July 6, 1926. 1,591,410.

H. I. SPANG

VAGINAL SYRINGE

Filed March 20, 1923

Fig. 1.

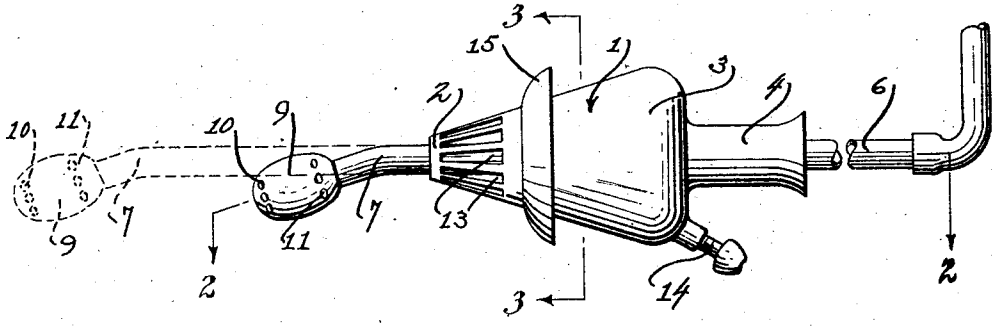
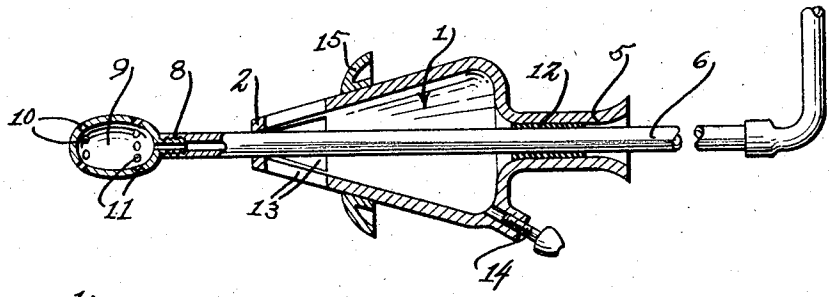


Fig. 2.



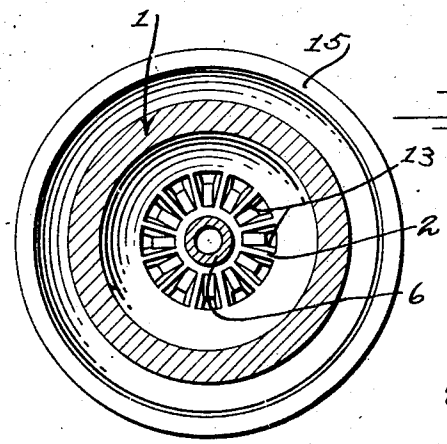


Fig. 3.

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Patented July 6, 1926. 1,591,410

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VAGINAL SYRINGE.

Application filed March 20, 1923. Serial No. 626,303.

This invention relates to a vaginal syringe and has for its principal object to provide a syringe of very simple and economical construction wherein the same is provided with means for adjusting the same to the proper size so as to facilitate its introduction into the vagina and is furthermore provided with means which will completely close the vulva so that the injected fluid will be discharged into the vaginal cavity and the liquid is then discharged into a suitable receptacle associated upon the syringe.

Another important object of the invention is to provide a vaginal syringe of the above mentioned character, which is of such a construction as to enable the same to be easily and properly adjusted to the desired length for the purposes well known in the art. The arrangement of the several parts is such as to prevent the injected fluid from escaping after the same has been discharged into the vaginal cavity where the same contacts with the diseased surfaces and the resultant liquid is then discharged through suitable means whereby the same is prevented from again entering the vagina and a suitable shield is also provided in the syringe for closing the vulva thereby forming a complete seal therefor.

Another important object of the invention is to provide a vaginal syringe of the above mentioned character which is simple in construction, inexpensive, strong, durable and further well adapted for the purposes for which it is designated.

A still further object of the invention is to provide a vaginal syringe of the above mentioned character which may be easily taken apart for the purpose of cleaning the several parts thereof and the simplicity of the device renders it very efficient and useful.

Other objects and advantages of this invention will become apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals designate like parts throughout the same:—

Figure 1 is a side elevation of my invention.

Figure 2 is a longitudinal section through the vaginal syringe.

Figure 3 is a transverse section taken on lines 3—3 of Fig. 1 and looking in the direction of the arrows

In the drawings wherein for the purpose of illustration is shown the preferred embodiment of my invention, the numeral 1 designates the hollow conical body which is constructed of hard rubber, aluminum or other suitable material. I do not wish to confine myself to the particular material used. The conical body member 1 includes the head portion 2 and the base 3. A suitable handle 4 extends from the base 3 and is provided with a longitudinal bore 5 for the purpose hereinafter to be more fully described.

Extending through the handle 4 and through the central portion of the base 3 and head portion 2 of the hollow conical body 1 is the inlet pipe 6. The forward end of the pipe 6 which extends beyond the head portion 2 of the hollow conical body member 1 is curved as shown at 7 in the drawings to conform substantially to the natural curve of the vagina. The curved end 7 of the inlet pipe 6 is also provided with a threaded collar 8 which is adapted to support the nozzle 9.

This nozzle 9 is provided at its forward end with a series of forwardly inclined spaced discharge apertures 10 and also is provided with rearwardly inclined circumferentially extending apertures 11. The purpose of this construction will be hereinafter more fully described. By constructing the curved end 7 in the manner heretofore described it will be seen that various sizes of nozzles may be used in conjunction with the vaginal syringe whereby the syringe is adapted for use by a person as often as may be desired and as necessary and for the purposes well known in the art.

The conical body portion 1 is furthermore provided with a suitable frictional washer 12 in the base 3 thereof whereby the inlet pipe 6 may be slidably adjusted therethrough and frictionally held in the adjusted position by the washer 12 and the apertured head portion 2. By sliding the conical body member 1 on the inlet pipe 6 by means of the handle 4, the length of the forward end of the pipe may be adjusted so as to facilitate the introduction of the nozzle 9 into the vaginal cavity.

The head portion 2 of the conical body member 1 is furthermore provided with

tapered spaced slots 13 as more clearly shown in Figs. 1 and 3 of the drawings and the purpose of these tapered slots 13 will also be hereinafter more fully described. The base portion 3 of the conical body member 1 is provided with an outlet pipe 14 and is supported in the base portion 3 in any suitable manner, the outlet pipe 14 being located in the base portion 3 adjacent the peripheral edge thereof.

Supported upon the conical hollow body member 1 and adjacent the longitudinal slots 13 provided in the head portion therein is the shield 15 which has its outer front face curved as more clearly shown in the drawings and the purpose of this shield 15 is to provide a seal for the vulva when the syringe is in use, it being understood that the curved portion of the shield 15 will fit around and close the vulva.

In use, the syringe is adjusted to the proper length by moving the hollow conical body 1 on the inlet pipe 6 and when the same is in its adjusted position, the rear end of the inlet pipe 6 is attached to a flexible hose which is adapted for connection with a suitable irrigating fluid supply. The irrigating fluid will pass through the inlet pipe 6 and will be discharged through the apertures 10 and 11 provided in the nozzle 9 and will escape into the vaginal cavity where the same comes in contact with the diseased surfaces. By providing the apertures 10 and 11 in the manner as set forth, the liquid will be forced in different directions thereby assuring the proper discharge of the liquid for the necessary purposes. The shield 15 will in the meantime close the vulva and thereby prevent the liquid which has been used from escaping and the discharged liquid will be caused to pass through the longitudinal slots provided in the head portion 2 provided in the hollow conical body 1 and it is also to be observed that the used liquid does not enter the hollow body 1 of the syringe through the same opening which supplies the fresh and unused liquid but reenters through the longitudinal slots 13 as above described. The used liquid which is collected and received in the hollow body 1 will be discharged through the outlet pipe 14 which is connected to a suitable discharge pipe, not shown.

In this manner it will be seen that a vaginal syringe has been provided wherein an irrigating liquid may be passed through the syringe for cleaning out the vaginal cavity and will at the same time be discharged through the syringe in such a manner as to prevent the same from coming in contact with the injected fluid and thereby saving considerable time and assuring cleanliness in the handling of the syringe.

It is to be also noted from the foregoing description that a syringe has been provided wherein the parts may be taken apart for the purpose of cleaning the same and this does not require the use of a number of tools and furthermore may be easily and simply accomplished.

From the foregoing description of the construction of my improved apparatus, it will be seen that I have provided a simple, inexpensive and efficient means for carrying out the objects of the invention, and while I have particularly described the elements best adapted to perform the functions set forth, it is obvious that various changes in form, proportion and in the minor details of construction may be resorted to, without departing from the spirit or sacrificing any of the principles of the invention.

What I claim as new and desire to secure by Letters Patent is:—

A syringe comprising a hollow cone shaped head provided at its hollow end portion with slots disposed longitudinally thereof, a tube passing through the head, and a shield having inner and outer flanges, the inner flange being adapted to frictionally engage the outer surface of the head beyond the inner ends of the slots and the outer flange of the shield being convexed transversely whereby the outer flange is spaced from the inner flange.

In testimony whereof I affix my signature.

HARVEY I. SPANG.