The present invention relates to a catamenial device and to a sanitary napkin and holder and to certain subdivisions of the female anatomy.

Present day catamenial devices frequently incorporate belts which are difficult to adjust so that they are comfortable in the various positions the body assumes in standing, sitting, jumping, bending, etc. Such belts often cause chafing and irritation of the perineal and intergluteal skin areas. Also such sanitary belts in many cases tend to allow the sanitary napkin to slide out of its most absorptive position. Many of these problems are solved by the well known tampon or suppository; however, such tampons not infrequently cause vaginal irritations and infection.

It is, therefore, an object of the present invention to provide an improved catamenial device.

Another object of the invention is to provide an improved sanitary napkin and holder.

A further object of the invention is to provide a catamenial device which is comfortable to wear and which decreases the messiness of toiletty.

Still another object of the present invention is to provide a sanitary napkin and holder incorporating an indicating or stabilizing device which also functions as a tubular drain of the menstrual products.

A further object of the invention is to provide a catamenial device constructed so as to allow relatively complete freedom of movement with relatively little chafing or irritation of the skin.

Another object is to provide a catamenial device constructed to eliminate irritation and binding between the buttocks.

A further object is to provide a sanitary napkin holder constructed to better maintain a sanitary napkin in position than presently available sanitary napkin holders.

Related objects and advantages will become apparent as the description proceeds.

In accord with the present invention, there is provided a catamenial device comprising a section of material and a pair of loops of elastic material which are secured to the section of material at opposite sides thereof. The loops and section of material are proportioned and arranged so that the loops may be received in a somewhat stretched relation about the woman's legs at the junction thereof with the torso whereby they are supported by the conformation of the female figure to hold the section of material in close adjacency to the vaginal area.

The full nature of the invention will be understood from the accompanying drawings and the following description and claims.

FIG. 1 is a plan view of a sanitary napkin and holder embodying the present invention.

FIG. 2 is a perspective view of a portion of the female body showing the napkin and holder of FIG. 1 in proper position.

FIG. 3 is a sectional view of the napkin and holder of FIG. 1 showing it in position over the vaginal area.

FIG. 4 is an exploded perspective view of the holder of FIG. 1 and of an alternative napkin forming a part of the present invention.

FIG. 5 is a plan view of an alternative holder embodying the present invention.

FIG. 6 is a sectional view similar to FIG. 3 of the holder of FIG. 5 and of a further alternative sanitary napkin, the holder being in proper position for carrying the napkin over the vaginal area.

FIG. 7 is an enlarged sectional view of a portion of the structure of FIG. 6.

FIG. 8 is a plan view similar to FIG. 1 of a further alternative embodiment of the present invention.

Referring now to the drawings, and more particularly to FIGS. 1-3, there is illustrated a sanitary napkin and holder arrangement 10 comprising a generally rectangular, somewhat elongated and curved sanitary napkin and holder base 14 at the opposite longitudinal edges 15 thereof. In the embodiment of FIGS. 1-3, the loops are closed and are sewn to the longitudinal edges 15 so as to extend along those edges. The transverse edges 16 and 17 of the rectangular section 11 of cloth have elastic sewn thereto so as to cause the rectangular section of cloth to cup around a sanitary napkin 18 of conventional thickness and formed of layers of absorbent gauze material as is conventionally used for sanitary napkins.

The sanitary napkin 18 is detachably secured to the section 11 by means of conventional snap fasteners 20 and 21, the female portions 20A and 21A (FIG. 4) of the respective fasteners being mounted on the rectangular section 11 to facilitate the use of a washing machine ringer. It should be noted that the female portion 21A of the snap fastener 21 is located closer to the rearward edge 17 of the section than the female portion 20A is to the forward edge 16 of the section of material. Because the male portions of the snap fasteners are spaced generically and functionally only from the ends of the sanitary napkin, the loops 12 join the section 11 closer to the rearward end of the sanitary napkin than to the forward end thereof. Because the loops and snap portions are so proportioned and arranged (and for other reasons described below), the napkin 18 when in position (FIG. 3) covers only the forward portion of the perineum and does not cover the rectum.

A projecting element 25 consisting of a cylinder of gauze-like material is secured to the face of the napkin 18 which is away from the section 11 of material. In one specific embodiment of the invention, this element 25 has a diameter of approximately one-fourth inch and projects about one-half of an inch from the napkin. The element 25 is proportioned and arranged as to seat in the vestibule of the vagina but is not long enough to extend into the vagina itself. Thus, the element 25 is positioned to indicate and stabilize the device giving confidence to the wearer and assisting her that the napkin is in proper position, yet does not result in the irritation which may result from the conventional tampon.

It should be noted that the element 25 is located nearer to the rearward end of the napkin than to the forward end. In one specific embodiment of the invention, the element 25 is spaced two inches from the rearward end and two and one-half inches from the forward end of the sanitary napkin. Thus, the element 25 is so located that, when it is received in the vestibule of the vagina, the napkin 18 does not cover the rectum but does cover the forward portions of the perineum. It should also be noted that the cylindrical element 25 has a central axial hole or aperture 26 which leads to the napkin 18 and promotes menstrual drainage thereto.

Referring more particularly to FIGS. 2 and 3, between the legs of the female thigh is narrowed at the groove between the lateral margin of the labia majora and the proximal portion of the internal femoral region. Because of the narrowing of the female form in this area, the elastic loops 12 may be seated securely to encircle the thighs so as to pass through the above mentioned groove and the gluteal fold, and to extend laterally just above the trochanteric region, anteriorly across the subinguinal regions just above the medial termination of the inguinal.
ligament and again to said groove. When the holder and napkin of the present invention are so received on the female form, they are comfortable and cause little or no skin chafing and irritation.

Referring more particularly to FIG. 4, there is illustrated an alternative form of the napkin of the present invention which incorporates no projecting element such as the projecting element 25. In this embodiment, a different means is used for indicating to the wearer that the napkin is in proper position and for giving confidence to the wearer. In this embodiment, the male portions 190 of the snap fasteners are mounted further apart on the surface 181 of the napkin than are the female portions 20/A and 21/A on the section 11. This arrangement causes the napkin 102 to curve as illustrated and to bulge upwardly into engagement with the perineum giving confidence to the wearer.

Referring now to FIG. 5, an alternative form of holder is illustrated and is identical to the above described holder with the following exceptions. Elastic strips 200 are connected at their opposite ends to the generally rectangular elongated section 201 of material in such a manner as to span the opposite ends of the section 201. These strips replace and function similarly to the elastic of the edges 16 and 17 to cause (with the loops) a cupping action of the section 201 about a sanitary napkin. The strips 200, however, have an additional function of securing the napkin to the holder. The ends of a conventional sanitary napkin may be folded under these loops (in the manner illustrated in FIGS. 6 and 7) for securing the napkin to the holder and it is not necessary to use the snap fasteners 202. It should be noted that in order to cause the rearward end portion 205 of the section 201 to be spaced away from the rectum as above described in connection with FIGS. 1-4, the rearward end is folded over during manufacture of the holder and is secured in such a folded over condition by means of the female portion of one of the snap fasteners 202, this female portion extending through the folded over portion 205 and a more central portion of the rectangular section 201.

Referring to FIGS. 6 and 7, the preferred use of holder of FIG. 5 is illustrated and includes folding the ends 204 of a sanitary napkin 206 beneath the strips 200 and fastening those ends to the section 201 by means of snap fasteners 202, the sanitary napkin having the male portions of the snap fasteners mounted thereon and the section 201 having the female portions of the snap fasteners mounted thereon for easy washing.

Referring to FIG. 8, an alternative form of napkin and holder is illustrated as similar to the embodiment of FIGS. 1-3 with the exception that the loops have snap fasteners including male portions 308 and female portions 301 making the loops adjustable as to length. Of course, any of the above described embodiments may be so modified to make the loops adjustable as to length.

It should be understood that the sanitary napkin of the present invention might be used with other holding means. For example, the holder of FIGS. 1-4 might be replaced by a pair of conventional panties having the female portions of snap fasteners properly located thereon. It should also be mentioned that the above mentioned panties might be manufactured of easily disposable paper and also certain portions of the above described holders might be made of paper.

From the above description, it will be obvious that the present invention provides an improved catamenial device which is comfortable to wear and which is efficient in operation. A further advantage of the holder of the present invention is that it can be easily removed when employing the facilities of the restroom.

While the invention has been disclosed and described in some detail in the drawings and foregoing description, they are to be considered as illustrative and not restrictive in character, as modifications may readily suggest themselves to persons skilled in this art and within the broad scope of the invention, reference being had to the appended claims.

The invention claimed is:

1. A catamenial device having in combination, a sanitary napkin and holder therefor, said holder comprising a section of material in the form of a quadrilateral having front, rear and side edges, said material having a width between said side edges at least as great as the width of the sanitary napkin carried thereon, a pair of loops of elastic material forming the sole supporting means for the device, said loops under resilient tensile deformation being secured to the opposite side edges of said section of material along substantially the entire length thereof.

2. The catamenial device of claim 1 additionally comprising elongated pieces of elastic material secured under resilient tensile deformation to the front and rear edges of said section of material along substantially the entire length thereof, said section of material having a length between said front and rear edges at least as great as the length of the sanitary napkin carried thereon.

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