

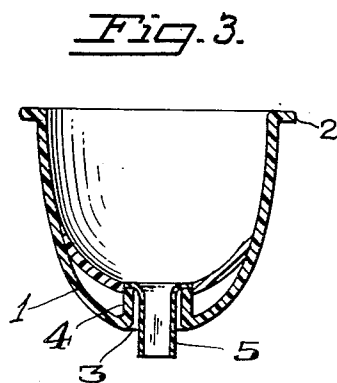
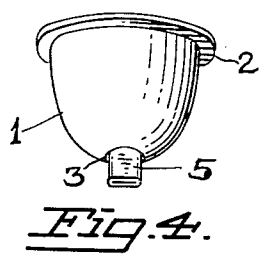
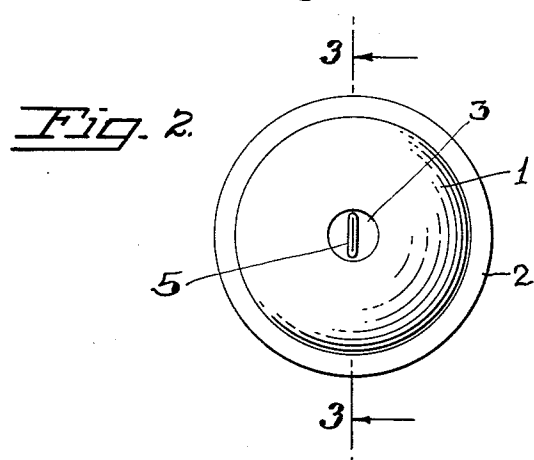
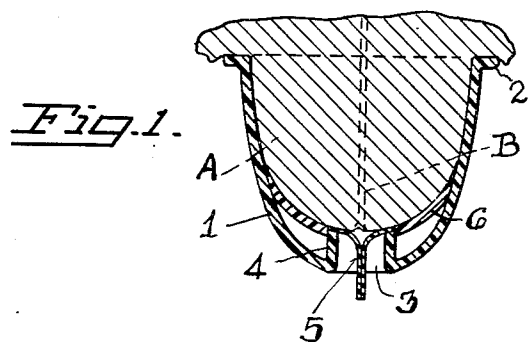
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CERVICAL CAP

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CERVICAL CAP

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2 Claims. (Cl. 128—127)

This invention relates to an improved pessary, and more particularly to a protective cap adapted to fit over the cervix for preventing semen from entering the cervical canal.

The primary object of the present invention is the provision of a protective cap of polyethylene or other suitable material fitting over the cervix, having valvular means capable of allowing the normal outward flow of secretions through the cervical canal into the vaginal tract but which is adapted to prevent semen or other fluids from entering such canal.

Another object of my invention is to provide a cervical cap of the kind characterized having a sensitive one way valve which is adapted to be automatically opened by normal uterine contractions or by the force of gravity to permit the discharge of normal secretions through the cervical canal from the uterus, but which is normal closed to prevent fluids from entering the canal from the vaginal tract.

Other and further objects of my invention will be pointed out hereinafter or will be indicated in the appended claims, or will be obvious to one skilled in the art upon an understanding of the present disclosure. For the purpose of this application, I have elected to show herein certain forms and details of a cervical cap which is representative of my invention; it is to be understood, however, that the embodiment of my invention herein shown and described is for purposes of illustration only, and that therefore it is not to be regarded as exhaustive of the variations of the invention in the art.

In the accompanying drawing:

Fig. 1 is a vertical sectional view on an enlarged scale, taken centrally through a cervical cap embodying the principles of my invention, showing the cap applied in an operative position on a cervix;

Fig. 2 is a bottom view of the cap;

Fig. 3 is a sectional view taken on the line 3—3 of Fig. 2; and

Fig. 4 is a perspective view showing the approximate normal size of the cap.

Referring to the drawing, the numeral 1 designates a cup-shaped cap having an annular outwardly disposed flange 2 on its upper end. The cap is shaped so as to snugly fit upon and embrace the sides of a cervix A, with the annular flange thereof abutting the anterior and posterior fornices at the upper portion of the cervix. The bottom side of the cap 1 is formed with a suitable shaped opening 3, and secured to such bottom side is an upstanding tubular flange 4 which provides a support for the upper end of a resilient, thin-walled tubular valve member 5. The upper end of the tubular valve member extends over and is firmly secured to the upper end of the tubular flange 4, thereby maintaining the upper portion of the tubular valve member in an open position so the normal secretions from the cervical canal B may enter. The tubular valve member extends downwardly through the flange 4 to a point slightly below the bottom side of the cervical cap 1, thereby allowing the secretions from the cervical canal

to discharge into the vaginal tract. The tubular valve member 5 at its lower end portion is collapsed or otherwise suitably contracted or shaped so as to provide opposed sides which are yieldably held in mutual contact by their normal, inherent resiliency. The normally contacting sides of the lower portion of the tubular valve member, as shown on the drawings, provide a sensitive valve which is normally closed but which is adapted to be opened through the force of gravity or by uterine contractions exerted upon the cervical secretions discharged into the upper open end of the tubular valve member. The valve member being normally closed prevents semen or other liquid from entering the cervical canal from the vaginal tract.

Secured inside the cervical cap 1 is a concave partition or false bottom 6 having a shape somewhat simulating the curvature of the lower end portion of the cervix. The cervical cap with its false bottom 6 fits snugly on the cervix, and except for menstruating periods it may be left indefinitely in such position.

It is to be noted that the opening 3 in the bottom side of the cap 1 and the passage way into the upper end portion of the tubular valve member are aligned with the cervical canal B, thereby making it possible for the secretions discharged from the cervix to flow directly into the open upper end of the valve member 5. The tubular flange 4 extending upwardly into the cup-shaped cap 1 provides suitable means for securely anchoring the upper end of the valve member 5. While it is possible to eliminate the tubular flange 4 and the false bottom 6, and attach the tubular valve member 5 directly to the cap 1, it is preferable to provide a connection for the valve member which is protected and which is not apt to come apart. The valve means associated with the cervical cap may embody other suitable forms and constructions if so desired.

The cervical cap and valve means associated therewith may be made from any suitable material such as polyethylene or the like.

The cervical cap may also be used to maintain a medication for a period of time in contact with the surface of the cervix.

It is to be noted that in accordance with my invention as disclosed on the drawing, the cervical cap 1 may comprise only the cup-shaped or concave member (including the false bottom 6) which embraces and actually contacts the cervix, and in such construction the valve supporting tubular flange 4 would then be in a depending position with respect to the bottom side of the cap rather than in an upstanding position.

What I claim is:

1. In a device of the kind characterized, a concave cap adapted to fit snugly over a cervix and having a bottom opening in alignment with a cervical canal of the cervix, an upstanding tubular flange secured to the bottom of the cap and having its opening in registry with the opening of the cap, a flexible tubular valve member secured at one end to the upper edges of the tubular flange and arranged with its lower portion extending through the tubular flange and the opening of the cap, said tubular valve member having an end opening in communication with the cervical canal, and said tubular valve having yieldable sides arranged in normally closed contacting relationship.

2. In a device of the kind characterized, a concave cap adapted to fit snugly over a cervix and having a bottom opening in alignment with a cervical canal of the cervix, an upstanding tubular flange secured to the bottom of the cap and having its opening in registry with the bottom opening of the cap, a flexible tubular valve member secured at one end to the upper portion of the tubular flange and arranged with its lower portion extending through the tubular flange and the bottom opening of the

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cap, said tubular valve member having an end opening
in communication with the cervical canal, and said tubular
valve member having yieldable sides arranged in normally
closed contacting relationship, and a concave partition
secured within the cap and arranged in an encircling
position with respect to the tubular member.

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