

Sept. 10, 1968

TOSHIKO SAIJO

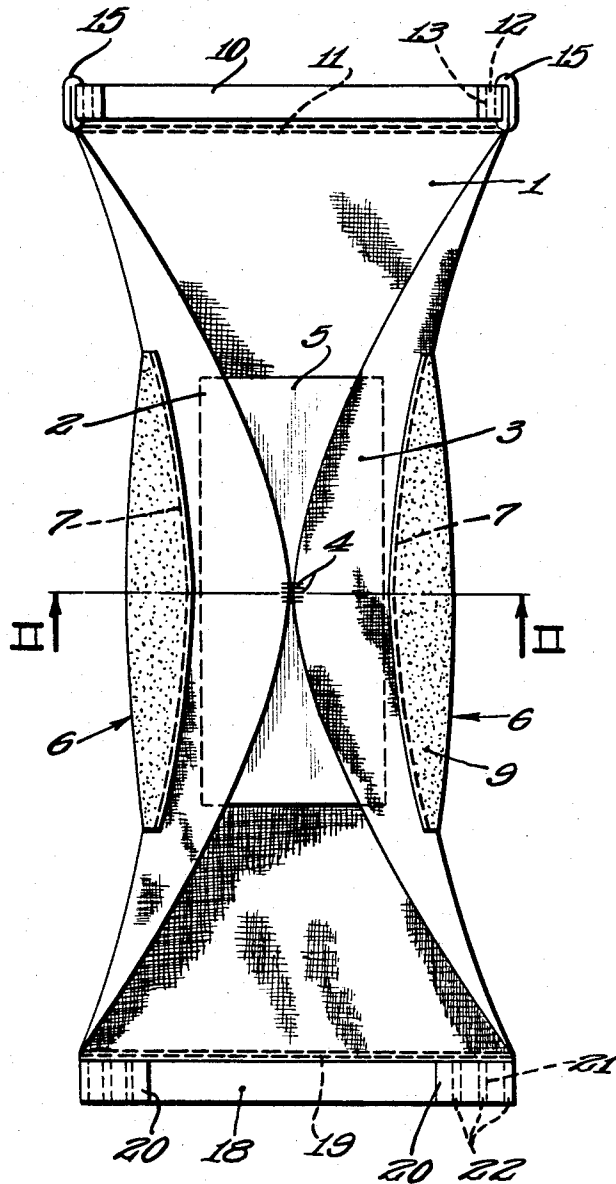
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SANITARY BELT

Filed May 28, 1965

2 Sheets-Sheet 1

Fig. 1



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2 Sheets-Sheet 2

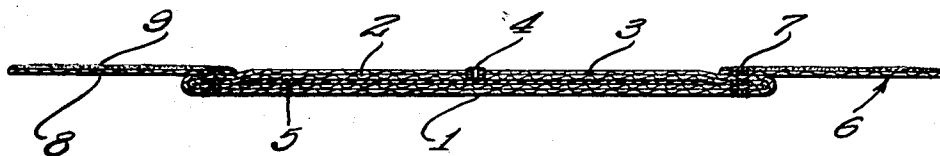


Fig. 2

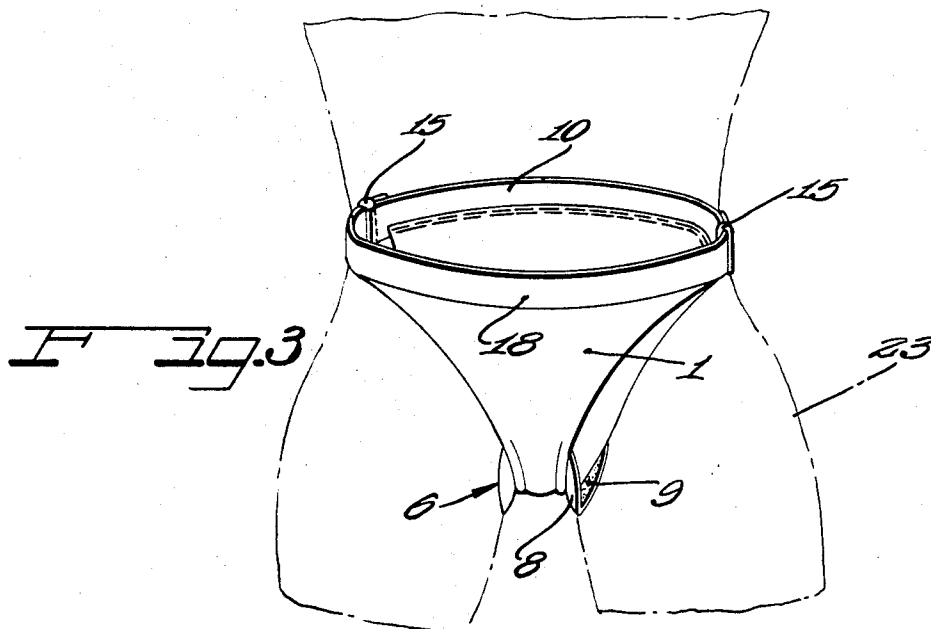


Fig. 3

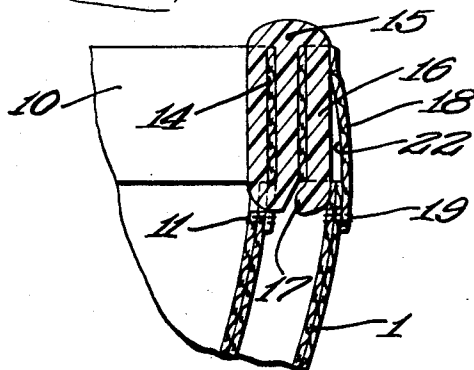


Fig. 4

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## SANITARY BELT

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### ABSTRACT OF THE DISCLOSURE

A sanitary belt has a body of fabric stretchable in a plurality of directions and initially of substantially rectangular shape, side portions of the body being folded in to form crescent-shaped laps over the remainder leaving the body with concave side edges, the laps abutting centrally of their confronting edges and being secured together at the abutting point to form an open-ended pocket with the remainder of the body receptive of a thin impervious shield freely disposed in the pocket. A half belt is attached to each end margin of the body and means connect the ends of the belt together around the waist of the wearer. Depending leakage preventing flanges are secured to the concave side edges.

This invention or discovery relates to improvements in a sanitary belt, and more particularly to a sanitary belt constructed to be a comfortable and form fitting garment for maintaining a catamenia receiver in proper position on the body of a user, although the invention may have other uses and purposes as will be apparent to one skilled in the art.

In the past, many and various types of sanitary belts have been provided, but were subject to objections and not as satisfactory as is desired. Were these formerly known belts equipped with an impermeable piece of material, such was usually too wide for comfort, and firmly affixed to the belt so that it could not be adjusted to the proper position for a particular individual user. In other instances, belts made heretofore failed to hold the catamenia receiver fixedly in proper position, tended to leak past the side edges of the crotch portion, were not as comfortable as desired while in use, and failed to furnish body support in the manner of a girdle.

With the foregoing in mind, it is an important object of the instant invention to provide a simple and yet completely effective sanitary belt.

Also an object of this invention is the provision of a sanitary belt embodying an impermeable member that may readily be adjusted to the most effective and comfortable position for an individual user.

Another object of the invention is the provision of a sanitary belt which functions to hold any type of catamenia receiver, tampons, bandages, napkins, or others, fixedly in proper position against unintentional movement, maladjustment, or dislodgement.

Also a feature of the invention is the provision of a sanitary belt that is soft and comfortable to the user, and can be worn effectively even when the user is highly active.

Still another feature of the invention is the provision of a sanitary belt so constructed as to add to the personal appearance of the user by providing abdominal support in the manner of a girdle.

It is also an object of the invention to provide a sanitary belt embodying soft depending flanges that cling tightly to the skin and prevent leakage around the edges of the crotch fitting portion of the belt.

While some of the more salient features, characteristics, and advantages of the instant invention have been above pointed out, others will become apparent from the

2

following disclosures, taken in conjunction with the accompanying drawings, in which:

FIGURE 1 is a plan view of the inside face of a sanitary belt, embodying principles of the instant invention, showing the same in flat position;

FIGURE 2 is a fragmentary enlarged central vertical sectional view taken substantially as indicated by the line II—II of FIGURE 1, looking in the direction of the arrows;

FIGURE 3 is a view of the structure of FIGURE 1 showing the same in position for use, the body being indicated by dotted lines;

FIGURE 4 is a magnified vertical sectional view through the upper portion of the structure as seen in FIGURE 3 illustrating the clip joining the elastic belt sections of the garment.

As shown on the drawings:

The illustrated embodiment of the instant invention includes a body portion 1 which comprises a fabric stretchable in both directions, which fabric may be made of organic or inorganic yarns or threads, helanca yarn, but which is preferably made of a material such as Spandex with the elastic threads running in both directions. While the body 1 may be fabricated from separate pieces of material stitched together, it is preferable to utilize a single piece of material, such as a circular knit fabric. Initially this body part is substantially rectangular in shape, and then opposite side portions are folded inwardly over the remainder to form crescent-shaped laps 2 and 3 as seen best in FIGURE 1, and the central portions of these laps are stitched together as indicated at 4, thus forming an open-ended pocket between the laps and the remainder of the body. The body, if made of circular knit fabric, will be of double thickness, as well as the laps, and in the region of the laps the entire body will be of quadruple thickness.

Within the pocket between the laps 2 and 3 and the remainder of the body 1, a liquid impermeable shield 5 is freely inserted. This shield may be made of any suitable thin flexible liquid impervious material, but is preferably a plastic film of a thickness in the neighborhood of 0.03 mm., and which can satisfactorily be made of polyethylene, polyvinyl chloride or equivalent material. Being seated freely in the pocket between the folds of fabric, the shield 5 may be easily adjusted to the most effective and comfortable position for the individual user of the device.

A strip of material 6 is secured, as by a line of stitching 7, to the body 1 in the central region of each of the concave side edges of the body. These strips 6 ultimately form depending leakage preventing flanges and are also made of material that is stretchable in both directions. Preferably, to provide better and more positive engagement with the skin of the user, each of the strips 6 comprises a layer of fabric 8 stretchable in both directions and a body contacting layer 9 of thermoplastic foam, such as polyvinyl chloride or polyurethane foam, whereby each flange 6 is absorbent of effluence.

At one end of the body 1 an elastic half belt 10 is secured along the body margin as by stitching 11. Each end portion of this half belt 10 is reversely folded upon itself as indicated at 12 and secured by stitching 13 after being passed through a slot 14 in a securing element or clip 15 as seen best in FIGURES 1 and 4. Each clip 15 is provided with a freely depending tongue 16 having a slightly inwardly turned lower end as indicated at 17.

Another elastic half belt 18 is secured along the opposite end margin of the body by stitching 19. Opposite ends of this half belt are also reversely bent upon the body of the belt as indicated at 20, and several rows of stitching 21 are provided to define spaced tunnels 22 in any selected one of which the prong 16 of the clip 15 may be inserted, as

seen in FIGURE 4 so that the two half belts may be connected around the body of the user, the spaced tunnels 22 providing an adjustment to acquire the proper and correct fit. The inwardly turned end or detent 17 on the clip prong 17 insures the clip remaining locked in one of the tunnels 22 against accidental dislodgment.

In FIGURE 3, I have illustrated my sanitary belt in proper position for use on the body 23 of a wearer. It will be noted that due to the multidirectional stretch of the fabric, the sanitary belt snugly and firmly fits the body. Since all of the fabric is under tension when the device is on the body, the device gives abdominal support to the body in the manner of a girdle, thereby adding to the user's appearance. The stretchability of the fabric permits proper adjustment of the impermeable member 5 after the device has been put on. The catamenia receiver itself, not shown in the drawings, may be positioned either before or after the sanitary belt is put on, and such receiver by virtue of the pressure exerted on the user's body by the belt will be retained fixedly in position regardless of the activity of the wearer. From the showing in FIGURE 3 it will be noted that the two side flanges 6—6 intimately engage the thighs, the foam lining of these flanges providing a soft clinging action against the skin. These absorbent flanges are therefore positioned automatically when the device is put on so as to effectively prevent any leakage of effluence. Further, it is not necessary to remove the sanitary belt in order to remove or change the catamenia receiver. Also, the sanitary belt may be laundered as frequently as desired without any damage. Once the proper adjustment of the half belts around the waist of the wearer is determined, it is not necessary to release the clips 15—15 to remove the garment, the stretchability of the fabric permitting removal and replacement of the device without the necessity of releasing the clips.

From the foregoing, it is apparent that I have provided a simple, leakproof, and highly effective sanitary belt. Further, the sanitary belt is extremely durable and long lived, and may be economically manufactured.

It will be understood that modifications and variations may be effected without departing from the scope of the novel concepts of the present invention.

I claim as my invention:

1. In a sanitary belt:

a body of fabric stretchable in a plurality of directions and initially of substantially rectangular shape, side portions of said body being folded in to form crescent shaped laps over the remainder leaving the body with concave side edges, said laps abutting centrally of their confronting edges, means securing said laps together at the abutting point to form an open-ended pocket with the remainder of said body, a thin impervious shield freely disposed in said pocket, a half belt attached to each end margin of said body, means to connect the ends of said half belts together around the waist of the wearer, and a leakage preventing flange freely depending from the central region of each concave edge of the body.

2. In a sanitary belt:

a body of fabric stretchable in a plurality of directions and initially of substantially rectangular shape, side portions of said body being folded in to form crescent shaped laps over the remainder leaving the body with concave side edges, said laps abutting centrally of their confronting edges, means securing said laps together at the abutting point to form an open-ended pocket with the remainder of said body, a thin impervious shield freely disposed in said pocket, a half belt attached to each end margin of said body,

means to connect the ends of said half belts together around the waist of the wearer, and

a leakage preventing flange freely depending from the central region of each concave edge of the body, said flanges each comprising a strip of fabric stretchable in a plurality of directions and a layer of absorbent plastic foam bonded to one face of said strip to contact the body of the wearer.

3. In a sanitary belt:

a continuous body part of circular knit fabric stretchable in a plurality of directions and initially substantially rectangular in shape and capable of supporting the front and rear portions of the abdomen in the manner of a girdle, side portions of said body part being folded inwardly over the remainder to provide laps abutting at the center of the body part, means securing said laps together at the abutting point to form an open-ended pocket, an impervious shield freely disposed in said pocket and adjustable at will relatively to the belt itself, and means to hold both ends of said body part around the waist of a wearer.

4. In a sanitary belt:

a body part of fabric stretchable in a plurality of directions and having concave side edges, a leak preventing flange extending outwardly from each of said side edges in the central region of said body, elastic means to hold the end edges of said body around the waist of a wearer, and a lining of absorbent plastic foam on each of said flanges.

5. In a sanitary belt:

a body having concave side edges, said body being of fabric stretchable in a plurality of directions, means forming a pocket on the central portion of said body, a thin flexible impervious shield receptive of a replaceable catamenia receiver and freely disposed in said pocket and adjustable at will relatively to the belt itself, depending leak preventing flanges secured to the margins of said body adjacent said pocket, and elastic means to hold the end edges of said body around the waist of a wearer.

6. In a sanitary belt:

a continuous body part of circular knit fabric stretchable in a plurality of directions and initially substantially rectangular in shape and capable of supporting the front and rear portions of the abdomen in the manner of a girdle, side portions of said body part being folded inwardly over the remainder to provide laps abutting at the center of the body part leaving the body part with concave side edges, means securing said laps together at the abutting point to form an open-ended pocket, a respective leak-preventing flange extending outwardly from each of said side edges, and means to hold both ends of said body part around the waist of a wearer.

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