UNITED STATES PATENT OFFICE

PNEUMATIC RUPTURE CONTROL GARMENT

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2 Claims. (Cl. 128—96)

1. The present invention relates to variable pressure establishing and exerting means which is highly useful in the technique of rupture control and appertains, more particularly, to improved expandable and contractable pneumatic pad facilities incorporated in and forming an improved part of a body embracing supporter; for example, a yieldable foundation garment.

It is a matter of common knowledge that, generally speaking, appliances ordinarily used for such purposes are in the forms of so-called trusses and belts which, as currently designed and constructed, embody one or more pads which, in use, bear forcibly against ruptured areas. Not only are such trusses cumbersome and uncomfortable, they are objectionable because of metal and leather constructional parts, are easily displaced and are tiring when allowed to remain in place for a prolonged period of time.

In carrying out the principles of the instant invention, I have evolved and produced a novel pneumatic pad equipped garment which is free of metal, springs, leather and crotch straps, one which exerts smooth hand controllable pressure against the rupture while conforming in shape to the rupture, one in which the degree of pressure may be adjusted and regulated according to exertion anticipated and is such in style and form to minimize chafing and undue restrictive body binding.

Another object of the invention is to provide a special rupture control garment which is in the form of a girdle which acts as an abdominal supporter and which embodies a non-elastic front panel, the latter provided with pocket means containing an accessibly arranged inflatable bladder constituting the aforementioned rupture control pad.

Another object of the invention is to provide a foundation garment of the nature alluded to wherein the latter is provided with a filler hose so constructed and arranged as to accommodate a readily attachable and detachable air bulb for variable inflation purposes.

A still further object of the invention is to provide a pocket construction in a non-elastic girdle front having a reinforcing patch, preferably of rubber, which reduces the likelihood of undesirable outward bulging.

Other objects and advantages will become more readily apparent from the following description and the accompanying illustrative drawings.

In the drawings, wherein like numerals are employed to designate like parts throughout the views:

Figure 1 is a perspective view of a foundation garment or girdle constructed in accordance with this invention and showing the manner in which the hand squeezed air bulb is, in practice, employed.

Figure 2 is a horizontal section taken on the plane of the line 2—2 of Figure 1, looking in the direction of the arrows.

Figure 3 is an enlarged fragmentary sectional view on the line 3—3 of Figure 2, looking in the direction of the arrows.

Figure 4 is a detail elevational view of the bladder.

Figure 5 is a fragmentary sectional and elevational view of the intake end of the bladder hose.

Figure 6 is a perspective view of a bulb-type inflating device constituting an accessory for convenient use.

Referring now to the drawings and particularly to Figure 1 the numeral 8 denotes a foundation garment, a type which is often and otherwise referred to as a girdle and also has an abdominal supporter. This is characterized by elastic webbing 9, forming the sides and rear portions, and a non-elastic panel-like front 10. Zipper fastening means comprising components 11 and 12 may, in practice, be provided.

The pad is, specifically speaking, in the form of a rubber or equivalent bladder 13, which is preferably of the shape shown in Figure 4. It is to be understood, however, that the shape and size of the bladder will vary according to unpredictable requirements of the trade. The bladder is provided with an air supply and exhausting hose 14 of appropriate length, said hose being provided on its intake end with a rigid nipple-like fitting 16 which, in turn, is internally provided with an insertable and removable air valve 15 of appropriate form. The valve is shown with a trip stem 17. The nipple and valve arrangement serves to accommodate a rigid nozzle 18 mounted on a pressure hose 19 attached to a valve air bulb 20. The discharge end of the nozzle is apertured and pointed as at 21, whereby to trip the valve and to supply the desired air pressure.

On its inner surface the non-elastic satin or equivalent panel 10 is provided with a pocket, the same constructed from a suitably attached sheet of rubber or equivalent stock 22 (see Figures 2 and 3). Arranged and stitched in place on the interior of the pocket is a reinforcing or extra ply of rubber 23 (see Figure 3) and this element serves as a backing and strengthening wall, the same being interposed between the outer surface of the bladder and inner surface of the panel 10,
With this construction outward bulging of the panel is restrained to a minimum. It follows that when the bladder or pad is inflated, the principal pressure is toward and against that part of the anatomy constituting the focal area of the rupture.

The combination garment functions collectively as a girdle, corset, abdominal supporter and/or foundation garment, is characterized by an elastic major portion, and a non-elastic front panel portion, the latter being novel in that it has incorporated therein an expandable and contractable pneumatic pad. Collectively these parts contribute their proportionate shares in the provision of reliable and comforting means for rupture control. The degree of inflation of the pad is variable according to the needs and requirements of the individual wearer. Thus, the wearer may apply and release pressure at will and according to discretion. The hand bulb may be optionally left in place, or detached in keeping with the needs of the wearer.

Changes in shape, size, materials and rearrangement of details and parts may be resorted to in actual practice, so long as they do not depart from the spirit of the invention or the scope of the appended claims, as is well understood.

I claim:

1. A rupture control appliance of the class described comprising a girdle including an elastic endcircling band and a non-elastic front abdominal panel carried by said band, said panel being provided on its inner body contacting surface with a marginally attached ply of the elastic material, said ply coating with the panel in defining a pneumatic pad holding pocket, and a second elastic ply within said pocket attached to the inner surface of said panel outwardly of said first named ply, said second ply constituting a reinforcing and pad backing element.

2. A rupture control appliance of the class shown and described comprising a girdle embodying an elastic encircling band and a non-elastic abdominal panel carried by the frontal portion of said band, a pneumatic pad mounted on the interior of said abdominal panel, said pad being in the form of an inflatable and deflatable bladder, said bladder having an air hose, said hose being provided on its intake end with a rigid sleeve-type nipple, a tire-type inflation valve mounted in the intake end of said hose and wholly housed and protected in the inner end portion of said nipple, and a readily attachable and detachable pressure pumping bulb provided with a companion hose terminating in a rigid nozzle adapted to fit telescopically and removably into said nipple and to come into direct engagement with the valve stem for purposes of opening the valve and inflating said bladder.

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