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TAMPONS AND PROTECTIVE SHIELD THEREFOR

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This invention relates to tampons and applicators therefor. The tampons to which the present invention relates are especially those of the type intended for use during menstrual periods.

One of the obstacles met in using tampons of this character is that encountered when inserting the tampon in the body orifice. Applicators of various kinds have been attempted, some of which were found difficult to use; others were so constructed as to make ejection of the tampon from them difficult, and others required at least a partial insertion of them in the vagina. The unsuccessful efforts of the manufacturers to produce a practical and satisfactory applicator has resulted in a general dislike or aversion by users, many employing the fingers for the insertion of the tampons. The use of the fingers for the purpose is unsatisfactory; it is insanitary and distasteful to many, with the result that many former users of tampons have abandoned their use and solely because of the fact that they found the insertion of the tampons repugnant to them.

It is therefore an object of the present invention to provide a tampon and an applicator which will eliminate the objections found in applicators of the prior art; which will permit the insertion of the tampon without direct contact of the fingers with the tampon, and which will prevent soiling of the fingers when inserting the tampon.

It is an object of the invention to provide a tampon with a wrapper which will protect and maintain the tampon in a clean and sanitary condition and which can be folded back to provide a protective shield for the fingers of the user while the tampon is being inserted.

It is also an object of the invention to provide a wrapper around a tampon, said wrapper being in the form of a pleated cup with its pleated side wall capable of distention while the fingers of the user hold one end of the wrapper-enclosing tampon, to cause said wall to form a flaring skirt around the fingers engaged in holding the tampon thereby permitting insertion of the tampon without direct contact of the fingers with the tampon and which will prevent soiling of the fingers.

With these and other objects to be hereinafter set forth in view, I have devised the arrangement of parts to be described and more particularly pointed out in the claims appended hereto.

In the accompanying drawing, wherein an illustrative embodiment of the invention is disclosed,

FIG. 1 is an elevational view of a tampon and its wrapper-applicator, constructed according to the invention;
FIG. 2 is a vertical sectional view through the same;
FIG. 3 shows the wrapper-applicator in a slightly unfolded condition;
FIG. 4 is a sectional view of the closure cap;
FIG. 5 is a view, in a reduced scale, of the tampon;
FIG. 6 shows how the tampon is held for insertion, and
FIG. 7 shows the wrapper-applicator in its flattened condition.

Referring to the drawing, 1 indicates a menstrual tampon of conventional form, the same consisting of a substantially cylindrical body of soft and absorbent material, usually of cotton or paper or a combination of both or other materials. The tampon need not be of the specific shape shown in the drawing.

Extending from the rear end of the tampon 1 is a withdrawal cord 2, or so-called "pull string" by means of which the tampon is withdrawn from the body orifice after use.

The combined wrapper and applicator 6 is, in its flattened form as shown in FIG. 7, in the form of a circular disk provided with a plurality of radial folds or pleats 8 in order that it may be contracted or gathered to thereby form it into a narrow, deep, open-mouthed cup to fully contain the tampon 1, substantially as shown in FIGS. 1 and 2. The combined wrapper and applicator 6 may be composed of any suitable inexpensive foldable sheet material such as metal foil, paper, plastic or the like, and preferably a material that is at least water-resistant if not altogether water-impermeable. The bottom or closed lower end of the wrapper-formed cup, consists of the circular area shown at 7.

When the tampon is placed inside of the pleated cup, the pull string 2 is passed upwardly along the side of the tampon, as shown at 3 in FIG. 2, is then brought across the upper edge of the wrapper and secured by any suitable means at 4, and then extends downwardly in a free or dependent end portion 5.

The wrapper 6 is maintained in its cup-shaped form to hold the tampon, by means of a telescopically-applied closure cap 9 which, when fitted in place, closes the open or forward end of the cup and thus co-operates with the cup in completely enclosing and protecting the tampon.

To facilitate the insertion of the tampon in a body orifice, the forward end of the tampon may be lubricated and the lubrication for such purpose may be contained within the interior of the closure cap as shown at 10. The act of placing the cap in position on the open end of the cup will bring the lubricant into contact with the forward end of the tampon and will thus apply the lubricant thereto.

The pleated, cup-shaped wrapper not only serves as a protective enclosure or holder for the tampon, but as shown in FIG. 6, it serves as an applicator and a protective shield.

In preparing the tampon for use, the enclosure cap 9 is first removed from the end of the cupped wrapper 6. When that is done, a slight pull on the depending end 5 of the withdrawal cord will cause the walls of the wrapper or cup to open or flare outwardly substantially as shown in FIG. 3 and from which position the pleated wall can be readily spread out and folded back over the fingers engaged in holding the rear end part of the wrapper and tampon. This will be clear from FIG. 6 wherein it will be seen how the flared or open wrapper forms a protective skirt or shield in advance of the fingers. When the tampon is to be inserted, it is inserted into the body orifice the grip on the rear end of the tampon is released and the push of a finger on the central part 7 of the wrapper and against the rear end of the tampon then located forwardly of that area, will push the tampon forwardly and completely out of the wrapper and into position in the body orifice itself.

During the entire operation of removing the cupped wrapper and inserting the tampon in the body orifice, the tampon itself remains untouched by the fingers, all contact therewith being had through the wrapper. While the tampon is being inserted, the folded-back wrapper, substantially in the position shown in FIG. 6, forms a protective shield and prevents soiling of the hands. In the use of the device no parts of the wrapper enter the body orifice and the insertion of the tampon is quick, clean and easily performed.

Having thus described a single embodiment of the invention, it is obvious that the same is not to be restricted thereto, but is broad enough to cover all structures coming within the scope of the annexed claims.

What claim is:

1. A tampon comprising, a tampon body provided with a pull string, a cup-shaped, pleated wrapper closely fitting
around and containing the tampon body, the wrapper being of a size and shape to enable it to function as a protective shield when partially unfolded from the tampon and while the tampon has one end held in the hand during insertion, the pull string extending from the end of the tampon and along the inner wall surface of the wrapper and having a part disposed over the edge of the wrapper and extending externally of the wrapper so that a pull exerted on said part of the string will tend to cause an unfolding of the wrapper.

2. A tampon as provided for in claim 1, including a removable cap fitted over one end of the cup-shaped wrapper and serving as a cover therefor, said cup containing a lubricant for contact with an end of the tampon body in the cup-shaped wrapper.

3. A wrapper and protective shield for a tampon comprising, a cup having a pleated side wall normally disposed against the side of a tampon enclosed in the wrapper, the wall of the cup being capable of being spread outwardly to form a flaring skirt around the rear part of the tampon when the tampon is held at its rear end, a tampon contained within the wrapper, the wrapper being imperforate, the tampon having a pull string extending from it, said string extending along the side of the tampon and over the top edge of the cup and terminating in a dependent end on the outside of the cup and in such a position that a pull on the dependent end of the string will cause the wall of the cup to flare outwardly.

4. A wrapper and protective shield for a tampon comprising, a sheet of flexible material folded around and closely fitting and forming a cup into which a tampon is directly fitted, the sheet being substantially disk-shaped and being pleated to form it into a cup, the cup having a side wall of a length substantially as long as the tampon, the sheet being of a size to form a protective shield for the fingers when it is partially unwrapped from the tampon and when the tampon is held in the hand for insertion within a body orifice, the wrapper being wholly imperforate so that when it is interposed between the fingers and the tampon it forms a complete shield while the tampon is held for insertion, and a cap fitted over the end of the wrapper and the forward end of the tampon to hold the wrapper in its pleated condition closely around the tampon in direct contact therewith.

References Cited in the file of this patent

UNITED STATES PATENTS
2,733,714 Haas ------------ Feb. 7, 1956

FOREIGN PATENTS
903,262 Germany ------------ Jan. 31, 1955
1,018,586 Germany ------------ Oct. 31, 1957