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DISPOSABLE CATAMENIAL DEVICE

Filed Feb. 24, 1961

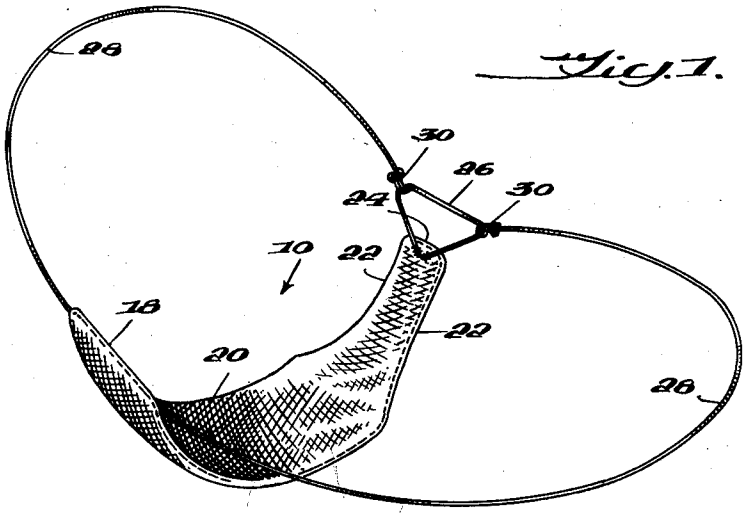


Fig. 1.

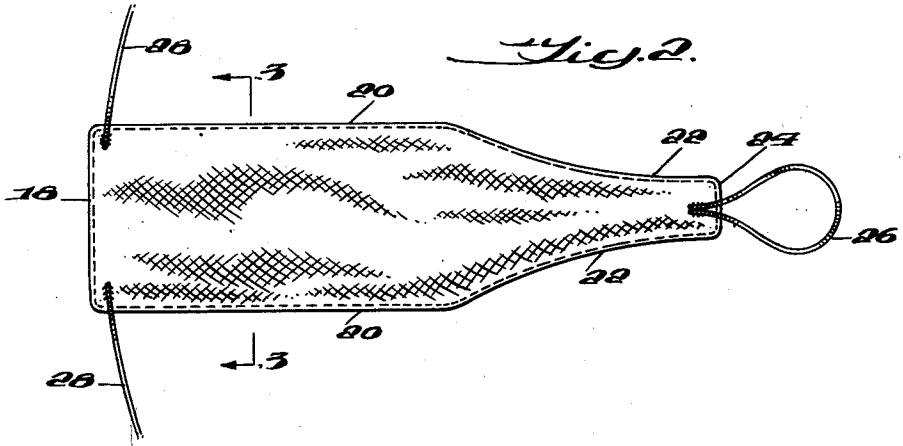


Fig. 2.

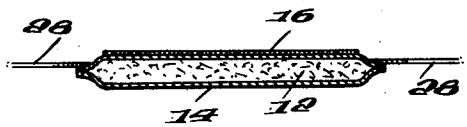


Fig. 3.

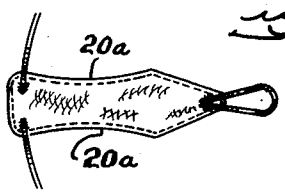


Fig. 4.

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DISPOSABLE CATAMENIAL DEVICE

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4 Claims. (Cl. 128—289)

This invention relates generally to catamenial pads, and more particularly to a combined disposable pad and belt.

There have been many attempts in the past to provide pads for the absorption of fluid discharge during the menses. Many of these devices in attempting to provide sufficient absorption capability also caused bulges noticeable through feminine outer clothing, which is psychologically unpleasant to women. Also the belts with which these pads were used were quite often visible through the outer clothing as was the means for attaching the ends of the belt together or the means for detachably connecting a pad to the belt. A further problem with the devices now available is that they provide permanent belts adapted for use with detachable pads to be replaced periodically. However, permanent belts are unsatisfactory because they must be cleaned frequently and are apt to be misplaced.

With these defects of the prior art in mind it is an object of this invention to provide a combination catamenial pad and belt of one piece construction which is disposable.

Another object of the invention is to provide a pad which is perfectly waterproof on one side so that the pad thickness can be smaller than prior pads to eliminate any telltale bulges.

A further object of the invention is to provide a combination pad and belt wherein the belt is constructed of fine elastic material and the pad is properly contoured to fit the legs of a user so that bulges are eliminated, persons of different sizes may use the device, and the pad is held firmly in place regardless of the wearer's position.

These objects and others ancillary thereto will become apparent from a description of a preferred embodiment wherein an absorbent pad is provided and is rendered completely waterproof on one side by the provision of a plastic coating. The pad has a forward edge which is squared and a rearward portion having curved edges which narrow to a flat end. The belt includes a small loop of a fine elastic material connected to the rearward end of the pad and two straps formed of a similar material connected to the pad at its forward corners which at their free ends are engaged with the loop.

These, together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout and in which:

FIG. 1 is a perspective view of the disposable combination pad and belt comprising the present invention;

FIG. 2 is a plan of the pad,

FIG. 3 is a lateral sectional view through the pad taken substantially along the plane defined by line 3—3 of FIG. 2, and

FIG. 4 is a plan of a modification.

With more particular reference to the drawing, numeral 10 generally designates the pad of the present invention. This pad is constructed of an absorbent material 12 completely encased within a fine, open, mesh fabric 14 for retaining the absorbent material 12 as a body in the desired shape. The pad is shaped to have a flat forward end 18, straight sides 20 extending rearwardly therefrom, and curved portions 22 which narrow rearwardly to form the rear flat end 24.

A thin plastic film 16 is applied to the entire back of the pad or fabric, such as by spraying, to render the pad completely waterproof. Since the pad is waterproof it may be of less thickness than pads of the prior art which were necessarily sufficiently thick not only to absorb all the fluid discharge, but to assure that no dripping or staining of a wearer's clothing occurred. Therefore, padding material considerably in excess of that required for absorption only had to be used. Note, however, that in the present invention the pad need only be sufficiently thick as to provide absorption of the maximum fluid discharge which will be encountered without the need for excessive padding as a safety factor, since once the fluid is absorbed by the pad material the waterproof plastic film will prevent staining of clothing and dripping.

The belt includes a loop 26 of a fine, strong elastic material connected to end 24 by stitching or any other suitable means. Straps 28 formed of the same material as loop 26 are connected to the corners of end 18 in the same manner as loop 26 is connected to the pad. Hooks 30 are attached to the free ends of straps 28 and are adapted to be releasably and slidably connected to loop 26.

In use, pad 10 is to be placed against the body with the side opposite plastic coating 16 against the skin, and with end 18 facing the front. Straps 28 are then moved up over the hips or around the thighs depending upon the wearer's preference and hooks 30 are engaged with loop 26 so that the device is held to the wearer's body.

If desired hooks 30 may first be connected to loop 26 so that a wearer need only step into the straps 28 and draw the device up her legs until it is properly seated against the body. Due to the provision of waterproof layer 16 the padding 12 may be thinner than the padding of previous pads. The effectiveness of this water-proofing has been admirably demonstrated by running water at high pressure through the pads. Those of the prior art consistently leaked under this testing procedure, while pads constructed according to the present invention permitted no water whatsoever to pass therethrough. This thinner construction to a large extent eliminates the bulges caused by the pads which women objected to in the prior art devices. Also the pad is of sufficiently short length that forward and rearward bulges will not be caused by sides 18 and 24 respectively since substantially the entire pad is located in the crotch area and therefore does not contact the clothing of a wearer in any area where bulges would be visible through the outer clothing.

The straps 28 and the loop 26 are of a material which is sufficiently small in diameter so as not to cause bulges through the clothing while the disposition of loop 26 in the lower inter-buttock area assures that the belt connection will obviate the problem of bugling.

The formation of curved portions 22 adapts the rearward portion of the pad to fit the curve of a wearer's legs for eliminating bulging and bending of the pad. This provides wearing comfort as well as preventing chafing of the legs. The elasticity of the straps and loop not only allow the same size device to be worn by persons of different sizes, but also hold the pad firmly in place whether the wearer is sitting, standing or reclining.

While sides 20 have been shown straight, and sides 22 concaved for improved fit, such concaving may be applied to the sides 20 in lieu of or in addition to its application to sides 22, as indicated at 20*a* in FIG. 4.

Since this device is rather inexpensive to manufacture it is completely disposable and thus eliminates those problems encountered with permanent belts adapted to be used with detachable pads.

While but one specific embodiment of the invention has been particularly shown and described, it is apparent that various modifications may be made in the invention without departing from the spirit and scope thereof, and

it is desired therefore, that only such limitations shall be placed thereon as are imposed by the prior art and set forth in the appended claims.

What is claimed is:

1. For use on a female wearer, a disposable combination catamenial pad and belt, comprising a pad for disposition in the crotch area of a wearer, said pad being of absorbent material having a forward end including two corners and a rearward end, the forward end of said pad being straight, the rearward portion of said pad being curved inwardly on each side edge to conform to the inner thigh portions of the legs of a wearer and narrowing to define a blunt rearward end, an open mesh fabric encasing the absorbent material, a belt structure for holding the pad against the body of a wearer, said belt structure including a small loop connected to the rearward end of said pad, straps connected to the forward end of the pad on the corners thereof, and hooks connected to the free ends of said straps for engagement with said loop and said pad being of sufficiently short length to fit entirely within the crotch area of a wearer and said loop being sufficiently short that it engages said straps in the lower inter-buttock area of a wearer to eliminate bulges, said loop and straps being constructed of a fine, strong, elastic material, and a thin plastic waterproof layer on one side of said pad.

2. The device of claim 1, wherein the sides of the forward portion of the pad are concave to conform to the body of a wearer.

3. For use on a female wearer, a disposable combination catamenial pad and belt, comprising a pad for disposition in the crotch area of a wearer, said pad being of absorbent material having a forward end including two corners and a rearward end, the forward end of said pad being straight, the rearward portion of said pad narrowing to define a blunt rearward end, an open mesh fabric encasing the absorbent material, a belt structure for holding the pad against the body of a wearer, said belt structure including a small loop connected to the rearward end of said pad, straps connected to the forward end of the pad on the corners thereof, and connecting at their other ends with said loop, and said pad being of sufficiently short length to fit entirely within the crotch area of a wearer and said loop being sufficiently short that it engages said straps in the lower inter-buttock area of a wearer to eliminate bulges, said loop and straps being constructed of a fine, strong, elastic material.

4. The device of claim 3 wherein side portions of the pad are concave to conform to the body of a wearer.

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