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2,769,442

VALVE FOR INFLATABLE PESSARIES AND THE LIKE .

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FIG. 1.

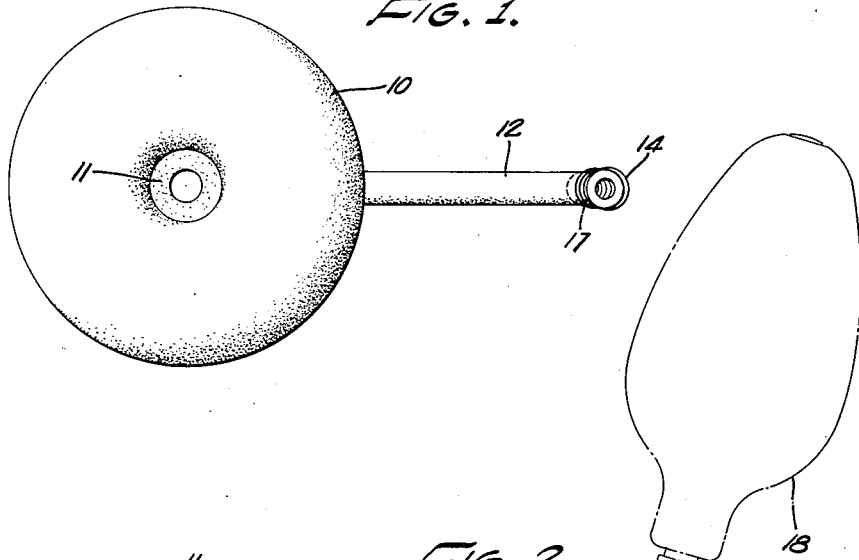


FIG. 2.

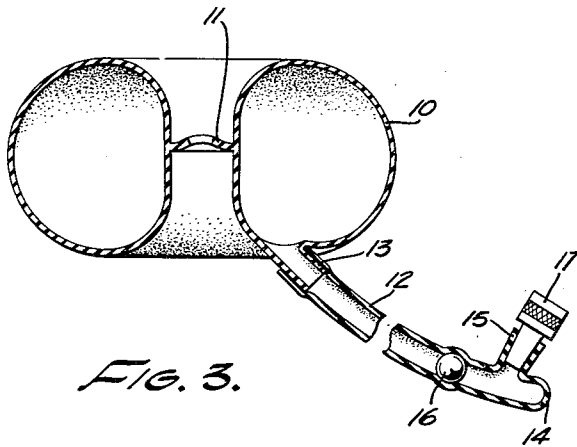
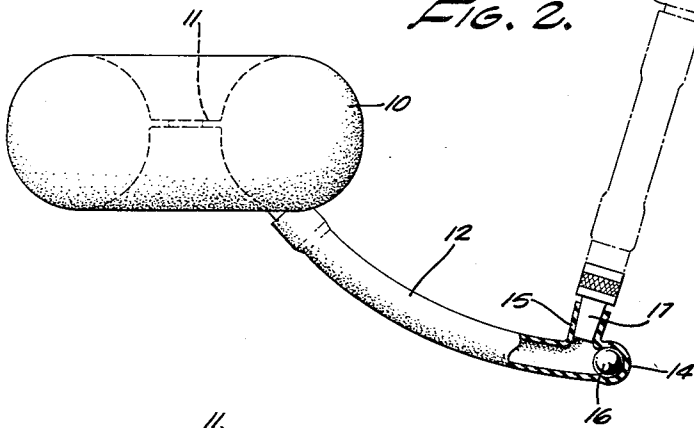


FIG. 3.

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2,769,442

**VALVE FOR INFLATABLE PESSARIES
AND THE LIKE**

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2 Claims. (Cl. 128—127)

This invention relates to inflatable pessaries, and particularly to valves therefor which enable the pessary to be inflated while in position and which will retain or confine air in the pessary effectively after the pessary has been inflated.

Heretofore, inflatable pessaries have been developed for supporting the uterus in situations of prolapsus-uteri. In essence, these pessaries consist of flexible thin walled rubber rings equipped with various means for inflating them when the pessaries have been positioned in the vagina beneath the uterus. An object of the present invention is to provide an improved pessary of this type consisting of an inflatable, flexible, thin-walled rubber ring which can be positioned in the vagina while in a deflated and highly collapsed condition and to provide a novel stem and valve therefor which will facilitate the inflation of the pessary while in position and the entrapment or confinement of air therein.

With the foregoing and other objects in view, which will be made manifest in the following detailed description and specifically pointed out in the appended claims, reference is had to the accompanying drawings for an illustrative embodiment of the invention, wherein:

Figure 1 is a top plan view of the pessary embodying the present invention;

Fig. 2 is a view in side elevation of the same, parts being broken away and shown in vertical section, and illustrating the manner in which the pessary may be inflated; and

Fig. 3 is a sectional view through the pessary, the valve having been shifted to a position wherein it will entrap or confine the air in the pessary.

Referring to the accompanying drawings wherein similar reference characters designate similar parts throughout, the pessary illustrated consists of a flexible thin-walled rubber ring 10 across the center of which there may be a thin apertured web 11. This ring is hollow and is adapted to be inflated through a rubber stem 12 that is connected to the ring, as at 13, so as to be in communication with its interior.

The stem 12 is in the form of a narrow rubber tube, having a closed outer end 14 adjacent which there is a laterally directed inlet 15. Within the stem there is disposed a ball 16 whose diameter is slightly greater than the internal normal diameter of the stem 12. The diameter of the ball is also slightly greater than the normal internal diameter of the lateral inlet 15.

By the above-described construction, due to the thin highly flexible walls of the ring 10, the pessary may be inserted in the vagina in a deflated and highly collapsed condition. The stem 12 is allowed to extend from the vagina exposing the inlet 15. In this inlet there may be inserted the nipple 17 of a pneumatic syringe or air bulb 18, which on being squeezed will force air through the

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nipple 17 and through the stem 12 into the ring 10, to inflate it. This is accomplished while the ball 16 is disposed within the closed end of the stem. When the ring 10 has been inflated the end of the stem 12 is pinched, such as between the thumb and forefinger to squeeze the ball and cause it to slide from the closed end 14 across the entrance 15 and into the position shown in Fig. 3. When the ball occupies this position, it is frictionally retained therein due to the fact that the diameter of the ball is slightly greater than the internal diameter of the stem. The nipple 17 of the pneumatic syringe or air bulb can then be withdrawn from the inlet and the air within the ring 10 will be effectively confined therein. When it is desired to deflate the pessary this is accomplished by merely squeezing the stem 12 ahead of the ball and thus causing the ball to slide back across the lateral inlet 15 and into the closed end 14 of the stem. Air within the ring 10 can then readily escape through the stem 12 and inlet 15.

It will be appreciated that the above-described construction provides a means by which the pessary may be easily and quickly inflated when it has been positioned and that after the pessary has been inflated the stem 12 can be effectively closed by merely squeezing on the end of the stem so as to force the ball 16 into a position within the stem that is ahead of the inlet 15.

Although it is possible to force the ball 16 through the inlet 15 and into the stem in the course of manufacture, the normal size of the inlet 15 is such that the ball can not readily pass therethrough. Consequently, the ball may be regarded as being permanently associated with the stem so that it cannot become lost. While the invention has been described as being applicable to inflatable pessaries, it will be appreciated that it is equally applicable to other inflatable articles wherein it is desired to inflate them and retain the air therein.

Various changes may be made in the details of construction without departing from the spirit and scope of the invention as defined by the appended claims.

I claim:

1. An inflatable pessary comprising a hollow, flexible rubber ring having a tubular stem connected thereto and communicating therewith, said stem having a closed end adjacent which there is a laterally extending inlet, and a ball in the closed end when the pessary is being inflated and frictionally fitting the interior of the stem, said ball being adapted to be forced through the stem across the inlet to occupy a position behind the inlet to retain the pessary inflated after it has been filled.

2. An inflatable article having a tubular rubber stem connected thereto and in communication with the interior of the article, said stem having a closed end adjacent which there is a laterally extending inlet, and a ball adapted to occupy the closed end of the stem on one side of the inlet to enable the article to be inflated through the inlet, said ball being capable of being forced across the entrance to the inlet and to occupy a frictionally held position in the stem on the other side of the inlet so as to retain the article in inflated condition.

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