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CERVICAL TAMPON APPLIER

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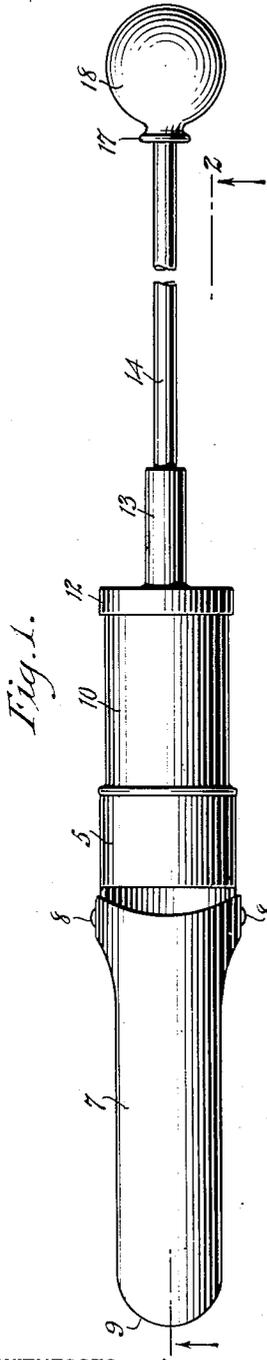


Fig. 1.

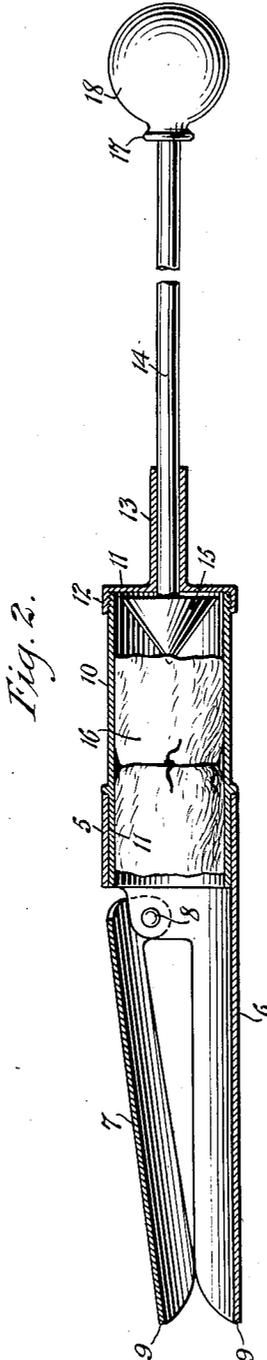


Fig. 2.

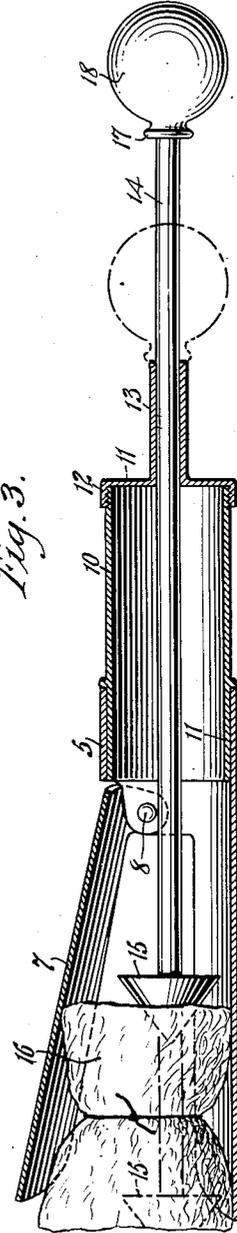


Fig. 3.

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CERVICAL TAMPON APPLIER

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5 Claims. (Cl. 128—263)

An object of the invention is to provide a cervical tampon applier having a collapsible speculum which may be readily introduced without pain into the vagina of a woman and to which a tampon-charging member may be attached, a piston being provided for forcing the tampon from the member and through the speculum, which will extend the speculum and protect the tampon from the walls of the vagina until the tampon is disposed at the mouth of the uterus.

Another object of the invention is to provide a speculum with a body having an extending arm and with a companion extending arm pivoted to the body.

Still another object of the invention is to provide a tampon-charging member with an open end which may be attached to the speculum and with a head with an aperture normally closing the other end, a piston rod being disposed in the aperture, the piston rod carrying a piston which is adapted to pass through the tampon-charging member and between the arms of the speculum to extend the pivoted arms of the speculum and dispose the tampon at the mouth of the uterus.

Additional objects of the invention will appear in the following specification in which the preferred form of the invention is described.

In the drawing similar reference characters refer to similar parts in the several views, of which Figure 1 is a plan view illustrating the speculum, and the tampon-charging member with its associated piston rod,

Figure 2 is a sectional view on the line 2—2 of Figure 1, and

Figure 3 is a sectional view similar to the sectional view illustrated in Figure 2, but with the pivoted arm of the speculum extended.

By referring to the drawing it will be seen that a speculum is provided having a collar 5 from which extends an arm 6, a companion arm 7 being pivoted to the speculum at 8. It will be seen, by referring to Figures 2 and 3 of the drawing, that the inner ends of the arms 6 and 7 are spaced apart, and it will also be seen by referring to the drawing that each of the arms 6 and 7 is concavo-convex in cross section and that the extreme ends 9 of the arms are rounded. With this construction it is possible to introduce the arms 6 and 7 into the vagina of a woman, preferably with the pivot point disposed vertically, or from the front to the rear of the woman, and after the said arms 6 and 7 are disposed in the vagina, the speculum may be turned, so that the pivoted arm 7 will be disposed at the front of the vagina. In this way the speculum may be intro-

duced into the vagina of the woman readily and without pain, and it may be disposed as desired after it has been introduced into the vagina.

It will be understood that a speculum constructed as described may be made of different sizes to fit different women, and preferably it will be manufactured in three sizes to expel tampons of one and one-half, one and three-quarters and two inches from side-to-side measurement. It will also be understood that the speculum which has been described may not only be introduced into the vagina without pain, but that it will serve to assist in positioning a tampon of a relatively large size and will protect this tampon from moisture at the walls of the vagina until it is disposed in position.

A hollow tampon-charging member 10 is provided which has an end 11 which may be disposed within the collar 5 of the speculum after the speculum has been disposed in the vagina. This tampon-charging member 10 is preferably cylindrical in cross section and has a head 11 which may be detachably disposed on the outer end of the tampon-charging member. The drawing shows the head 11 with a threaded flange 12 which meshes with a thread at the outer end of the tampon-charging member, but it will be understood that any desired means may be employed to mount the head 11 on the tampon-charging member 10. Preferably the head 11 has an extending sleeve 13 in which is disposed a piston rod 14, a piston 15 being disposed in the tampon-charging member 10 and being secured to the said piston 15. This piston 15 is preferably conical in shape, so that it may serve not only to discharge the tampon 16 from the tampon-charging member 10, but may also serve to press the tampon 10 between the extending arms 6 and 7 of the speculum to extend the pivoted arm 7 of the speculum to the position shown in Figure 3 of the drawing.

The piston rod 14 has a flange 17 which is adapted to engage with the sleeve 13 on the head 11 to limit the movement of the piston 15 and prevent the base of the piston 15 from extending beyond the curved ends 9 of the extending arms 6 and 7, which would interfere with the relative movement of the piston. A handle 18 is provided by which the piston rod 14 may be readily operated.

In using the device, the speculum is introduced into the vagina of the woman in the manner set forth, after which a sterilized tampon is disposed in the tampon-charging member 10, when the tampon-charging member is mounted on the col-

lar 5 of the speculum, after which the piston 15 is operated by means of the handle 18 on the piston rod to force the tampon 16 into position. The speculum may then be removed from the

5 vagina in the reverse manner of its introduction. It will be understood that, in using the cervical tampon applicator, the physician will select a speculum of the desired size, as well as a tampon of the desired size, and that, when the tampon is to

10 be removed, this will be done by the physician with suitable dressing forceps.

What is claimed is:

1. In an article of the class described, a speculum having a collar with an arm extending therefrom and rigidly connected thereto, and a companion extending arm pivoted to the collar, the two arms converging forwardly when in inactivated positions, with the distance between the outer sides of the forward portions of the arms

20 longitudinally of the pivot greater than the distance between the outer sides of the arms transversely of the said pivot when the pivoted arm is inactivated.

2. In an article of the class described, a speculum, a hollow tampon-charging member having its inner end detachably mounted on the speculum and provided at its outer end with a head having an aperture, the tampon-charging member normally containing a tampon which is introduced into the tampon-charging member at

30 its inner end, a piston rod in the aperture, and a piston on the piston rod disposed for passing out of the tampon-charging member and into the speculum.

3. In an article of the class described, a speculum, a hollow tampon-charging member detach-

ably mounted on the speculum and provided at its outer end with a head having an aperture, a piston rod in the aperture, and a cone-shaped piston on the piston rod disposed for passing out of the tampon-charging member and into the

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4. In an article of the class described, a speculum, a hollow tampon-charging member detachably and slidably mounted with an end of the speculum and provided at its outer end with a head having an aperture, the tampon-charging member normally containing a tampon which is introduced into the tampon-charging member at its inner end, a piston rod in the aperture, a piston on the piston rod disposed for passing out of the tampon-charging member and into the speculum, and means to limit the piston rod relatively to the tampon-charging member.

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5. In an article of the class described, a speculum including a rigidly extending arm and a companion pivoted extending arm having its inner end spaced from the first mentioned arm and movable relatively thereto, the companion extending arm normally converging forwardly relatively to the first mentioned arm to form a wedge, a hollow tampon-charging member detachably and slidably mounted on the speculum and provided at its outer end with a head having an aperture, the tampon-charging member normally containing a tampon which is introduced into the tampon-charging member at its inner end, a piston rod in the aperture, and a piston on the piston rod disposed for passing out of the tampon-charging member and into the speculum.

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