

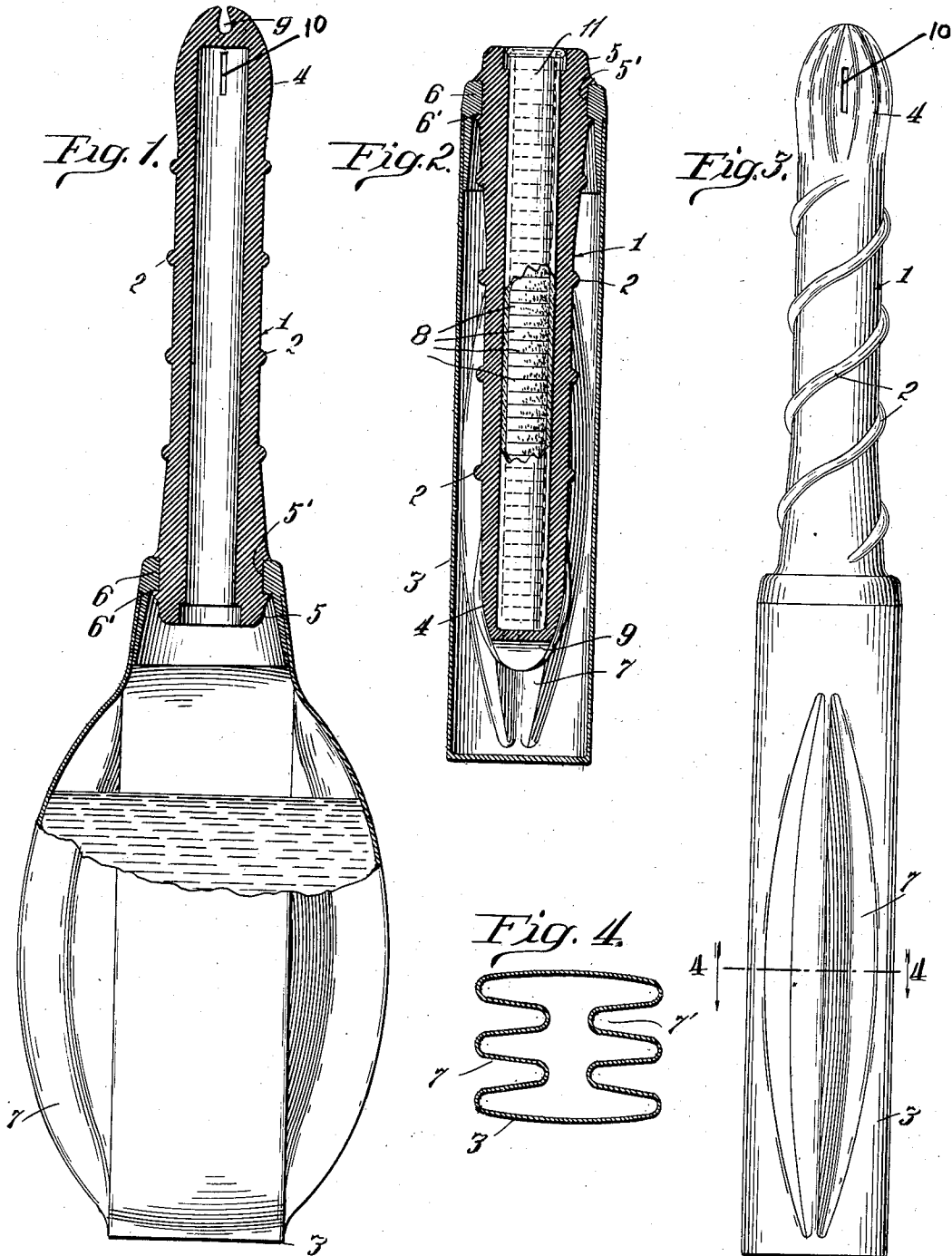
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VAGINAL SYRINGE

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VAGINAL SYRINGE

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2 Claims. (Cl. 128—232)

This invention relates to syringes and the like, and more particularly to vaginal syringes of the bulb type.

Vaginal syringes of the bulb type heretofore made usually comprise a compressible elastic bulb of soft rubber and a hard rubber tube and nozzle. The hard rubber tube frequently causes lacerations and injuries of the tissue when used, and accordingly, one object of the invention is to provide a bulb syringe of this character which may be more readily manipulated, avoiding all danger of injury to the tissue.

A further object of the invention is to provide a bulb syringe of this character which is made more compact than the usual syringe and can be closed in a compact assembly which occupies very little space. A still further object of the invention is to provide a connecting means for the tube and container of the syringe, whereby when the tube is reversed and inserted in the container the connecting means will facilitate the compact assembly of the tube and container when not in use. A still further object of the invention is to provide means for removing from the mucous membrane, viz., the vagina, any mucus accumulated therein. Other objects and advantages of the invention will be apparent from the following description of one embodiment of the invention, with reference to the accompanying drawing, in which:

Fig. 1 shows the complete assembly, partly in section, of a vaginal syringe, ready for use, in accordance with this invention.

Fig. 2 shows a longitudinal section through the syringe assembly in compact closed condition.

Fig. 3 is a side view of the syringe assembly, and

Fig. 4 is a section on line 4—4 of Fig. 3.

Referring to the drawing, the tube 1 is preferably made of soft rubber and is provided on its exterior with projections which are here shown in the form of a continuous helical rib 2. By making the tube of soft rubber, the syringe may be more easily manipulated both during insertion and withdrawal of the nozzle, with no danger of injury to the tissues. The projections or helical rib 2 also serve, by friction with the walls of the vagina, to remove all mucus that may be accumulated on the mucous membrane. Also the helical rib 2 tends to cause the liquid from the syringe to take a circuitous path during its egress from the vagina, and thereby massage the walls of the vagina. The container 3 is preferably made collapsible so as to occupy very little space when so collapsed. To that end the bulb is made of

thin, flexible, sheet-like rubber. The container bulb is provided on two diametrically opposite sides with pleats or folds 7—7' to permit the same to be collapsed. When the container is provided with liquid it assumes the usual bulbous form, but contrary to the usual compressible elastic rubber bulb the new container bulb does not tend to assume its distended condition when compressed, but on the contrary, will remain in its collapsed condition. This prevents the mucus of the affected parts from being sucked or drawn back into the bulb. Thereby the liquid in the bulb in accordance with the present invention, is always uncontaminated. The tube 1 carrying the nozzle 4 may be connected to the container 3 by the use of the connecting flanges 5 and 6. These flanges may be made of soft rubber or any other material, and may be made separate from or integral with the tube and container, respectively. It will be noted that the flange 5 carried by the tube 1 forms an annular recess 5' adapted to be engaged by the flange 6 on the container 3 and said flange 5 is in turn adapted to engage in a recess 6' beneath the flange 6. As the flanges 5 and 6 are made of soft rubber or similar yielding material, it will be appreciated that they can be very readily sprung into and out of engagement with each other.

The flanges 5 and 6 carried by the tube and container are so formed that upon reversing the tube, the latter can be inserted into the container, and the flange 6 of the container would fit into the recess 5' beneath the flange 5 resulting in a closed and very compact structure, as shown in Fig. 2.

By the use of a collapsible container, it is possible to utilize a container of much greater capacity than the bulb of the ordinary syringe and yet the container will, when collapsed occupy considerably less space than the ordinary bulb. The collapsed container is shown more clearly in Fig. 2, where the container is shown collapsed along the folds 7—7'.

If desired, the bore of the tube can be utilized to store disinfectant tablets 8 or the like which would be dissolved in the syringing liquid when the syringe is used.

The disinfectant tablets as indicated in Figure 2, can be held in transparent sheet-like material such as "cellophane" or the like 11 and the whole tube readily inserted within the hollow portion of the nozzle tube.

It will be noted that nozzle 4 is provided with narrow elongated slits 10 instead of rounded

openings. I found that a slit permits a larger volume of water to impinge against the mucous membrane with less irritation to the membrane. Obviously the nozzle 4 may be made removable

5 from or integral with the tube 1.

I have shown the tip of the nozzle 4 split as at 9 by a transverse recess. This space 9 may receive a disinfectant tablet 8, and the tube 1 may then be employed for the insertion of the disinfectant tablet directly into contact at the remote portions of the mucous membrane, as in the case of deep-seated infections. In such cases, the tablet would be gradually dissolved by the mucous discharge assisted by the liquid being expelled

15 through the nozzle tube.

In addition, the liquid in the container 3 may be forced through the nozzle 4 to wash out the mucous discharge.

20 The nozzle tube is preferably made of soft rubber so that the two lips of the transverse recess 9 will through their resiliency, tend to firmly hold in place the shaped solid tablet when placed therein.

25 While I have described one specific form of my invention, it will be understood that the invention is not limited to such specific embodiment, and that various changes may be made in the embodiment described without deviating from the spirit and scope of my invention.

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What I claim is:

1. A vaginal syringe of the bulb type, comprising a distensible manually operable container bulb, made of thin flexible folded sheet-like material and which bulb due to its folds distends 5 when liquid is placed therein but which on compression, remains in collapsed condition, a soft rubber nozzle tube detachably connected to said container bulb, said nozzle tube being provided with liquid emitting openings, and having a transverse recess formed at the extreme tip thereof 10 out of the path of the liquid which is dischargeable through the tube, said transverse recess being adapted to receive a shaped solid tablet.

2. In a vaginal syringe of the bulb type, comprising a distensible manually operable container 15 bulb made of thin flexible longitudinally folded sheet-like material, and which bulb due to its folds distends when liquid is placed therein, but which on compression remains in collapsed condition, a soft rubber nozzle tube detachably connected to said container bulb, said nozzle tube being provided with liquid emitting openings and having a transverse recess formed at the extreme 20 tip thereof, out of the path of the liquid which is dischargeable through the tube, said transverse recess being adapted to receive and due to the soft rubber walls of the recess, being adapted to hold a shaped solid tablet.

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