conical shape wherein the wall thereof is a straight edge while the upper frusto-conical half has an outwardly curved edge, for example, 13' and 13'', 14' and 14'', and 15' and 15''. This construction insures both the collapsing and retention of the container into itself. With continuing reference to FIG. 2, the syringe is provided with a pre-measured cleansing powder 33 therein

and maintained therein by a standard, threaded cap 34 cooperating with the syringe threads 22.

When the douche is to be used, the sealed package is opened, cap 34 is removed from threaded neck 18 and the syringe is grasped with the base 16 thereof in one hand and the neck 18 in the other whereafter the neck 18 is pulled away from the base to extend the V-shaped chambers about a longitudinal axis. Opening 17 is then positioned beneath a faucet, see FIG. 3, and filled with warm water, generally about 3 ounces, to dissolve the pre-packaged powder. The nozzle 12 is threadably locked and sealed in place and as seen in FIGS. 1 and 4, the user places both hands on either side of the syringe with the thumbs on the top of the syringe, and the index and middle fingers on the bottom and while maintaining the syringe in an upright position inserts the nozzle into the body opening and squeezes the same to force the solution out of the nozzle openings into the body opening until such time that the syringe is substantially completely collapsed. The douche is thereafter discarded. In this regard, the components can be made from any suitable material but plastic is preferred.

The particular embodiment of the present invention which has been discussed herein is for illustrative purposes only and is not considered as a limitation upon the scope of the appended claims.

We claim:

1. A disposable douche comprising a syringe and a discharge nozzle, said syringe being adapted to be collapsible and capable of being retained into itself, said syringe being formed of a body having a base at one end, a neck forming an opening at the other end and a collapsible bellows connecting said base to said neck, said bellows being defined by a plurality of adjacently connected chambers, V-shaped in cross-section, of successively decreasing size, extending from the base to the neck, each of said V-shaped chambers is comprised of a lower and upper frusto-conical portion disposed base to base with the wall of the lower portion defining a straight edge and the wall of the upper portion defining an outwardly extending curved edge, said neck opening being formed on the smallest V-shaped chamber as an externally threaded neck, and said discharge nozzle having means removably securing the same to the neck portion.

2. The douche of claim 1 wherein the discharge nozzle is an elongated member, substantially rectangular in cross-section throughout a major portion of its length and provided with spaced discharge openings in each side thereof, said discharge nozzle being substantially

closed at one end and formed with an internally threaded bulbous skirt at the other end.

3. The douche of claim 2 wherein each side of said elongated discharge nozzle is provided with an elongated recess coinciding in length with the rectangular portion of its length, each of said recesses having up-standing side walls on either side of the recess and wherein the spaced discharge openings on each rectangular side are disposed in the recess whereby the up-standing walls of the recess shield said discharge openings.

4. The douche of claim 3 wherein a recessed opening with an internally spaced radial cross-member is provided in the substantially closed end of the discharge nozzle member.

5. The douche of claim 1 wherein a pre-packaged pre-measured dissolvable powder is disposed in said syringe body.

6. The douche of claim 1 wherein the neck is an externally threaded neck having formed on the neck, below the lowermost thread, a plurality of annularly disposed locking lugs defining individual teeth angularly disposed in one direction and wherein the discharge nozzle is provided at one end with an internally threaded bulbous skirt having positioned internally, below the lowermost thread of said skirt, annularly disposed locking teeth angularly disposed in a direction opposite to that of the locking lugs of the syringe neck to provide a locking feature when the same are engaged.

7. The douche of claim 6 wherein the discharge nozzle is an elongated member, substantially rectangular in cross-section throughout a major portion of its length and provided with spaced discharge openings in each side thereof, said discharge nozzle being substantially closed at the end opposite the end formed with an internally threaded bulbous skirt.

8. The douche of claim 7 wherein each side of said elongated discharge nozzle is provided with an elongated recess coinciding in length with the rectangular portion of its length, each of said recesses having up-standing side walls on either side of the recess and wherein the spaced discharge openings on each rectangular side are disposed in the recess whereby the up-standing walls of the recess shield said discharge openings.

9. The douche of claim 8 wherein a recessed opening with an internally spaced radial cross-member is provided in the substantially closed end of the discharge nozzle member.

* * * * *