

Dec. 27, 1966

H. G. NELKIN
MALE SUPPORTING GARMENT

3,294,086

Filed May 15, 1964

3 Sheets-Sheet 1

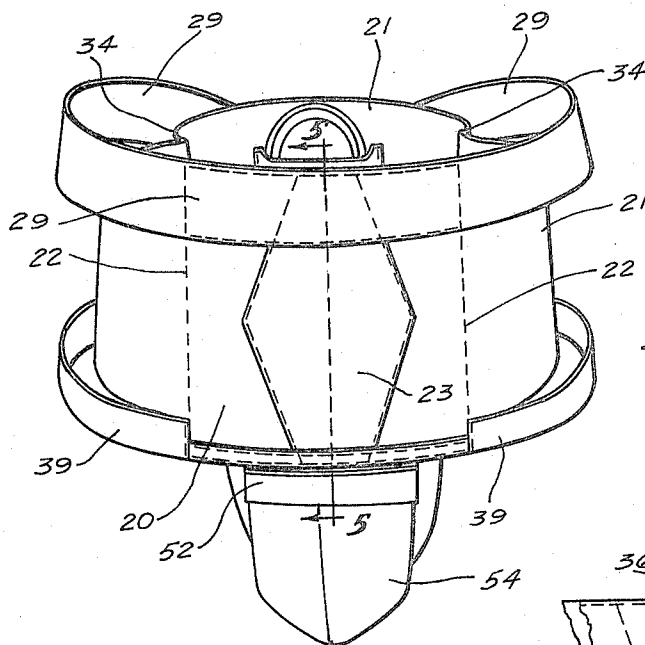


Fig. 1

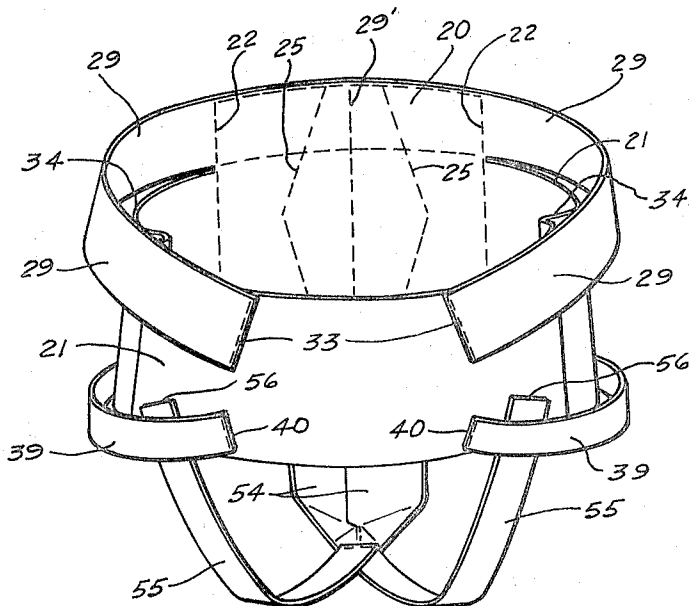


Fig. 2

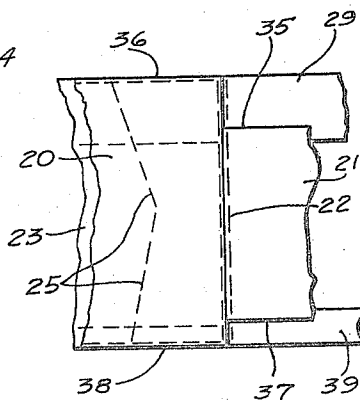


Fig. 9

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3 Sheets-Sheet 2

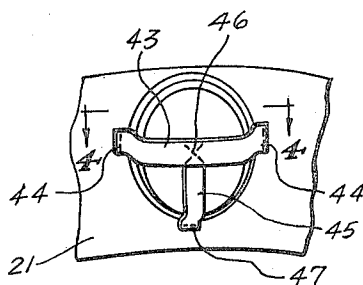


Fig. 3

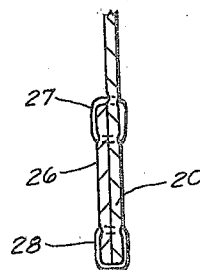


Fig. 8

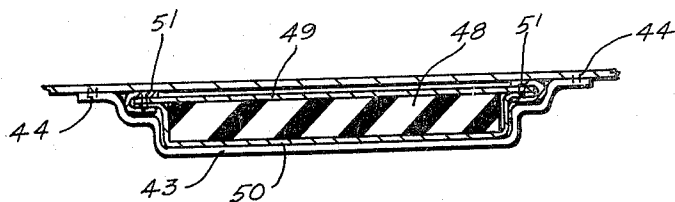


Fig. 4

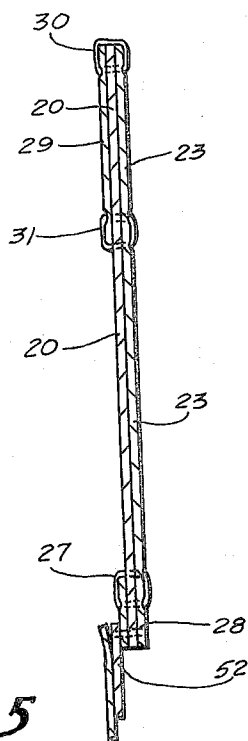


Fig. 5

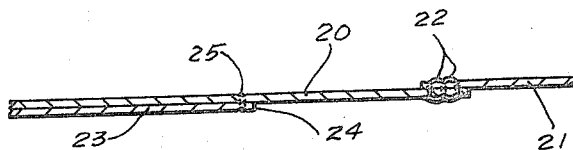


Fig. 10

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3 Sheets-Sheet 3

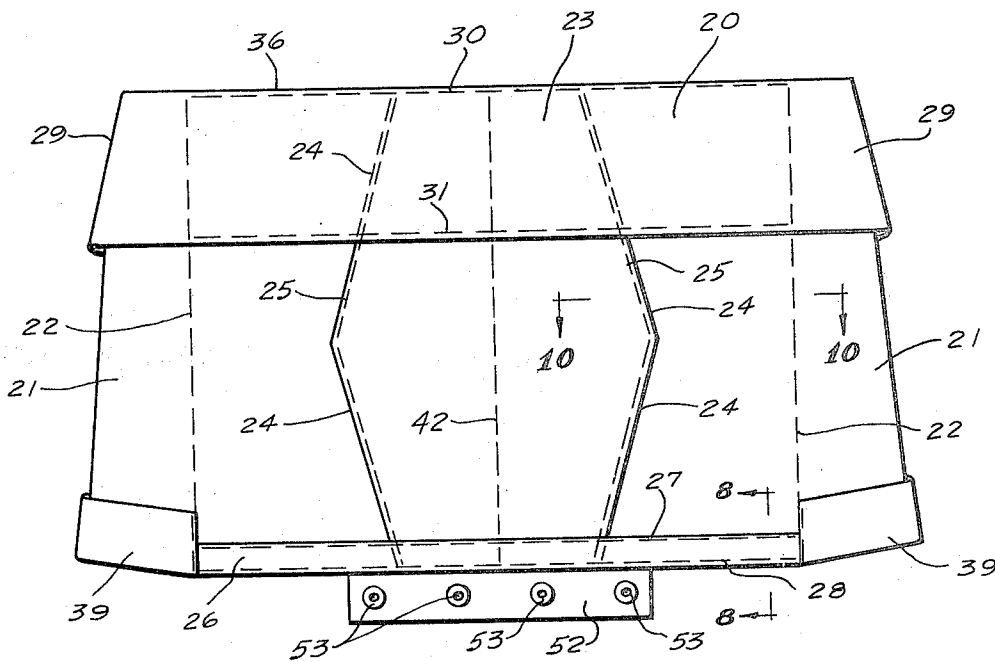


Fig. 6

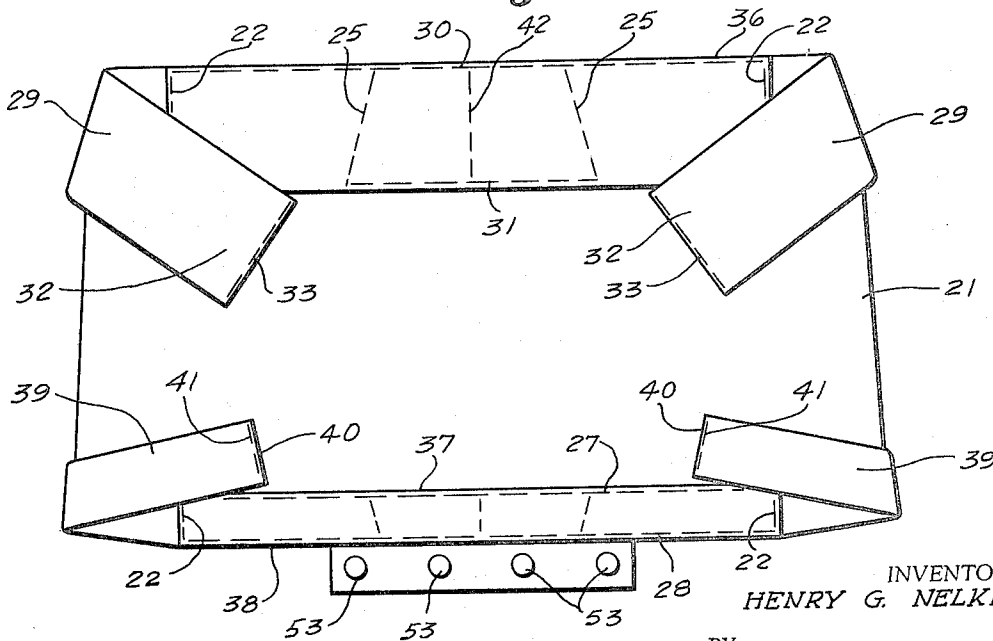


Fig. 7

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MALE SUPPORTING GARMENT

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9 Claims. (Cl. 128—78)

My invention relates to supporting garments, and more particularly to a male supporting garment for obese persons.

It is a purpose of my invention to provide a garment that is both an abdominal support and a sacroiliac support, which is particularly adapted for use by obese persons that have a large bulging abdomen.

Considerable difficulty is encountered in getting an abdominal support to function in the proper manner for an obese person that has a large bulging abdomen because the supporting garment tends to ride out of its proper position, usually tending to ride upwardly because of the large amount of bulge in the abdomen. Also the tendency is for the excess of the abdominal bulge to be forced upwardly above the top marginal edge of the support.

It is a purpose of my invention to provide a supporting garment of the above referred to character that is so constructed and arranged that it will not ride either upwardly or downwardly from the desired position thereof to accomplish the maximum result of supporting and confining the abdominal bulge, and which is further so constructed and arranged that the bulge will not be forced upwardly out of the confines of the garment above the top edge of the abdominal supporting portion thereof.

More specifically my invention comprises a supporting garment that has a body portion that is adapted to encircle the body of the wearer that has a front panel that is relatively short and wide and a rear panel that is relatively long and narrow in proportion to the front panel, said front panel and rear panel being firmly secured together by securing the front edges of the rear panel by suitable stitching to the rear edges of the front panel.

A wide upper elastic band is preferably provided extending lengthwise along the top of the front panel, which is secured to the front panel throughout its length, and which elastic band extends beyond the ends of the front panel, the ends thereof being secured to the rear panel in spaced relation to said front panel in such a manner that there is some slack in the rear panel between the forward end edge thereof and the point of securement of the elastic band thereto in the relaxed condition of the parts. A narrow elastic band is secured to each end of the front panel and has its other end secured to the rear panel in spaced relation to the forward end thereof, also in a manner to provide some slack in the rear panel in the relaxed condition of the parts. The arrangement of the upper and lower elastic bands is such that when the garment is placed in proper position for supporting the abdomen by the abdominal support and the back by means of the sacroiliac support, the hip bones will be located between the upper and the lower bands at each side of the body so that when the bands are in their stretched condition, the upper band will be firmly seated above the hip bone and the lower band will be firmly seated below the hip bone with the hip bone projection confined between the upper and lower bands to prevent any riding either upwardly or downwardly, from the proper supporting position, of the front panel of the garment.

Also, due to the provision of the wide elastic band along the upper margin of the front panel, the tendency of any of the abdominal bulge to protrude upwardly beyond the top edge of the front panel is avoided, the

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wide band confining the abdominal bulge so as to prevent any such protrusion above the top edge of the band. This action is furthermore enhanced by the manner in which the elastic bands are related to each other and the direction in which the same extend with relation to each other and to the top and bottom edges of the front panel between the end margins of said front panel and their point of securement to the rear panel, said elastic bands inclining toward each other from the ends of the front panel to their point of securement to the rear panel so that the upper wide band exerts an inward and downward pressure on the abdominal bulge and the lower bands exert an inward and upward pressure on the abdominal bulge.

In order to obtain the desired action of conforming the garment to the shape of the body, and at the same time exerting a flattening action on the abdominal bulge, the front panel is preferably made of a body portion of elastic fabric that stretches both lengthwise of the panel and crosswise thereof, or in a direction around the body and up and down, but is provided with a central reinforcing panel of an inextensible fabric secured in fixed position thereto and extending from the top edge to the bottom edge of said front panel. Said reinforcing panel is preferably made of an open weave non-elastic fabric in order to provide for circulation of air through the same. The main body portion of said front panel is also made of elastic fabric that is of a somewhat porous character.

In order to obtain the proper mounting for the sacroiliac support, the rear panel is inextensible in an up and down or transverse direction, but extensible in a longitudinal direction and is also preferably of a porous character. The sacroiliac support is preferably provided with a pad that is removable that is mounted in the middle of the rear panel of the garment.

Other objects and advantages of my invention will appear as the description of the drawings proceeds. I desire to have it understood, however, that I do not intend to limit myself to the particular details shown or described, except as defined by the claims.

In the drawings:

FIG. 1 is a perspective view of my improved supporting garment as viewed from the front thereof, the parts being in relaxed condition.

FIG. 2 is a similar view as viewed from the rear thereof, the parts being in relaxed condition.

FIG. 3 is a fragmentary inside face view of the rear panel at the mounting for the sacroiliac support.

FIG. 4 is an enlarged section taken on the line 4—4 of FIG. 3.

FIG. 5 is a section taken on the line 5—5 of FIG. 1.

FIG. 6 is a face view of the supporting garment with the pouch removed, as viewed from the front thereof.

FIG. 7 is a similar view as viewed from the rear thereof.

FIG. 8 is a fragmentary section taken on the line 8—8 of FIG. 6.

FIG. 9 is a fragmentary inside elevational view showing the joint between the front and rear panels, and

FIG. 10 is a section taken on the line 10—10 of FIG. 6.

Referring in detail to the drawings, my improved supporting garment comprises a front panel 20 and a rear panel 21, which is longer and narrower than the front panel 20. The forward end edges of the rear panel 21 and the rear end edges of the front panel 20 are secured together by means of stitching 22. The front panel is made up of a body portion that is elastic knit fabric adapted to be stretched or extended both lengthwise, or in the direction around the body of the wearer and trans-

versely thereto, while the rear panel 21 has a body portion of an elastic fabric that is extensible only in the direction of length of the panel. The front panel is provided with a central reinforcing panel or ply of inextensible fabric 23, which has a mid-portion and tapers toward the top and bottom ends thereof, having inclined edges 24 extending from the mid-portion of the reinforcing ply to the top and bottom edges of the front panel 20. Stitching 25 is provided along the opposite side edges of the reinforcing panel 23 for fixedly securing said panel 23 to the mid-portion of the front panel 20, the marginal side edges of said reinforcing panel 23 being spaced from the end edges of the panel 20 so as to leave a portion that is extensible in directions at right angles to each other on each end of the panel 20 and a mid-portion that is inextensible because of the reinforcing ply 23. A binding strip 26 comprising a band of material elastic in the direction of its length is secured along the bottom edge of the panel 20 by means of rows of stitching 27 and 28 (see FIG. 8).

A wide elastic band 29, which is extensible only in the direction of its length, is secured across the top portion of the panel 20, said band 29 extending beyond the end edges of the panel 20 and having its top edge flush with the top edge of the panel 20, as will be obvious from FIG. 5. Said elastic band 29 is secured both to the reinforcing panel 23 and the body portion of the panel 20 by means of rows of stitching 30 and 31 at the longitudinal marginal edges of the band 29. There is thus a central portion of the elastic band 29 that is inextensible because of the connection of the inextensible reinforcing panel 23 therewith, this portion being indicated by the numeral 29' in FIG. 2.

The ends 32 of the elastic band 29 are secured to the rear panel 21 by rows of stitching 33 that extend at an oblique angle, the extending portions of the bands 29 inclining downwardly from the ends of the panel 20 to their point of securement to the panel 21. The angle at which said extended ends of the band 29 extend to the top edge of the panels 21 and 20 is substantially 45°. When in their relaxed condition the extending portions of the bands 29, which are free of the panel 21 between the ends of the panel 20 and their secured ends thereof on the panel 21, are shorter than the distance between the corresponding forward end of the panel 21 and the point of securement of said bands to said panel 21, leaving some fullness, as shown at 34 in the panel 21 before it has been extended and before the elastic band 29 has been extended, as will be the case after the garment has been placed in position on the body of the wearer.

It will be noted upon reference to FIG. 9 that the top edge 35 of the panel 21 is disposed downwardly a substantial distance below the top edge 36 of the panel 21 and that the bottom edge 37 of the panel 21 is also offset somewhat upwardly from the bottom edge 38 of the panel 20. Elastic bands 39 are secured at their forward ends to the panel 20, adjacent the bottom marginal edge thereof at the opposite ends of the panel 20, being secured to the panel 20 by means of the stitching 22. Said elastic bands 39 are also secured at their rear ends 40 to the rear panel 21 near the bottom edge of said panel 21, as will be obvious from FIG. 7, the ends of the bands 39 being secured substantially immediately below the ends of the bands 29 to the panel 21 and inclining upwardly toward the secured ends 40 thereof, the same being secured by rows of stitching 41. A row of stitching 42 is also provided extending between the top and bottom edges of the panel 20, and securing together the reinforcing panel 23, the main body portion of the panel 20 and the band 29, as well as said body portion 20, reinforcing panel 23 and band 26. The elastic bands 39 are also made so that they are shorter between their point of securement 41 to the panel 21 in their relaxed condition than the length of the panel 21 from said points of secure-

ment of the bands 39 thereto to the forward marginal edges of the panel 21.

The vertical spacing of the elastic bands 29 and 39 is such that when the garment is in position on the body, the elastic band 29 will be located above the hip bone and the elastic bands 39 will be located below the hip bone, but in both cases in close proximity to the hip bone projection so that the hip bone projection will be seated between the bands 29 and 39, preventing any up and down movement of the supporting garment with respect to the body. Also, when the garment is in position on the body of the wearer the pull exerted by the extended or tensioned elastic band 29 will cause a downward and inward pull on the forward panel 20 and the pull exerted by the bands 39 will cause an upward and inward pull, causing the panel 20 to conform closely to the body of the wearer and confine and reduce the abdominal bulge of the body.

Mounted in the middle of the rear panel 21 is a transverse elastic band 43, which is secured at its ends by means of stitching 44 to the body portion of the panel 21. A vertically extending elastic band 45 is connected with the transversely extending band 43 by means of stitching 46 and is secured to the panel 21 at the bottom end thereof by means of stitching 47. A sacroiliac pad having a body portion of cushioning material 48 such as sponge rubber and cover plies 49 and 50, secured together at the margins thereof by stitching 51, is detachably mounted on the rear panel 21 by means of the elastic bands 43 and 45, which form a pocket-like holding means for the sacroiliac pad, which pad is of a somewhat elliptical character, being somewhat greater in vertical than in transverse extent.

A tab 52 is secured to the bottom marginal edge of the front panel 20 at the center thereof by means of stitching 28 and is provided with separable fastening elements 53, which are adapted to cooperate with companion separable fastening elements that are mounted on the pouch 54 for detachably securing the pouch 54 in position. The leg straps 55 extending from the pouch 54 are detachably secured at their ends 56 to the rear panel 21 slightly forwardly of the point of securement of the bands 29 and 39 thereto.

What I claim is:

1. A supporting garment having a body portion adapted to encircle the body of the wearer comprising a front panel of elastic fabric, a central reinforcing panel of inextensible fabric secured to said front panel, a rear panel of elastic fabric attached permanently at the forward ends thereof to the ends of said front panel in spaced relation to the side margins of said reinforcing panel, an upper elastic band extending lengthwise along the top of said front panel and secured to said front panel throughout the length of said panel, said elastic band extending beyond the ends of said front panel and having its ends secured to said rear panel in spaced relation to the forward ends of said rear panel and being free of said rear panel between said forward ends of said rear panel and the ends of said band, and lower elastic bands secured at one end of each thereof to an end of said front panel in downwardly spaced relation to said upper band and at the other end thereof to said rear panel in spaced relation to the forward end of said rear panel, said lower bands being free of said rear panel between the ends of said lower bands.

2. A supporting garment as claimed in claim 1 in which the upper elastic band inclines downwardly from the ends of said front panel to the ends of said upper band and the lower elastic bands incline upwardly from the ends thereof secured to said front panel to the ends thereof secured to said rear panel.

3. A supporting garment as claimed in claim 1 in which the top marginal edge of said rear panel is downwardly offset relative to the top marginal edge of said front panel.

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4. A supporting garment as claimed in claim 1 in which the bottom marginal edge of said rear panel is upwardly offset relative to the bottom marginal edge of said front panel.

5. A supporting garment as claimed in claim 1 in which the elastic fabric of said front panel is extensible both vertically of said panel and lengthwise of said panel and the rear panel is extensible only lengthwise thereof.

6. A supporting garment as claimed in claim 1 in which the length in relaxed condition of each portion of said upper band between a secured end thereof and the corresponding end of said front panel is less than the length of said rear panel in relaxed condition between said end of said front panel and the point of securement of said band to said rear panel.

7. A supporting garment as claimed in claim 1 in which the length in relaxed condition of each of said lower bands between the secured ends thereof is less than the length of said rear panel in relaxed condition between the corresponding forward end of said rear panel and the point of securement of said lower band thereto in spaced relation to the forward end of said rear panel.

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8. A supporting garment as claimed in claim 1 in which said rear panel has a sacroiliac pad detachably mounted on the mid-portion thereof in spaced relation to the ends of said upper and lower bands secured to said rear panel.

9. A supporting garment as claimed in claim 1 in which said upper band is much wider than said lower bands, said upper band inclines downwardly from the ends of said front panel to the ends of said upper band and said lower bands incline upwardly from the ends thereof secured to said front panel to the ends thereof secured to said rear panel.

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