

July 10, 1962

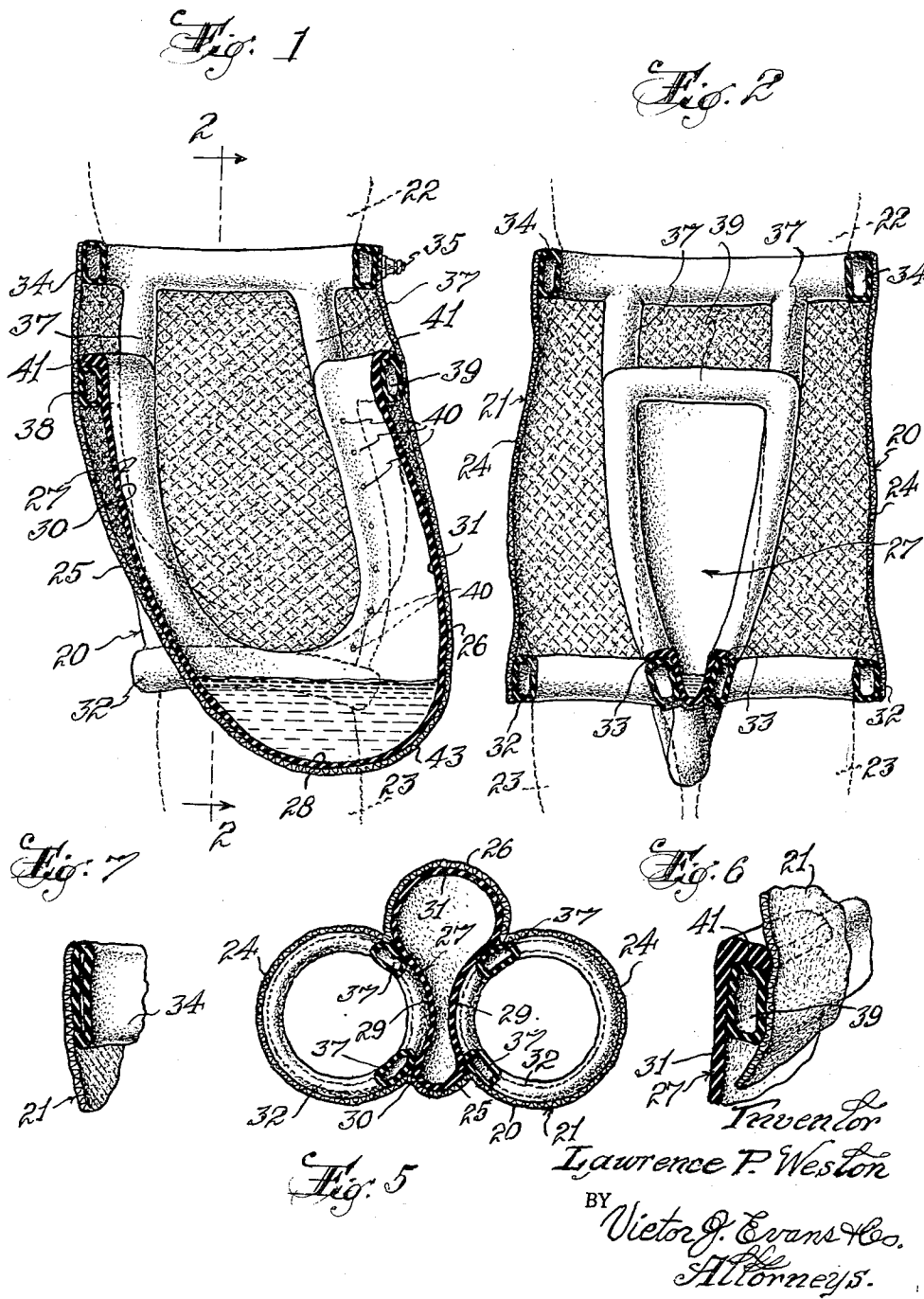
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GARMENT

Filed Feb. 9, 1961

2 Sheets-Sheet 1



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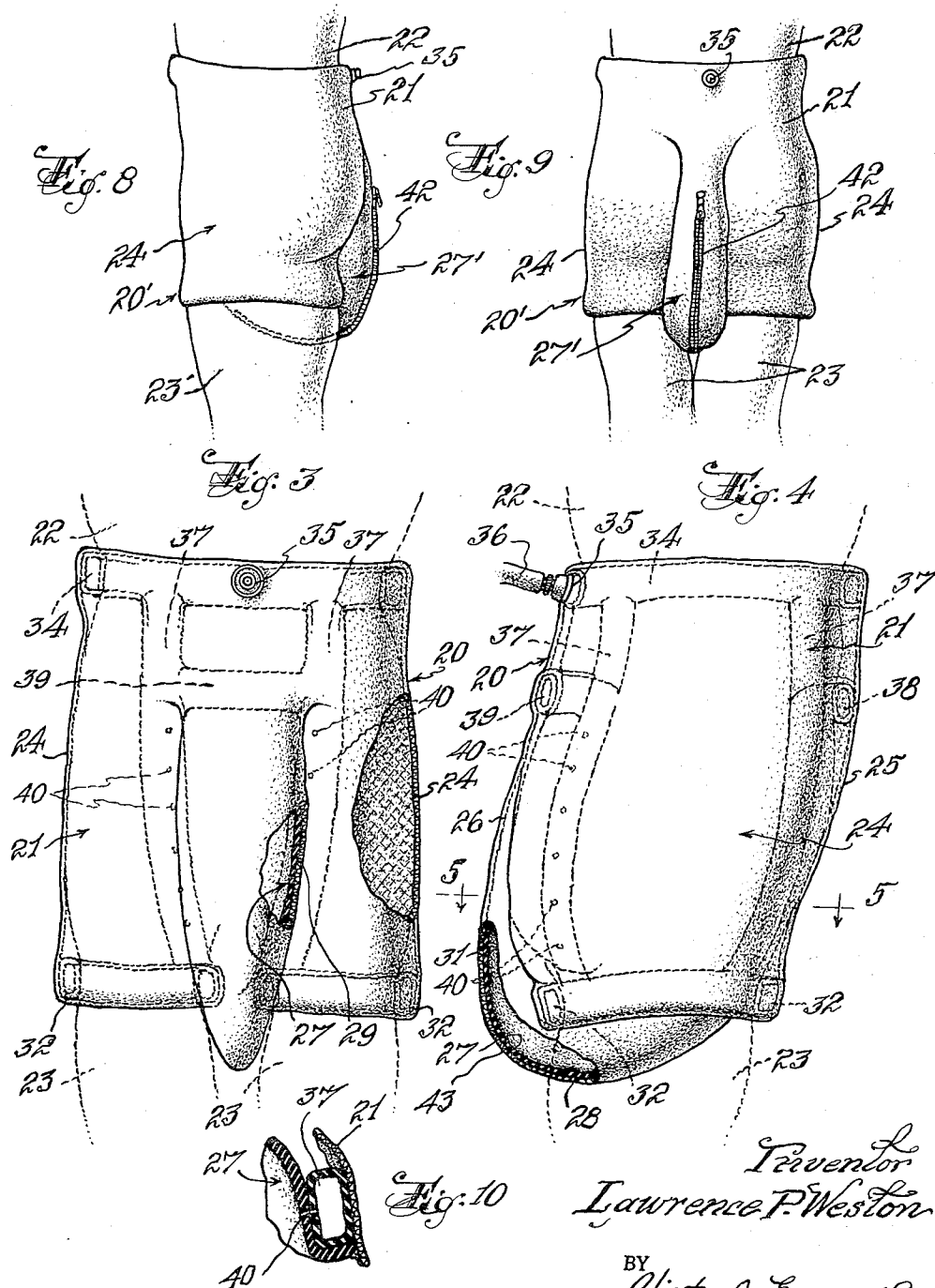
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GARMENT

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The present invention relates to a garment, and more particularly to a garment that is adapted to be worn by a patient or sick person or bedridden person whereby such a person can discharge urine or the like and have such urine collected in a bag which is a part of the garment as for example when a bedridden person is unable to get up out of bed and attend to his or her normal private functions.

An object of the present invention is to provide a garment which is adapted to be comfortably and conveniently worn by a person or patient as for example when a patient is lying in a hospital bed, and wherein with the present invention fluids such as urine that are discharged from the body will be collected in a bag that forms part of the garment being worn by the patient so that contamination or messing up of the bed sheet or other parts of the bed will be prevented, and wherein the bag containing the fluid can later be emptied as desired or required, as for example when a hospital attendant or other person is able to help the patient in emptying the fluid or liquid from the bag.

Another object is to provide a garment which is adapted to be comfortably and conveniently worn on the waist or hip portion of a person's body, and wherein the garment includes an outer member that may be made of stretchable rubberized cloth or other suitable material, there being a water tight or water proof bag secured within the outer member for collecting the fluid that is discharged from the vicinity of the crotch of the patient, and wherein the garment of the present invention further includes a plurality of hollow air inflatable members that are adapted to be conveniently inflated as for example by means of compressed air that can be supplied from a suitable source of supply so that with the member inflated by air pressure, the garment can be maintained in an extended or inflated condition so as to insure that the garment can be worn with maximum comfort and facility, and wherein the air inflated members will also help hold the parts such as the fluid collecting bag in proper position so as to accomplish the desired results.

Another object is to provide a device of the character described that may be utilized conveniently and readily by men or women, and wherein in one form of the invention the air inflatable members can be deflated in order to permit the girdle like garment to be readily removed from the patient's body so as to facilitate the emptying of the fluid holding bag, or else a slide fastener may be provided for facilitating the emptying of the fluid holding bag so that by utilizing a slide fastener it is not necessary to completely remove the garment from the patient's body in order to empty the bag, and wherein the girdle like garment of the present invention is adapted to be used over and over again as desired.

Further objects and advantages of the invention are to provide improved elements and arrangements thereof in a device of the character described that is economical to produce, durable in form and conducive to the most economical use of materials and uniformity of members formed therefrom.

Still further objects and advantages will become apparent in the subsequent description in the specification.

In the drawings:

FIGURE 1 is a vertical sectional view taken through the girdle like garment of the present invention.

FIGURE 2 is a sectional view taken on the line 2—2 of FIGURE 1.

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FIGURE 3 is a rear view of the garment of the present invention, and with parts broken away and in section.

FIGURE 4 is an elevational view looking at one side thereof.

FIGURE 5 is a sectional view taken on the line 5—5 of FIGURE 4.

FIGURE 6 is a fragmentary perspective view, with parts broken away and in section, showing the fastening or securing means for attaching the bag in place within the outer member.

FIGURE 7 is a fragmentary sectional view illustrating the position assumed by the parts when the device is inflated so as to permit the convenient removal of the garment from the body or to facilitate the placement of the garment on the body.

FIGURE 8 is a side elevational view of a modification wherein a slide fastener is provided for selectively permitting emptying of the bag.

FIGURE 9 is a rear elevational view of the modified girdle like garment shown in FIGURE 8.

FIGURE 10 is a fragmentary sectional view showing the apertures for establishing communication between the air inflatable members and the bag so as to help maintain slight air pressure in the bag whereby the bag will be kept open ready to receive fluid discharged from the wearer's or patient's body.

Referring in detail to the drawings, and more particularly to FIGURES 1 through 7 of the drawings, the numeral 20 indicates the girdle like garment of the present invention which is shown to comprise an outer member that is indicated generally by the numeral 21, and the outer member 21 may be made of a suitable form fitting stretchable material such as rubberized cloth or the like, and the upper and lower ends of the outer member 21 are open so as to facilitate the positioning of the garment on the patient's body, the numeral 22 indicating in broken lines a portion of the patient's body and the garment 20 of the present invention is adapted to be worn adjacent the waist portion of the body 22. The numeral 23 indicates in broken lines leg portions of a patient or person utilizing or wearing the garment 20, and the primary purpose of the present invention is to provide a means for eliminating the necessity of a bed pan or the like since with the present invention urine or other fluids discharged by a bedridden patient can be conveniently collected and kept from contaminating a bed or the like so that at a later period of time the fluid that has been discharged and collected can be conveniently emptied into a toilet or the like so as to permit the garment to be used again by the patient, as for example when the patient is in a hospital or other locality.

As shown in the drawings the outer member 21 of the garment 20 is shaped to include outer arcuate portions 24 which are adapted to be arranged contiguous to the size of the wearer, and the arcuate portions 24 are joined together at the front of the garment by a curved section 25, FIGURE 5. The arcuate portions 24 are joined together at the rear of the garment by an outwardly bulging section 26.

There is also provided a water tight or fluid tight bag that is arranged and secured within the outer member 21, and the bag 27 has its lower end closed as at 28, FIGURE 1. The bag 27 is adapted to be arranged contiguous to the crotch of the wearer so as to provide a means for conveniently collecting urine or the like that is discharged by the patient, and as shown in FIGURE 5 the bag 27 includes side sections 29 as well as a front section 30, and the front section 30 is arranged within and is contiguous to the curved section 25 of the outer member 21. The rear portion 31 of the bag 27 is arranged within and contiguous to the outwardly bulging section 26 of the outer member 21.

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The girdle like garment of the present invention further includes a pair of hollow inflatable ring members 32 that are secured to the lower inner portion of the outer member 21 in any suitable manner, and these ring members 32 are adapted to snugly receive the legs 23 of the wearer. The lower portion of the bag 27 is suitably affixed or secured to the ring members 32 as at 33, and these parts can be secured together in any suitable manner, as for example by vulcanization.

Arranged within the upper portion of the outer member 21 is a hollow inflatable waist or body encircling tube 34 which has an air valve 35 connected thereto whereby compressed air from a suitable source of supply can be introduced from a hose 36 through the valve 35 and into the tube 34, FIGURE 4. As shown in the drawings there is provided a plurality of spaced apart generally vertically disposed conduits or tubes 37 which serve to connect and establish communication between the tube 34 and the rings 32 so that for example as air is introduced from the hose or line 36, the air pressure will be distributed throughout the various hollow inflatable tubes or conduits within the garment in order to cause the garment to become expanded whereby the garment will snugly and properly fit the body of the user. Front and rearwardly arranged generally horizontal cross pieces 38 and 39 are suitably affixed to or formed integral with the conduits 37 and these cross pieces 38 communicate with the conduits 37 so that some of the air can enter and inflate the cross pieces 38 and 39 and these cross pieces help maintain the garment in its proper position at the front and back of the patient's body. In addition the upper portion of the bag 27 is adapted to be secured or vulcanized as at 41 to the cross pieces 38 and 39, so that these cross pieces help maintain the bag 27 supported in its proper location.

As shown in FIGURE 1 for example there is provided a plurality of small apertures or openings 40 which establish communication between the conduits 37 and the interior of the bag 27 so that these small openings 40 permit some air to enter the interior of the bag which has the effect of helping to maintain the bag in a somewhat inflated condition. By having the bag maintained in such an inflated condition, the bag will be kept or held open so that fluid such as urine discharged from the patient's body can more readily enter and be received and collected in the bag.

Attention is now directed to FIGURES 8 and 9 of the drawings wherein there is illustrated a modified girdle like garment which is indicated generally by the numeral 20', and the garment 20' generally has the same construction as the previously described garment 20, and the garment 20' is adapted to be used in substantially the same manner as the previously described garment 20. However, in FIGURES 8 and 9 the bag 27' is provided with a slide fastener 42 which facilitates the emptying of the bag 27', so that for example it is not necessary to deflate the various hollow members of the garment 20' in order to remove the garment and empty the bag as is the case with the garment shown in FIGURES 1 through 7. Thus, to empty the garment 20' of FIGURES 8 and 9 it is only necessary to manually move the slide fastener 42 so as to provide or define an access opening which can be used for emptying the contents of the bag 27' into a suitable receptacle or the like, and then the slide fastener 42 can be closed so that the garment 20' can be used again.

The garment of the present invention can be used in different localities under different circumstances, and for example the garment can be worn by a patient after completion of an operation as for example when the patient is bedridden and unable to make his or her way to a toilet facility, and wherein the present invention will eliminate the necessity of using a bed pan.

The outer member 21 is provided with a depending portion 43 which surrounds and encloses the bag 27.

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From the foregoing, it is apparent that there has been provided a garment which is adapted to be worn by persons who may require an ever present receptacle for substances discharged from the body such as urine, excrement or the like, and while the present invention has been specifically described for use by persons lying in bed such as a hospital bed, it is to be understood that the present invention is not restricted to such an application or use. The following will serve as other examples of how the garment can be used but these are only illustrative and the garment is adapted to be used wherever the same is needed or desired and it is especially suitable as a device to be worn by patients such as those which have undergone operations or the like and for example certain types of operations such as those seeking to cure cancer or other diseases or maladies often have a tendency to leave the patient, in a post-operative condition, in such a state that they are not able to readily control the urine and excrement discharge. With the present invention the garment is adapted to be snugly and comfortably worn on the body at all times so that even though there is a loss of control by the person the discharge from the body will be collected in the bag 27 or the bag 27' and the bag can subsequently be emptied when it is convenient. In other words a person may wear the garment 20 while walking on the street or performing other activities and the garment will provide a degree of security or self-confidence for those persons who may be suffering from a condition which is such that they do not have control of their fluid or other discharge from the body and such discharge will be automatically collected in the bag 27.

It is to be noted that the garment includes the pair of lower ring members 32 as well as the upper tube 34, and these hollow inflatable members in conjunction with the other parts serve to insure that the garment will have a snug tight fit on the body when these members are inflated. The practical effect of having such a snug fit is to insure that no odors will be given off from any of the substances collected in the bag 27, and also such a tight fit will help insure that there will be no accidental spillage or passage of the collected material from the garment.

The garment is adapted to be made of a material so that those portions of the garment which are in contact with the body will be of a generally soft comfortable fit and type of material whereby the garment will not cause chafing, rubbing, or other discomfort to the wearer.

It is to be noted that the garment of the present invention includes the outer member 21 which can be made of a suitable material such as rubberized cloth that is stretchable so that it will readily conform and fit the body of the wearer, and the upper portion of the outer member 21 is adapted to be secured in any suitable manner to the hollow inflatable tube 34, and there is provided a valve 35 whereby air can be supplied from a suitable source of supply of compressed air into the interior of the tube 34. Since the tube 34 communicates with the ring members 32 through the medium of the conduits 37, and since the cross pieces 38 and 39 are also arranged in communication with the conduits 37, it will be seen that as air is introduced into the tube 34 through the valve 35, that the air will flow through all of the various conduits and ring members and cross pieces so that they will all be inflated as air is introduced through the valve 35. Similarly, when air is to be discharged from these hollow members, pressure can be exerted on the valve 35 so that for example a hollow member 34 can assume the deflated position shown in FIGURE 7. The various hollow members are adapted to be inflated when the device is being worn for the previously described purposes, and when the device is to be removed from the body the air can be let out of the hollow members so as to facilitate the removal of the garment from the body. The form of the invention shown in FIGURES 1 through 7 is such that the various hollow members are adapted to be de-

flated in order to remove the garment from the body so as to facilitate emptying of the bag 27, but the form of the invention shown in FIGURES 8 and 9 is such that it is not necessary to deflate the hollow members and remove the garment from the body to empty the bag since the garment 20' of FIGURES 8 and 9 includes the slide fastener 42 for the bag 27' which can be readily manually actuated or opened to gain access to the bag 27' to facilitate the cleaning thereof.

The bag 27 is arranged so that it fits between the legs 23 of the wearer in the vicinity of the crotch, and the top of the bag is open while the lower end of the bag is closed as at 28. The outer member 21 is shaped to include the depending portion 43 which surrounds the lower portion of the bag 27 and which helps support the bag, and as shown in FIGURE 1 for example the bag is arranged so that its lower portion projects slightly to the rear in order to permit the bag to be arranged and supported in a manner that is most comfortable and most convenient to use so as to facilitate the reception and holding of the fluid or solid substances which may be discharged from the wearer's body.

The upper portion of the bag 27 is bonded or otherwise affixed in place as for example as indicated by the numeral 41 the top of the bag 27 may be bonded to the hollow cross pieces 38 and 39. The lower portion of the bag 27 may be secured in any suitable manner to the ring members 32 at the points indicated by the numeral 33. The small openings 40 permit a small quantity of air pressure to flow from the hollow inflatable members into the interior of the bag 27 so as to help maintain the bag in a partially expanded or inflated position which will facilitate the collection of the material discharged from the body into the bag.

The parts can be made of any suitable material and in different shapes or sizes.

The inflating of the hollow members help insure that the garment will maintain its desired proper shape or configuration. The garment can be worn by persons laying in bed or it can be worn at other times such as when a person is working or walking or performing other activities and the garment will automatically collect any substances such as urine or solid material or matter which may be discharged inadvertently or uncontrollably from the patient's body.

As a further modification, a drain opening may be provided for the bag so that as for example when a bedridden person laying in bed with the garment being worn, the liquid or the like collected in the bag can automatically drain from the bag to a suitable receptacle, toilet or the like so that the bag will be continually and automatically drained off or emptied. The outer member serves to retain the inflatable members and other parts in their proper location so that when these inflatable members are filled with air the proper and desired fit will be insured. The garment is such that other articles of wearing apparel such as pajamas, regular pants or the like can be worn over the garment and since the garment of the present invention is form fitting it will not interfere with normal wearing of such other articles of wearing apparel. Also, an inlet fitting can be provided for the garment whereby water from a suitable source of supply can be introduced into the bag or other parts in order to facilitate the cleaning out of the garment after the same has been worn or used. The device is in the shape and formation of a girdle and is adapted to have elasticity so that it will have a tendency to remain in the proper location on the body. The top of the garment is open, and the ring members 32 are also open so as to permit the garment to be readily worn on the body in the same manner as a pair of trunks for example.

It will now be clear that there is provided a device which accomplishes the objectives heretofore set forth. While the invention has been disclosed in its preferred form, it is to be understood that the specific embodiment thereof

as described and illustrated herein is not to be considered in a limited sense as there may be other forms or modifications of the invention which should also be construed, within the scope of the appended claims.

What is claimed is:

1. As a new article of manufacture, a girdle like garment comprising an outer member having an open top and an open bottom portion, hollow inflatable elements secured within said outer member, a fluid tight bag secured within said outer member and said bag having a closed lower end, and said bag adapted to be arranged contiguous to the crotch of the wearer between the legs of the wearer, valve means connected to said inflatable elements, and means establishing communication between the inflatable elements and said bag, said last named means comprising a plurality of small apertures.

2. In a device of the character described, an outer member made of form fitting stretchable material and said outer member being shaped to include outer arcuate portions joined together at the front thereof by a curved section, said arcuate portions being joined together at the rear by an outwardly bulging section, a water proof bag having a closed bottom and said bag being arranged in the central portion of the outer member and said bag including side sections, said bag further including a front section arranged within and contiguous to the curved section of said outer member, the rear portion of said bag being arranged within and contiguous to the outwardly bulging section of said outer member, said outer member further including a depending portion which surrounds the closed bottom portion of the bag, a pair of hollow inflatable ring members secured within the bottom portion of said outer member, and the lower portion of said bag being secured to said ring members, a hollow inflatable tube of generally circular formation secured within the upper portion of said outer member, a valve connected to said tube, and spaced apart hollow inflatable conduits connecting said tube and ring members together.

3. In a device of the character described, an outer member made of form fitting stretchable material and said outer member being shaped to include outer arcuate portions joined together at the front thereof by a curved section, said arcuate portions being joined together at the rear by an outwardly bulging section, a water proof bag having a closed bottom and said bag being arranged in the central portion of the outer member and said bag including side sections, said bag further including a front section arranged within and contiguous to the curved section of said outer member, the rear portion of said bag being arranged within and contiguous to the outwardly bulging section of said outer member, said outer member further including a depending portion which surrounds the closed bottom portion of the bag, a pair of hollow inflatable ring members secured within the bottom portion of said outer member, and the lower portion of said bag being secured to said ring members, a hollow inflatable tube of generally circular formation secured within the upper portion of said outer member, a valve connected to said tube, and spaced apart hollow inflatable conduits connecting said tube and ring members together, and hollow inflatable cross pieces arranged within said outer member and said cross pieces communicating with said conduits and said cross pieces being affixed to the upper portion of said bag, there being a plurality of small apertures establishing communication between said conduits and the interior of said bag.

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