

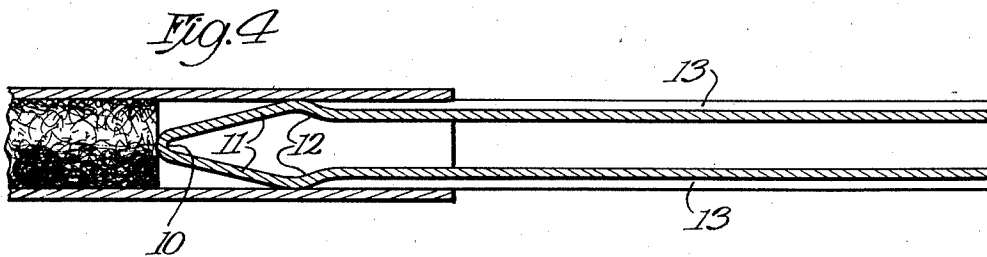
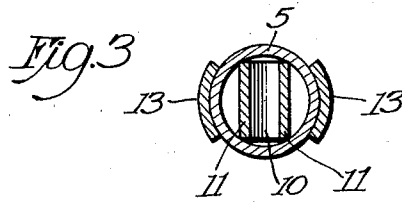
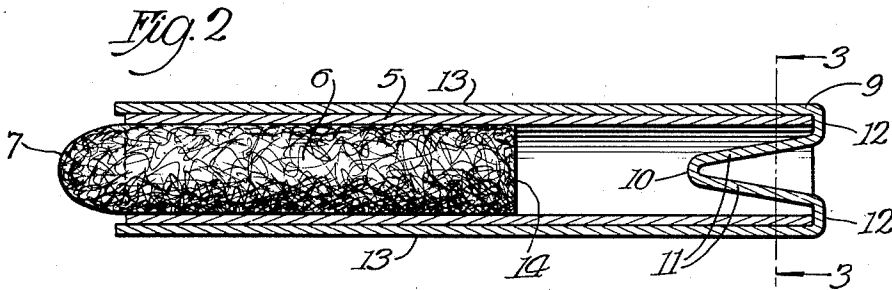
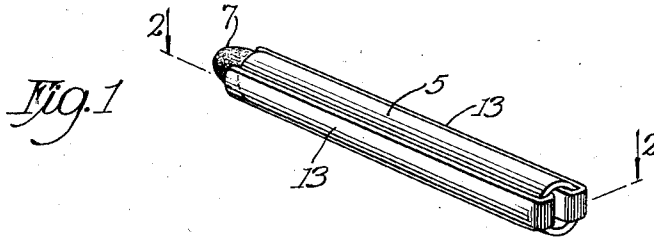
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G. W. PETERSEN

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TAMPON APPLICATOR

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Inventor:
Gordon W. Petersen

By *Loane, Pond & Anderson* Attys.

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2,222,088

TAMPON APPLICATOR

Gordon W. Petersen, Menasha, Wis., assignor to
International Cellucotton Products Company,
Chicago, Ill., a corporation of Delaware

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6 Claims. (Cl. 128—263)

This invention relates to an improvement in means for inserting a tampon in the vaginal passageway and the main objects of the invention are to provide an inexpensive, simple but efficient device for the purpose indicated; to provide an applicator of the character indicated which may be characterized as a single-use article, i. e., one which is thrown away or disposed of after it is used once; and to provide a device of the character indicated which will meet the requirements of proper hygiene with reference to the use of tampons.

Other objects and advantages of the invention will be understood by reference to the following specification and accompanying drawing wherein there is described and illustrated a tampon applicator embodying a selected form of the invention.

In the drawing:

Figure 1 is a perspective of the improved applicator including a tampon mounted in the applicator;

Figure 2 is a section on the line 2—2 of Figure 1 on an enlarged scale;

Figure 3 is a cross-section on the line 3—3 of Figure 2; and

Figure 4 is a section corresponding to a portion of Figure 2 but showing the parts in a changed position.

The tampon applicator herein contemplated is primarily intended for use in connection with tampons such as are employed for absorbing menstrual fluids but it will be understood that the structure may be employed for the insertion of other tampons such as are sometimes used in the treatment of various diseases.

The improved structure as shown in the drawing comprises a tubular member 5 which may conveniently be made of paper of a grade and thickness which will be substantially self-supporting. In other words, the paper tube should be of sufficient stiffness to maintain itself against collapsing both longitudinally and transversely. The tube 5 may be formed by spirally winding suitable paper stock and the outer surface thereof is preferably finished with a varnish or other coating which provides a smooth and substantially impervious finish.

A tampon 6 of suitable construction for the purpose intended is mounted in the forward end portion of the tube and the front or pointed end 7 of the tampon preferably, although not necessarily, projects slightly beyond the tube as best shown in Figure 2. The tube or holder 5 is of greater length than the tampon so as to provide

an unoccupied rear portion 8 into which a portion of an ejector member is initially inserted.

The ejector member comprises a strip 9 of paperboard which is folded upon itself approximately mid-way between its ends as indicated at 10. Portions 11 of the strip 9 adjacent its fold 10 are inserted in the unoccupied rear portion 8 of the holder 5 and the strip is re-bent as indicated at 12, 12 adjacent the rear end of the holder 5 so as to cause handle-forming portions 13, 13 of the ejector to lie closely adjacent oppositely disposed outer surface portions of the holder 5. As best shown in Figure 3, the holder portions 13, 13 are preferably pressed to a transversely arched shape which will hug the adjacent outer surface portions of the holder 5.

The applicator with a tampon positioned therein as illustrated in Figure 2 may be enclosed in cellophane or other suitable wrapping material which will serve to keep the article in a clean and sanitary condition, such wrapping also serving to hold the handle portions 13, 13 of the ejector in their refolded position and incidentally holding the ejector member in assembled relation to the holder 5.

When the device is to be used, the wrapping is removed and the ejector handle portions 13, 13 unfolded so as to extend rearwardly from the holder. The ejector may then be easily moved inwardly of the holder until the fold 10 of the ejector engages the adjacent end 14 of the tampon. The initial spaced relation between the ejector end formed by the fold 10 and the end 14 of the tampon is advantageous in that it permits the said initial free inward movement of the ejector whereby the zones of refolding 12 of the ejector are moved inwardly of the holder 5 so that the latter is effective to support the ejector against buckling in the refolded portions 12 when sufficient longitudinal force is applied to the ejector to eject the tampon from the holder 5.

The construction described is further advantageous in that it reduces to a minimum the necessary length of the ejector strip without sacrificing permanency of the assembled relation of the ejector strip and the holder. It will be observed that when using the device, the ejector may initially be adjusted to the position illustrated in Figure 4 in which the ejector is frictionally held in assembled relation to the holder 5, whereupon the holder 5 with the tampon in its front end may be inserted to the proper position in the vaginal passageway, after which the ejector may be manipulated to force the tampon from the holder or the holder pulled rearwardly while

preventing the tampon from following by holding the ejector in fixed position.

The ejector strip comprising only a simple narrow strip of suitable paper or other board is an obviously inexpensive element of the described applicator construction but it efficiently serves the purpose of ejecting the tampon from the holder. The device is simple and easy to use, affording adequate handling length conducive to the hygienic safety of the operation of inserting a tampon.

Changes in the described construction may be made without departing from the spirit of the invention, the scope of which should be determined by reference to the following claims, the same being construed as broadly as possible, consistent with the state of the art.

I claim:

1. A tampon applicator comprising an elongated tubular holder adapted to have a tampon removably seated in one end portion thereof, and means for ejecting the tampon comprising a folded strip having its fold and adjacent portions disposed within said holder, end portions of said folded strip remaining accessible outside of said holder to serve as a holder for advancing the folded strip in the holder to thereby eject the tampon.

2. A tampon applicator comprising an elongated tubular holder adapted to have a tampon removably seated in one end portion thereof, and means for ejecting the tampon comprising a folded strip having its fold and adjacent portions disposed within said holder, end portions of said folded strip being disposed outside of said holder to shorten the combined lengths of the holder and ejecting means, said refolded portions being adapted to be unfolded and forced into said holder, thereby to advance said fold to eject the tampon.

3. A tampon applicator comprising an elongated tubular holder adapted to have a tampon

removably seated in one end portion thereof, and means for ejecting the tampon comprising a folded strip having its fold and adjacent portions disposed within said holder, end portions of said folded strip being disposed outside of said holder and refolded to positions adjacent the outer surface of said holder, said refolded portions being adapted to be unfolded and to be forced into said holder, thereby to advance said fold to eject the tampon.

4. A tampon applicator comprising an elongated tubular holder adapted to have a tampon removably seated in one end portion thereof, and means for ejecting the tampon comprising a folded strip having its fold and adjacent portions disposed within said holder, end portions of said folded strip being disposed outside of said holder and refolded adjacent the end of the holder and disposed in positions adjacent outer surface portions of said holder, said refolded portions being adapted to be unfolded and forced longitudinally into said holder, thereby to advance said fold to eject the tampon.

5. A tampon applicator according to claim 3 wherein the holder is of rounded cross-section and the refolded portions of the ejecting means are arched transversely so as to be adapted to hug the outer surface of the holder.

6. A tampon applicator according to claim 3 wherein the fold in the ejector means is initially disposed in spaced relation to the adjacent end of the tampon in the holder, whereby the ejector strip is adapted to be freely movable inwardly so as to position its zones of refolding within the holder before the ejector engages the tampon, the holder being thereby operative to prevent buckling of the ejector adjacent said zones incident to the resistance of the tampon to displacement from the holder.

GORDON W. PETERSEN.