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E. M. POND

RECTAL TAMPON

Filed July 25, 1922

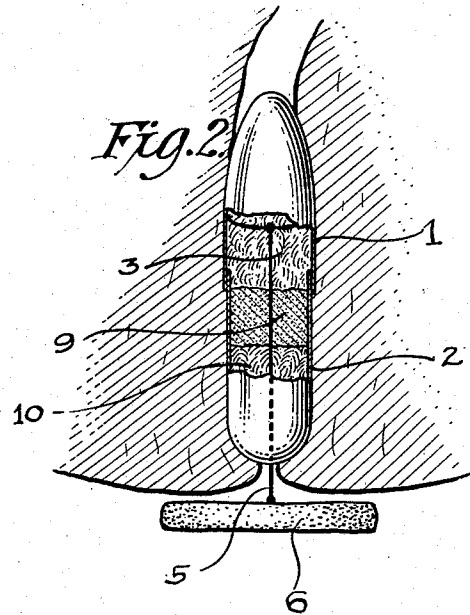
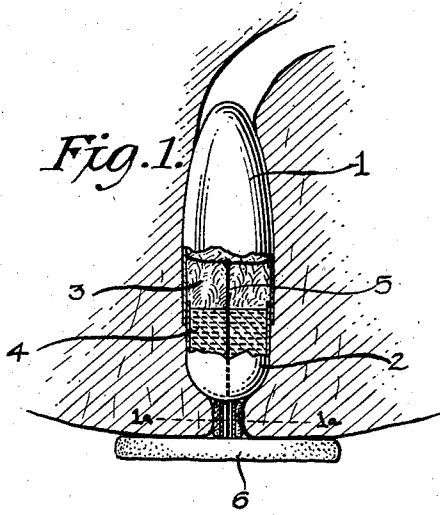
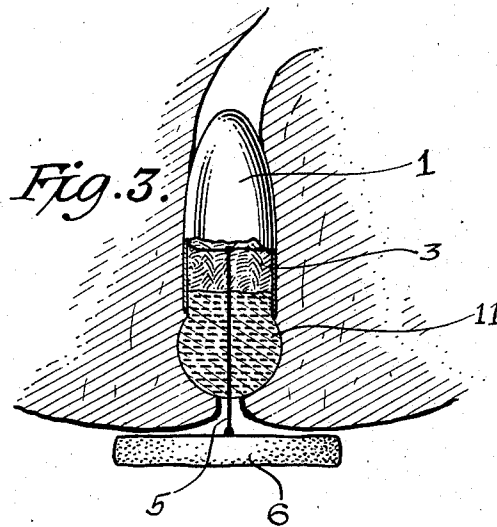


Fig. 1a.



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UNITED STATES PATENT OFFICE.

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RECTAL TAMPON.

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To all whom it may concern:

Be it known that I, EDMUND M. POND, a citizen of the United States of America, residing at Rutland, in the county of Rutland and State of Vermont, have invented certain new and useful Improvements in Rectal Tampons, of which the following is a specification.

My invention is designed to effect medication of the rectum, and also the ano-rectal regions and the organs in the adjacent zones, such as the prostate gland and the seminal vesicles. To this end it comprises generally a shell or capsule of soluble material, such as gelatine, a body of medicated material so located in the capsule as to come in contact with the area to be treated when the capsule has dissolved after being inserted in the rectum, a plug or tampon of fibrous material, such as wool or cotton, located above the medicated material for the purpose of preventing the latter from being mixed with fecal matter or drawn up into the intestines, and means for preventing any medical material which might otherwise be expelled from soiling the clothing of the patient.

My invention also comprises certain modifications and minor optional features hereinafter to be more fully described. Several embodiments of the invention, being the best forms of it at present known to me, are illustrated somewhat diagrammatically in the accompanying sheet of drawings in which

Fig. 1 shows a cross-section of the rectal regions with one form of tampon in position, parts being broken away;

Fig. 1^a is a cross-section on line 1^a—1^a of Fig. 1, and

Figs. 2 and 3 show similar views of modified forms of tampon.

Troughout the drawings like reference characters indicate like parts.

1 is a shell of gelatine or similar soluble material, pointed and closed at one end and open at the other. 2 is a similar shell telescoping into the first mentioned one, but preferably having its closed end more nearly hemispherical in contour. 3 is a body of wool or cotton or other fibrous material packed in the pointed end of the casing formed by assembling parts 1 and 2, and 4 is a body of medicated material, which may be a liquid or a semi-liquid, if desired, locat-

ed in the other end of the casing, below the wool or cotton 3 when the tampon is in operative position, as indicated in Fig. 1.

The medicated material may be solid, as indicated at 9 in Fig. 2, and a second mass of fibrous material 10 may be placed in the lower end of the casing or capsule as there shown.

The lower shell 2 may be omitted when the medicated material is solid, as indicated at 11 in Fig. 3 and the said solid medicated material be inserted as a plug in the open end of shell 1.

In all cases it is well to have an exterior pad 6 of absorbent material attached to the free end of the cord 5 so as to be supported exteriorly of the anus when the tampon is in position. This will absorb any of the medicament exuded and prevent the patient's clothing being soiled.

8 represents a cylinder or winding of gauze around the cord 5 between the tampon and the pad 6, and 7 is a layer of medicated gelatine wound on, or incorporated with, the gauze. The medicament so carried will act on any diseased or abnormal conditions of the anus, such as hæmorrhoids or fistulas. The material of the fibrous masses 3 and 10 may also be medicated and, to ensure their proper expansion when the containing shells 1 and 2 go into solution, I prefer to impregnate or sprinkle them with dry powdered bicarbonate of soda and cream of tartar, or other substances which upon the application of moisture will generate a small amount of harmless gas which will tend to expand these masses, by slightly separating their fibres. This action counteracts a tendency which the liquefied gelatine of the shells has to transform these fibrous packing bodies into sodden masses which do not sufficiently fill the passages in which they are placed and do not exercise the function of retaining the medicament, such as 4, 9 or 11, in position and protecting it from admixture with the fæces.

In operation the medicament arranged as shown in Fig. 2 will act on the adjacent prostate gland and seminal vesicles of the patient when the shells 1 and 2 have been dissolved by the moisture of the patient's body. The two packings 3 and 10 shown in this form of the invention serve the purpose of concentrating the action of the medicament 9 on the walls of the upper rectum.

The upper packing 3 prevents the medication being absorbed or forced upward into the colon, as is apt to occur when the medicament is placed this high and not protected, and the lower packing 10 prevents the extrusion of the medicament, which is likely to occur unless it is in the form of a fairly dense, hard mass, such as is used in the modification shown in Fig. 3. As a result, also, the particular arrangement shown in Fig. 2 renders it possible to use softer medication, which dissolves readily and is more easily absorbed by the surfaces to be treated, and is therefore more efficient, if it can be thus confined to the diseased zone. The forms shown in Figs. 1 and 3 are designed to treat the lower rectum or ano-rectal region.

When the shell of the tampon dissolves the fibrous packing expands, especially if impregnated with gas-forming materials as above described, and fills the rectum, adhering to the walls thereof by friction.

It is evident that certain of the features of my invention as herein described can be usefully employed without certain other of said features, as occasion for only a partial exercise of the described functions may arise in certain cases.

Having described my invention, I claim:

1. As an article of manufacture a tampon adapted for medication of the rectal regions, which tampon comprises a shell of soluble material, a body of medicated material supported by said shell and occupying the entire lower portion thereof when it is in

operative position and a body of fibrous material supported in said shell above said medication together with a protective pad of dry absorbent material connected to the tampon proper at a distance which locates it outside the anus when the tampon is in operative position.

2. As an article of manufacture a tampon adapted for insertion in the rectum, which tampon has a cord depending therefrom and a cylinder of medicated material supported by said cord exteriorly of said tampon, whereby when said tampon is in operative position said cylinder will be located in the anus.

3. As an article of manufacture a tampon adapted for insertion in the rectum, which tampon has a cord depending therefrom and a cylinder of medicated material supported by said cord exteriorly of said tampon together with a pad of absorbent material supported by said cord below said cylinder, whereby when the tampon is in operative position the cylinder will be located in the anus and the pad adjacent to but exterior thereof.

4. As an article of manufacture a tampon for treatment of cavities of the human body, which tampon has a soluble shell, and fibrous packing located in said shell, which packing contains materials adapted, on mixture with water, to generate a small amount of gas, whereby said packing is expanded to more completely fill the cavity in which it is located.

EDMUND M. POND.