No. 741,345. PATENTED OCT. 13, 1903.

L. KNOPF.

PESSARY.

APPLICATION FILED JUNE 19, 1902.

NO MODEL.

Fig. 1.

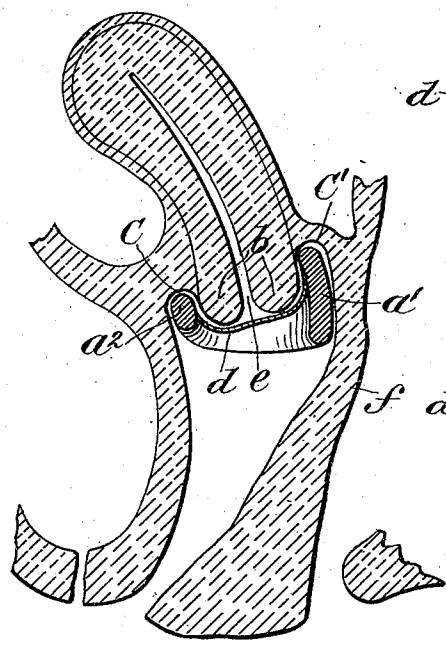


Fig. 2.

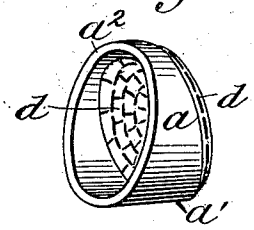


Fig. 3.

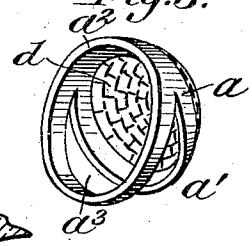


Fig. 4.

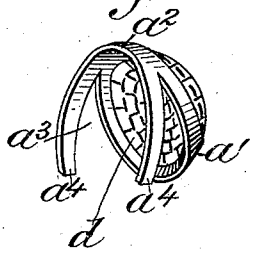
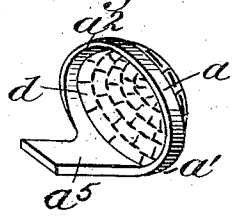


Fig. 5.



Witnesses

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 741,345. Patented October 13, 1903.

UNITED STATES PATENT OFFICE.

LEO KNOPF, OF BÜRSTADT, GERMANY.

PESSARY.

SPECIFICATION forming part of Letters Patent No. 741,345, dated October 13, 1903.

Application filed June 19, 1902. Serial No. 112,369. (No model.)

To all whom it may concern:

Be it known that I, LEO KNOPF, physician, a citizen of the German Empire, residing at the town of Bürstadt, in the Grand Duchy of Hesse, Germany, have invented a new and useful Pessary, of which the following is a specification.

This invention relates to an improved pessary; and it consists in certain peculiarities of conformation and arrangement hereinafter fully described, by means of which greatly-superior results are attained as compared with devices heretofore commonly used.

The pessaries hitherto known have exhibited manifold defects, in that they have a tendency to slip from their position or else serve to constrict the neck of the uterus and cause congestion, or they pinch the walls of the vagina, inducing local irritation. Many attempts have been made to devise a pessary that would remain firmly seated in position and yet not cause discomfort and injury by reason of constriction, but heretofore without success, for the reason that the axis of the uterus does not coincide with the axis of the vagina, and as a consequence the center of gravity of the pessary when in position is not perpendicular to the point of support. This results in a tendency of the pessary to slip from its position in a direction parallel to the axis of the vagina. By the present invention this difficulty is overcome by forming the annular wall of the pessary of greater width in that portion adapted to lie on the rear side of the uterus, whereby the upper portion of the wall rests upon the symphysis and the widened portion fills the posterior vault of the vagina, providing a firm seat and offering greater frictional resistance with no attendant greater pressure. In this manner any tendency of the pessary to shift from its position is effectually obviated.

The advantageous feature of my improved pessary will be made apparent from the accompanying drawings, in which—

Figure 1 is a sectional view showing the pessary in position, and Figs. 2, 3, 4, and 5 represent several embodiments of my invention.

In the drawings, a is the annular body of the pessary, fitted to encircle the neck of the uterus b. The ring a has its rear portion considerably widened, as at a', while the front portion a^2 is comparatively narrow. These portions of the ring are of a thickness and width adapted to snugly fit within the vaults c' and c, respectively, and to bear upon the rear and front side of the uterus and the wall of the vagina. This annular body of the pessary is covered by a flexible and preferably elastic membrane d, adapted to overlie the mouth e of the uterus. In order to further increase the frictional resistance to prevent slipping, I may form the widened portion of the wall with a slit a^3, as shown in Fig. 3, thus providing a space into which the fleshy parts may sink and constitute engaging projections.

In Fig. 4 I have shown a modification in which the widened portion is provided with a lateral cut connecting with the slit (before described) in such manner as to constitute arms a^4, adapted to embrace the neck of the uterus.

In Fig. 5 a simple modified form is shown in which the widened portion consists of a lip or projection a^5, extending from the annular flange of the pessary.

In all the embodiments illustrated it will be observed that the same principle obtains—*i. e.*, the provision of greater frictional resistance upon the posterior side of the uterus and a utilization to that end of the walls of the relatively deep posterior vault of the vagina.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A pessary comprising an annular body having an elongated slit formed in one wall thereof.

2. A pessary comprising an annular body having walls of unequal width and an elongated slit formed in the wider portion thereof.

3. A pessary comprising an annular body having walls of unequal width and a membrane serving as a cover for the space inclosed by the annular body.

4. A pessary comprising an annular body having a slit formed in one wall thereof, and a membrane serving as a cover for the space inclosed by the annular body.

5. A pessary comprising an annular body having walls of unequal width and a slit formed in the wider portion thereof, and a

membrane serving as a cover for the space inclosed by the annular body.

6. A pessary comprising an annular body having a slit formed in the wall thereof, and a second slit extending from the first slit to the edge of the wall.

7. A pessary comprising an annular body having a slit formed in the wall thereof, and a second slit extending at an angle from the central portion of the first slit to the edge of the wall.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LEO KNOPF.

Witnesses:
JACOB ADRIAN,
H. W. HARRIS.