

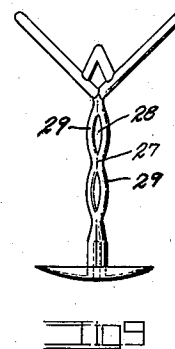
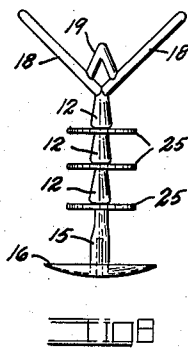
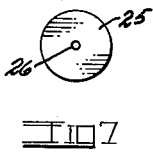
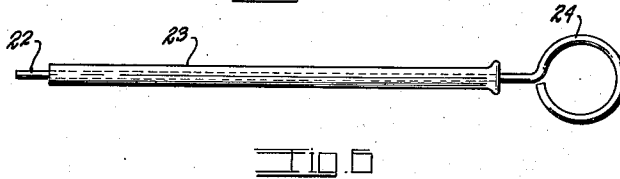
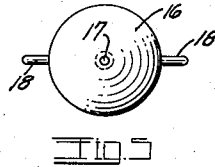
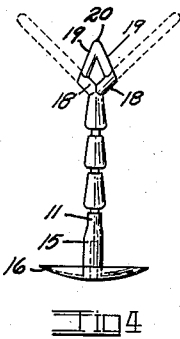
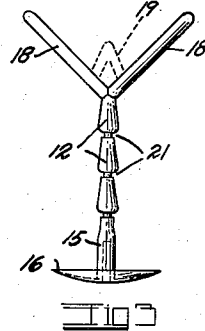
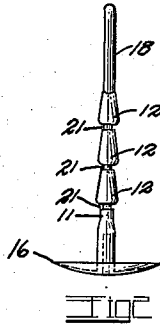
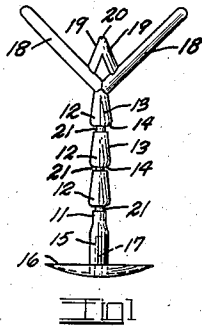
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2,564,177

PESSARY

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2,564,177

PESSARY

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This invention relates to an intracervical pessary for use in the treatment of pathological conditions of the uterus, cervix and vaginal canal.

The object of the present invention is to provide an improved device of this character: which will firmly and resiliently retain itself in the proper position; which will conform to the contour and shape of the surrounding tissues; which will not interfere with normal drainage; which can be quickly and easily inserted without injury to the surrounding tissues; which will adapt itself to a simple applicator device; and which can be easily and accurately shaped and preformed by the attending physician to accommodate various pathological conditions as encountered.

Other objects and advantages reside in the detail construction of the invention, which is designed for simplicity, economy, and efficiency. These will become more apparent from the following description.

In the following detailed description of the invention, reference is had to the accompanying drawing which forms a part hereof. Like numerals refer to like parts in all views of the drawing and throughout the description.

In the drawing:

Fig. 1 is a side view of the improved intracervical pessary;

Fig. 2 is an edge view thereof;

Figs. 3 and 4 illustrate forms to which the improved pessary may be altered to suit conditions as encountered;

Fig. 5 is a bottom view of the pessary;

Fig. 6 illustrates an applicator which may be used for the insertion of the improved pessary;

Fig. 7 is a detail view of a flexible disc which may be applied to the pessary;

Fig. 8 illustrates the appearance of the pessary with discs of the type of Fig. 7 applied thereto; and

Fig. 9 is a side view of an alternate form of the invention.

The improved pessary is molded from polyethylene plastic in a suitable steel die so that it will be a single, unitary plastic structure throughout without metallic reinforcement of any kind.

The basic form of the improved intracervical pessary, shown in Figs. 1 to 5, inclusive, comprises a stem 11 molded with three bulbous enlargements 12 spaced apart along its length. The enlargements are somewhat wedge-shaped in that their surfaces incline relatively gradually toward the stem 11 as they approach the inner extremity of the latter, as shown at 13, and in-

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cline rather abruptly toward the stem 11 as the outer extremity is approached, as indicated at 14. An annular groove 21 surrounds the stem 11 at the base of the abrupt side 14 of each enlargement 12.

The outer extremity of the stem is slightly enlarged, as shown at 15, and this enlarged extremity terminates in a flexible dished disc 16 having its convex surface directed outwardly. A tubular socket 17 extends into the enlargement 15 of the stem 11 from the axis of the outer face of the disc 16.

The inner extremity of the stem 11 terminates in two outwardly flaring flexible prongs 18 forming a substantially V-shape. The two prongs 18 are braced by two inclined flexible brace members 19 which join each other at an apex 20 and form with the prongs 18 a W shape.

The above described structure of the inner extremity readily adapts it for trimming by the physician to suit conditions encountered. For instance, the two brace members 19 may be severed from the prongs 18 to produce a flexible V-shaped inner extremity, as shown in Fig. 3. These flaring prongs may be readily inserted by bending them inwardly into parallel relation and placing them in one-half of a gelatin capsule as is usually done with this type of pessary. The expanding action of the prongs 18 serves to draw the disc 16 against the mouth of the cervix and acts to retain the latter snugly in place. The unusual wedge shape of the enlargements 12 also facilitates the insertion and tends to resist withdrawal of the stem.

In some cases the relatively long flexible prongs 18 might not be necessary or desirable. In such cases, the prongs may be cut away at their points of intersection with the member 19 to form an open pointed "spearhead" extremity on the stem as shown in Fig. 4. It will be noted that this so called "spearhead" is more tapered along the members 19 than along the remaining portions of the prongs 18. This tapering angle facilitates insertion and the more abrupt angle tends to resist withdrawal.

The tubular socket 17 is for the purpose of receiving the extremity of an insertion rod 22 (see Fig. 6) which is slidably mounted in a tubular applicator 23 and terminates in a finger grip 24. It can be readily seen that the pessary will be firmly supported on the rod 22 so that it may be readily inserted in the cervical canal. After insertion, the pessary is held in place by the tubular applicator while the rod 22 is withdrawn so as to avoid displacement of the pessary.

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If desired, flexible rubber discs, such as illustrated at 25 in Fig. 7, may be placed along the stem 11. The discs 25 are provided with small central openings 26 which can be stretched and distorted sufficiently to allow the discs to pass over the prongs 18, when the latter are pressed together, and snapped into the grooves 21 below each of the enlargements 12 where they will retain themselves in place due to their inherent elasticity. When the pessary is inserted, the discs fold outwardly into radial folds to act to retain the pessary in place without interference with normal discharges.

An alternate form of the pessary stem is illustrated at 27 in Fig. 9, having the same extremities, that is the disc 16 and the prongs 18, as the previous form. The alternate stem 27 is formed with one or more longitudinally extending slits or splits 28. The sides of the stem opposite the slits 28 are bowed outwardly as indicated at 29. The outwardly extending bowed sides 29 serve to retain the pessary in place and also act to accommodate uterine contraction.

It is desired to call attention to the fact that since the improved intracervical pessary has no metal reinforcements of any kind, the corrosion usually encountered with metal reinforced pessaries is eliminated and the possibility of infection is reduced. The polyethylene plastic from which the pessary is made is not effected by acids, alkalies or alcohols or by the natural body fluids, so that possible contamination is greatly reduced.

While a specific form of the improvement has been described and illustrated herein, it is to be understood that the same may be varied, within the scope of the appended claims, without departing from the spirit of the invention.

Having thus described the invention, what is claimed and desired secured by Letters Patent is:

1. A pessary comprising: a unitary molded article formed from flexible plastic and having an elongated stem; a dished disc concentrically molded on one extremity of said stem; flaring prongs on the other extremity of said stem; and an inverted V-shaped brace member joining said prongs at its extremities to form a spearhead shaped opening opposite the junction of said prongs.

2. A pessary comprising: a unitary molded article formed from flexible plastic and having an elongated stem; a dished disc concentrically molded on one extremity of said stem; flaring prongs on the other extremity of said stem; spaced-apart bulbous members formed along said stem, said bulbous members being substantially wedge shaped and having a more gradual incline as they approach the pronged extremity than at their other extremity; and an inverted V-shaped brace member joining said prongs at its extremities to form a spearhead shaped opening opposite the junction of said prongs.

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3. A pessary formed from a poly-ethylene plastic throughout its entire body and having an elongated stem, flaring prongs at one extremity of said stem, a dished disc at the other extremity thereof, the convex face of said disc facing outwardly, there being annular grooves formed about said stem at spaced-apart intervals and resilient flat, circular discs having an axial opening surrounding said stem, each disc engaged in one of said notches due to the elasticity of said disc.

4. A pessary having an elongated stem; a dished disc formed on one extremity of said stem; a plurality of spaced-apart, wedge-shaped enlargements formed along said stem, there being a circumferentially extending groove formed in said stem at the larger extremity of each of said enlargements; two flexible, outwardly flaring prongs formed on the other extremity of said stem in a substantial V-shape; two inclined flexible brace members extending from said prongs and joining each other to form an apex between said prongs so as to form with the prongs a W-shape.

5. A pessary having an elongated stem; a dished disc formed on one extremity of said stem; a plurality of spaced-apart, wedge-shaped enlargements formed along said stem, there being a circumferentially extending groove formed in said stem at the larger extremity of each of said enlargements; two flexible, outwardly flaring prongs formed on the other extremity of said stem in a substantial V-shape; two inclined flexible brace members extending from said prongs and joining each other to form an apex between said prongs so as to form with the prongs a W-shape; and a relatively thin, flat, flexible disc positioned at the larger extremity of each of said enlargements, each of said discs having a central opening, the edge of which is engaged in one of said grooves so that the disc is maintained in place by contraction into said groove.

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