Jan. 23, 1934. E. M. FREUND 1,944,553

DOUCHE

Filed June 24, 1929

Fig. 1.

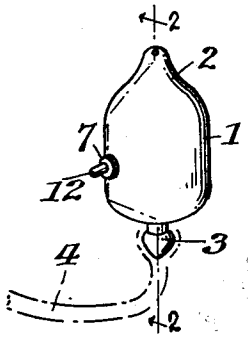


Fig. 2.

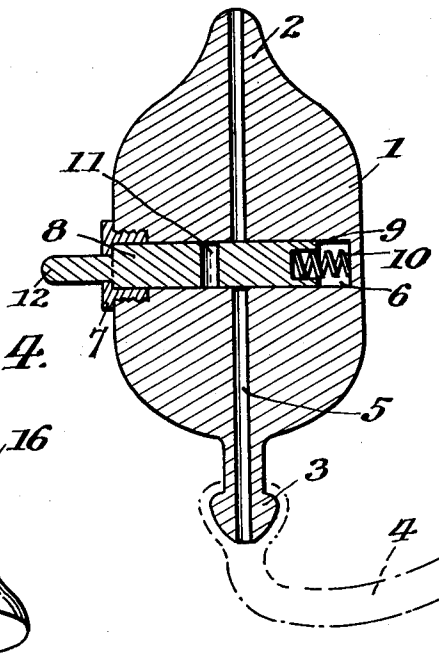


Fig. 3.

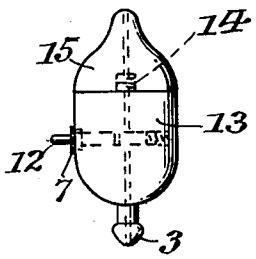


Fig. 4.

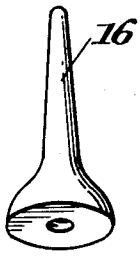


Fig. 5.

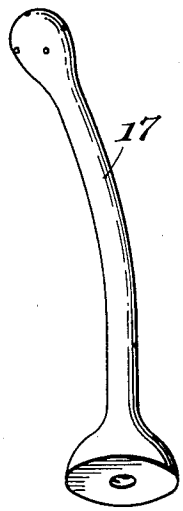


Fig. 6.

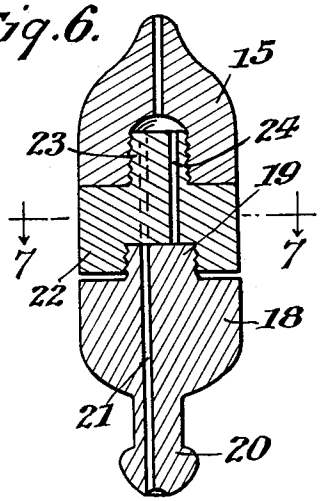
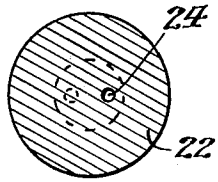


Fig. 7.



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DOUCHE

Emanuel M. Freund, Albany, N. Y.

Application June 24, 1929. Serial No. 373,385

1 Claim. (Cl. 128—229)

The present invention relates to improvements in douches and has for its principal object to provide a valve for controlling the flow of the irrigating solution.

One of the important objects of the present invention is to provide a douche that is constructed in such a manner as to accommodate interchangeable tips or nozzles so that the douche may be effectively employed for irrigation of various kinds.

A further object is to provide a douche of the above mentioned character which will at all times be positive and efficient in its operation, the same being further simple in construction, inexpensive, strong and durable and further well adapted to the purpose for which it is designed.

Other objects and advantages of the invention will become apparent during the following description when taken in connection with the accompanying drawing.

In the accompanying drawing wherein like reference characters indicate corresponding parts throughout the same:

Figure 1 is a perspective view of a nasal douche embodying one form of valve for controlling the flow of the irrigating fluid therethrough, the tip or nozzle being formed integrally with the body.

Figure 2 is a vertical sectional view taken approximately on the line 2—2 of Figure 1 for more clearly disclosing the valve construction.

Figure 3 is a view similar to Figure 1 showing a nasal douche wherein the tip or nozzle is detachably associated with the body.

Figure 4 is a detail perspective view of a rectal tip or nozzle that may be interchanged with the nasal tip or nozzle.

Figure 5 is a similar view of a vaginal tip or nozzle that can be interchanged with either of the aforementioned tips or nozzles.

Figure 6 is a view similar to Figure 2 embodying a different body construction and a different valve arrangement, and

Figure 7 is a transverse section taken approximately on the line 7—7 of Figure 6 looking downwardly.

In the drawing wherein for the purpose of illustration is shown the preferred embodiment of my invention, with attention more particularly to Figures 1 and 2, the numeral 1 designates a substantially cylindrical body that has formed at one end the nasal tip or nozzle 2 while extending from the opposite end of the cylindrical body 1 is the tube attaching nipple 3 over which is secured in the usual manner, the flexible tube shown in the dotted lines at 4 and which conducts the liquid from a suitable source of supply to the douche.

The cylindrical body 1 is formed with an axial bore 5 and this bore extends from the outer end of the tip or nozzle 2 to the extremity of the nipple 3 as more clearly suggested in Figure 2. A valve chamber 6 is formed transversely in the body 1, the same extending inwardly from one side at the intermediate portion thereof to a point adjacent the opposite side of the body and the outer open end of this valve chamber is enlarged and threaded for receiving the externally threaded cap 7. This valve chamber 6 intersects the bore 5 and arranged for reciprocatory movement within the valve chamber is the valve 8, the same being of a length less than that of the valve chamber. The inner end of the valve 8 is formed with a socket 9 within which is disposed one end of an expansible coil spring 10, the other end of this spring bearing against the closed end of the valve chamber 6 for normally urging the valve 8 toward the outer open end of the valve chamber against the cap 7.

This slide valve 8 is formed with a transverse aperture 11 that normally lies out of registration with the axial bore 5 but which aperture is adapted to be disposed in alinement with the axial bore 5 when the valve 8 is moved inwardly in the chamber 6. An actuating stem 12 is formed on the outer end of the valve and is disposed through a suitable opening provided therefor in the outer side of the cap 7. This stem provides a means whereby the user of the douche may actuate the valve to control the flow of the liquid through the douche.

In Figure 3 of the drawing I have shown a slight modification wherein the tip or nozzle is detachably associated with the body of the douche, and to this end one end of the body 13 is formed with a flat face and extending outwardly from the central portion thereof is the externally threaded stem 14 that is formed with a bore forming a continuation of the bore formed in the cylindrical body. A detachable nasal tip or nozzle 15 is formed in its inner flat face with a socket to accommodate the stem 14 so that the flat faces of the body 13 and the tip or nozzle 15 will be disposed in abutting relation. The same valve unit is associated with this particular form of douche as is associated with the douche shown in Figures 1 and 2.

Interchangeable with the nasal tip or nozzle 15 are the rectal and vaginal tips or nozzles shown at 16 and 17 in Figures 4 and 5, respectively. Each of the last mentioned members

has its base portion formed with a flat face for engagement against the flat face of the cylindrical body 13 and a threaded socket is formed in the base portion of each tip or nozzle to accommodate the threaded tubular stem 14.

In Figure 6 of the drawing I have shown a further modification of the douche wherein the same includes a body 18 having one end thereof formed with a flat face from which extends at the central portion thereof the threaded stem 19, while extending from the opposite end of the body 18 is the tube attaching nipple 20. The body 18 is formed with a longitudinally extending bore 21 that is located at one side of the center or axis and this bore extends from the outer end of the stem to the outer end of the nipple.

Threaded on the stem 19 is the head 22 that is formed in one end with a socket to accommodate the stem while extending from the opposite end of this head is an externally threaded stem 23 for receiving the detachable tips or nozzles 15, 16 and 17, respectively, that are interchangeable with each other. In the present instance I have shown the nasal tip or nozzle as being secured on the stem 23.

The head 22 is formed with a longitudinally extending bore 24 that is also located to one side of the axis of the head. One end of the bore 24 will always have communication with the bore of the tip or nozzle that is secured on the stem 23 while the other end of the bore 24 is capable of being disposed either in alinement with or out of registration with respect to the bore 21. The head 22 constitutes a valve unit for controlling the flow of the liquid through the douche and obviously by rotating the head 22 in one direction, the bore 24 will be brought into registration with the bore 21 as indicated by the dotted lines in Figure 6 so that the liquid will be caused to flow through the bores 21 and 24 and through the bore of the tip or nozzle secured on the stem 23.

It will thus be seen from the foregoing description that I have provided a douche that is simple in construction and the parts are so arranged as to permit interchangeability of the different tips or nozzles as may be desired in a quick and easy manner.

Furthermore the unit associated with the douche can be readily and easily operated by the user of the device without any inconvenience.

While I have shown the preferred embodiment of my invention it is to be understood that minor changes in the size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention and the scope of the appended claim.

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

A douche nozzle comprising a body circular in cross section and of an even diameter throughout the greater portion of its length, the diameter of the body being substantially one-half its length, said body having a tube engaging nipple formed integral with its rear end and the front end of the body being abruptly tapered and merging into a short tip tapered towards its outer end, a bore being formed axially through said body with its ends opening through the nipple and tip, the body being also formed with a transversely extending pocket intermediate its length intersecting said bore and open only at one end, the pocket being of less length than the diameter of the body to provide a closed end for the pocket and the open end of the pocket being enlarged and threaded, a slide valve in said pocket formed with a transversely extending passage intermediate its length, the outer end of the valve being reduced in diameter to form a stem projecting outwardly from the body, a spring between the inner end of said valve and the closed end of the pocket yieldably holding the valve extended with its passage out of registry with the bore of the body and a retainer to limit outward movement of the valve screwed into the enlarged outer end of the pocket and formed with an opening slidably receiving the stem of the valve.

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