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SANITARY DOUCHE

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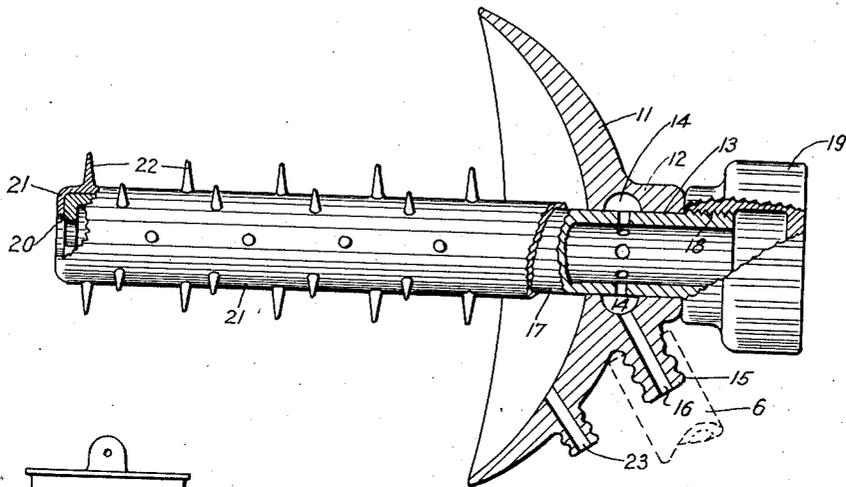


FIG. 1

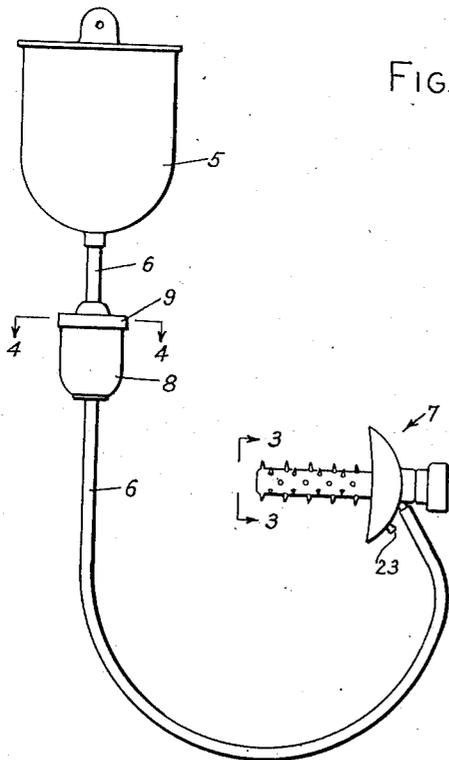


FIG. 2

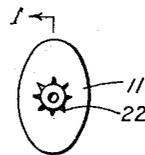


FIG. 3

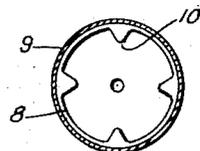


FIG. 4

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SANITARY DOUCHE

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3 Claims. (Cl. 128—256)

This invention relates to improvements in sanitary douches or syringes.

It frequently becomes necessary to irrigate certain body cavities for the purpose of cleansing and antiseptizing the same.

It is the object of this invention to provide a douche apparatus or syringe constructed to direct cleansing fluid into a cavity in such a manner as to subject the walls thereof to a thorough contact with the fluid and to subject them to a distending pressure.

Another object of the invention is to produce a syringe or douche apparatus which shall be provided with a tubular member through which the liquid is introduced and to the outside of which a separable shield provided with radially extending flexible fingers is applied.

A further object of the invention is to produce a syringe in which the liquid is permitted to come into contact with the outer surfaces surrounding the cavity so as to subject them as well as the interior of the cavity to the action of the cleansing and antiseptic fluid.

A further object of this invention is to produce an apparatus in which the tubular nozzle or insertable member can be rotated so as to allow the flexible fingers to straighten any folds thereby assuring that every part of the surface will be brought into contact with the fluid.

A further object of this invention is to produce a douche device in which the antiseptic is introduced or mixed therewith in a special mixing chamber forming part of a flexible tubular connection between an elevated reservoir and the syringe for the purpose of obviating the necessity of mixing the antiseptic with the water in the reservoir.

Another object of this invention is to produce a device of the class specified in which the liquid is introduced under pressure, which can be varied to suit the user, whereby the walls of the cavity will be extended so as to straighten any surface folds.

The above and other objects that may become apparent as this description proceeds are attained by means of a construction and an arrangement of parts that will now be described in detail, and for this purpose reference will be had to the accompanying drawing in which the invention has been illustrated in its preferred form, and in which:

Figure 1 is a view partly in elevation and partly in section taken on line 1—1, Figure 3;

Figure 2 is a view showing the douche device

connected with an elevated reservoir in the relationship assumed by the parts during use;

Figure 3 is an end view taken on line 3—3, Figure 2; and

Figure 4 is a section taken on line 4—4, Figure 2.

In the drawing reference numeral 5 designates a rubber bag or reservoir of the type employed in connection with the ordinary fountain syringe and reference numeral 6 designates an ordinary rubber tube that extends from the reservoir to the douche device, which has been designated in its entirety by reference numeral 7. Interposed in the tube 6 is a hollow container 8 having a removable cover 9. This container is provided at its bottom and the cover is provided at its top with a suitable nipple for effecting a connection with the rubber tube. The interior of the container is provided with a plurality of inwardly extending vertical ribs 10 which gives to the interior a certain characteristic cross section somewhat like that shown in Figure 4. The cross section illustrated in Figure 4 is merely illustrative and can be replaced by any other desired cross section.

The container 8 is provided for the reception of a solid water soluble antiseptic, for example, a specially compounded soap containing a highly efficient antiseptic, such as merthiolate, or its equivalent. The object in making the interior of a peculiar and distinctive cross section is to prevent the use of unauthorized antiseptics.

The syringe or douche apparatus consists of a saucer-like shield 11 of a substantially elliptical shape as shown in Figure 3. This shield is provided with a hub 12 having an opening 13. The inner surface of the opening wall is provided with an annular depression 14. A nipple 15, whose outer surface is corrugated so as to form a substantial connection with the end of the tube 6 has an axial opening 16 in communication with the groove 14; inserted in the opening 13 of the hub is a tube 17 which is made of rubber or some suitable plastic material. The diameter of the tube is slightly larger than the diameter of the opening 13 so that the wall surrounding this opening will be put under some slight tension when the tube is in position therein. The outer end of tube 17 is provided with a threaded section 18 to which a cap 19 is threadedly connected. Cap 19 serves as a closer for the outer end of the tube and also as a hand grip for rotating the same. The inner end of tube 17 may be turned inwardly as indicated at 20. Surround-

ing the tube 17 is a sleeve 21 which is made from a soft rubber composition or from any other rubber-like material, or from a plastic that is slightly elastic and soft. The outer surface of the sleeve 21 is provided with a plurality of outwardly extending fingers 22. These may be of the length indicated in the drawing or of any other length and size that may be found suitable. It is also contemplated to substitute for the fingers 22 outwardly extending ribs. Sleeve 21 can be removed and replaced by another similar one in case of breakage or in case it deteriorates due to age or use. By the employment of an outer sleeve, it is possible to employ a tube 17 of rigid material and still have fingers or ribs, corresponding to those indicated by reference numeral 22, of a soft flexible material that will not injure the sensitive mucous surfaces with which it is in contact.

Where the device is to be employed in connection with bed patients, it may be provided with an outlet nipple 23 to which one end of a tube may be connected which conveys the discharged liquid to a suitable container. If such an arrangement is used, the distending pressure may be obtained by temporarily closing the tube by means of pressure applied to its outer surface. This additional nipple, however, is not as a rule necessary because even where the patient is confined to a bed, the liquid can be discharged into a suitable receptacle such as the ordinary bedpan.

In the drawing, in Figure 1 thereof, a device has been shown to a somewhat greater than full scale, but can be constructed of any suitable size.

The shield 11 is preferably made from some flexible rubber-like material, although a certain amount of rigidity is permissible due to the yielding nature of the body surfaces with which it is in contact.

From the above description it will be apparent that the douche device that has been described and illustrated in the drawing is of a simple and substantial construction and attention is directed in particular to the fact that the tubular member 17 with its sleeve 21 can be rotated relative to the shield 11 thereby making it possible to effect a rotation of the sleeve and distending fingers 22 without interfering with the liquid seal on the outside.

The removable and replaceable sleeve 21 of a material having different characteristics than the tube 17 is also a matter of importance, because by this construction fingers or ribs 22 of a very soft and flexible material can be employed regardless of the characteristics of the material in tube 17.

Particular attention is also directed to the fact that with this apparatus the liquid is introduced under sufficient pressure to effect an extension of the cavity walls to expose either portion of the surface thereof which might otherwise be shielded by wrinkles or folds.

Tube 17 may be either rigid or have a certain degree of flexibility. It must, of course, be sufficiently rigid to resist bending forces while being positioned.

5 Since the sleeve 21 is readily removable from tube 17 it is possible to employ the device in the absence of this sleeve for the purpose of administering enemas to bedridden patients. By closing the opening 23, the colon can be distended, if desired; at any rate, the pressure can be controlled by this simple means.

10 Although the cap 19 has been shown as threadedly connected with tube 17, it can, of course, be connected therewith in any other way or may be made integral therewith as may be found most desirable.

15 Having described the invention what is claimed as new is:

20 1. A douche device comprising a shield having a concave inner surface, a tubular hub positioned substantially centrally thereof, an irrigator nozzle extending through the hub, the inner end of the nozzle being open and the outer end provided with a finger grip portion for rotating the same, 25 the inner surface of the hub having a circumferential groove, and a tubular nipple projecting outwardly from the hub, the opening in the nipple being in communication with the groove, the wall of the nozzle having at least one opening communicating the interior thereof with the groove.

30 2. A douche device comprising a substantially elliptical shield having its inner surface concave, a tubular hub projecting from the outer surface of the shield, the inner surface of the hub having a circumferential groove, a tubular nipple projecting from the outer surface of the shield, the opening in the nipple being in communication with the groove, an irrigator nozzle extending through the hub, the walls of the nozzle having at least one opening communicating the interior thereof with the groove, the outer surface of the nozzle having spaced spreader devices extending outwardly therefrom.

35 3. A douche device comprising, a substantially elliptical shield having its inner surface concave, a tubular hub projecting from the outer surface of the shield, the inner surface of the hub having a circumferential groove, a tubular nipple projecting from the outer surface of the shield, the opening in the nipple being in communication with the groove, an irrigator nozzle extending through the hub, the wall of the nozzle having at least one opening communicating the interior thereof with the groove, a sleeve of resilient flexible material enclosing the nozzle from a point adjacent the inner surface of the shield to the end thereof, the outer surface of the shield having a plurality of readily bendable spreader elements extending outwardly therefrom, and a combined closure and handgrip on the outer end of the nozzle.

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