July 6, 1937. A. N. OPPENHEIM 2,086,235

GARMENT

Filed Nov. 28, 1936

Fig. 1,

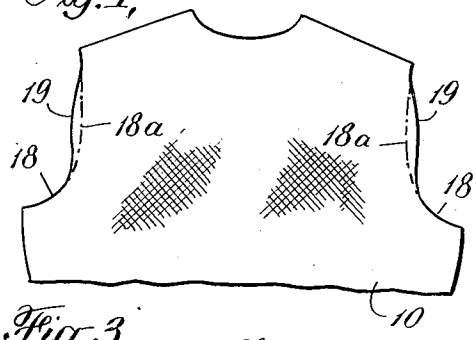


Fig. 2,

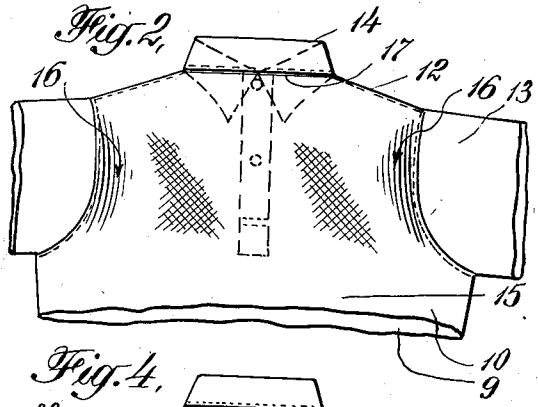


Fig. 3

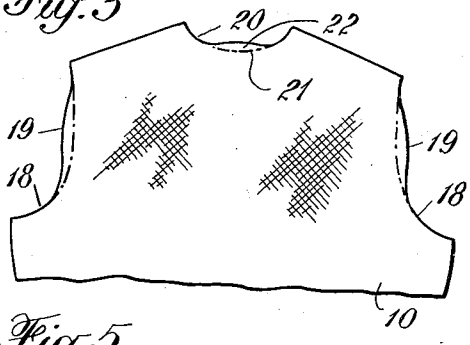


Fig. 4,

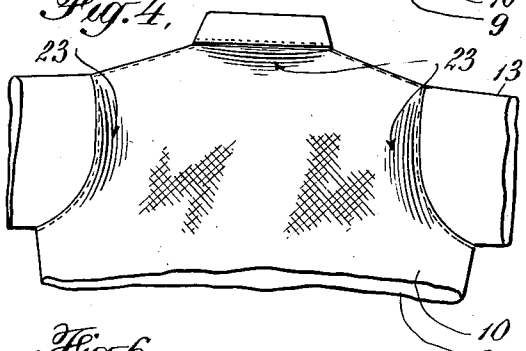


Fig. 5,

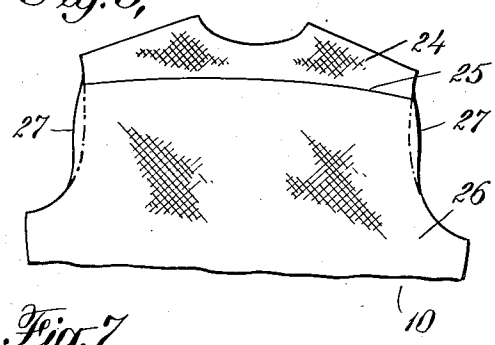


Fig. 6,

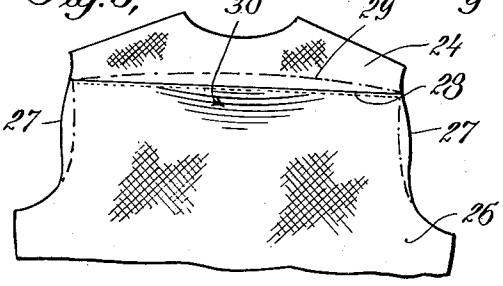


Fig. 7,

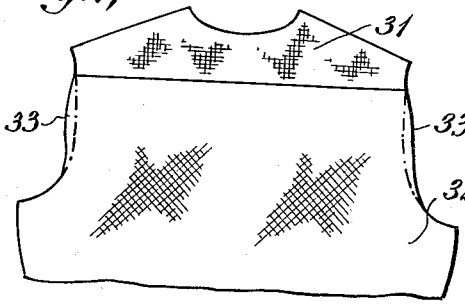
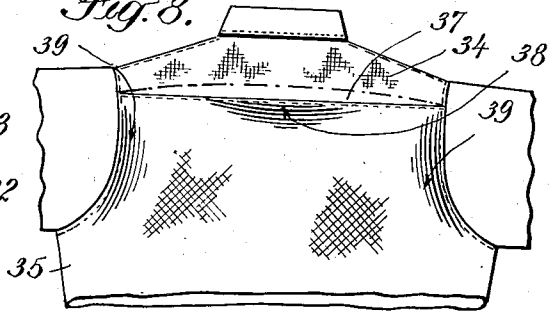


Fig. 8.



INVENTOR
Austin N. Oppenheim
BY
Fennie Davis Marvin-Edmonds
ATTORNEYS

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2,086,235

GARMENT

Austin N. Oppenheim, Pikesville, Md., assignor to The B. V. D. Corporation, New York, N. Y., a corporation of Delaware

Application November 28, 1936, Serial No. 113,118

13 Claims. (Cl. 2—122)

This invention relates to garments for clothing the body, and is concerned more particularly with a novel garment of the type referred to, which, although made of a relatively inelastic material, such as a woven fabric, is so constructed as to afford greater comfort and permit greater freedom of movement by the wearer than similar prior garments. The principles of the invention may be employed in garments of various types, such as shirts, pajama coats, lounging robes, etc., but since the invention may be utilized to special advantage in a shirt, particularly one used for athletic purposes, an embodiment of the invention in that form will be illustrated and described in detail for purposes of explanation. It is to be understood, however, that the utility of the invention is not limited to garments of any specific type or for any specific purpose.

Special shirts for athletic purposes, such as for wear during the playing of polo, golf, or tennis, have come into wide popularity in the last few years, and these shirts, commonly known as polo shirts, are ordinarily made of a light weight knitted fabric, which yields and stretches. Such shirts permit the wearer to bend or contort his body without binding and are entirely satisfactory in that respect, but they have a tendency either to cling to the body or to sag away from it, depending on the fit. Because of that and of the material of which they are made, they are not usually suitable for ordinary wear.

The present invention is, accordingly, directed to the provision of a body garment, such as a shirt, coat, robe, or the like, which is made of relatively inelastic material, but so constructed that it has a considerable degree of stretch, particularly over the back and across the shoulders. These objects are attained by forming the back section of the garment of material cut on the bias and cutting the edges of the section in such manner that, in specific places, they have a contour differing from that of the edges of the other parts of the garment to which they are secured. This difference in contour of the edges of the back and other sections is such that when the edges are connected together, additional material is forced into the area ordinarily covered by the back section, and this extra material, together with the bias cut of the back section, permits the latter to yield and stretch as the wearer moves.

For a better understanding of the invention, reference may be had to the accompanying drawing in which

Figure 1 is a plan view of one form of back section of the new garment;

Figure 2 is a back view of a portion of a garment made with the back section cut as illustrated in Figure 1;

Figure 3 is a view similar to Figure 1 illustrating a modified form of back section;

Figure 4 is a plan view according to Figure 2, showing a garment made with the back section illustrated in Figure 3;

Figures 5, 6, and 7 are plan views of modified forms of back section; and

Figure 8 is a view similar to Figure 2 showing a garment made with the back section shown in Figure 7.

Referring to the drawing, the new garment is of generally conventional construction and includes a front section 9 and a back section 10 secured thereto by side seams 11 and shoulder seams 12. These sections are cut to form arm openings, to which are connected sleeves 13, and a collar opening, to the edge of which is secured a collar band or collar 14. The front section 9 may be either one piece, as shown in Figure 2 with an opening closed by buttons and buttonholes, or of two parts overlapping and connected together in the same way. This portion of the garment is ordinarily made of textile material cut straight, so that the warp and weft threads extend vertically and horizontally, respectively, while the back section 10 is of similar textile material, but bias cut so that, as indicated at 15, the warp and weft threads extend diagonally relative to the section.

The sleeves 13 have end edges 16 which have a generally convex curvature, and the band or collar likewise has an edge 17 of convex curvature. Ordinarily, in the construction of such a garment, the edges 18 of the back section, which in part define the arm openings, are cut to conform closely to the contour of the end edges of the sleeves, and the edges of the back section would thus normally have the shape indicated by the dotted lines 18*a*. In the new garment, however, these edges of the back section have a contour different from that of the end edges of the sleeves. In general, this difference in contour may be described by saying that the curvature of the edges of the back section partly defining the arm openings are of a flatter curvature than the curvature of the end edges of the sleeves, or that the concave edges of the back section have a less concavity than the convexity of the end edges of the sleeves. Ordinarily, the flattening or

bulging of the edges of the back section, indicated at 19, does not extend throughout the entire length of the edges around the arm openings, but is disposed about mid-way of the length of the edges and slightly toward the upper ends thereof.

When the sleeves are secured to a back section cut as illustrated in Figure 1, the edges 18 of the back section are distorted and then secured to the end edges of the sleeves by stitching in the usual manner. In this distortion, the material lying between the lines 18a and 19 is forced toward the median line of the back and the extra material makes the garment fit somewhat more loosely across the shoulders than would ordinarily be the case. This extra material, together with the bias cut of the back section, prevents the back section from binding, particularly across the shoulders, and the wearer may thus move and bend his body freely without discomfort. The presence of the additional material in the area across the shoulders does not detract from the fit of the garment because elsewhere the garment is of normal cut, and since it is made of relatively inelastic material, such as a woven fabric, it does not sag or otherwise become distorted.

In some instances, it may be desirable to provide a greater amount of additional material across the shoulders than can be conveniently made available by altering the contour of the edges of the back section defining the arm openings, as above described. For this purpose, the back section may be cut as illustrated in Figure 3. As there shown, the section has arm hole edges cut as shown in Figure 1, and, in addition, the edge 20 of the back section partly defining the neck opening is cut with a flatter curvature than the edge of the collar band or collar. Ordinarily, the edge of the back section at the neck opening would be of the curvature indicated at 21, conforming closely to the curvature of the collar, but in the new construction, the edge 20 at the neck opening is of flatter curvature than that of the collar so that additional material is provided at 22, which is forced down into the space across the shoulders when the edges of the collar and of the back section are secured together in the usual way.

The garment shown in Figure 4 has a back section cut as shown in Figure 3 and the additional material made available across the upper part of the back is indicated at 23. This additional material in the back section, together with the bias cut of the latter, permits the garment to yield and stretch to a substantial extent without binding and thus increases the comfort of the wearer. At the same time, these effects are obtained without detracting from the appearance of the garment.

The garments illustrated in Figures 2 and 4 do not have a yoke, and in some cases, that feature may be desirable. When it is to be used, the back section may be formed in various ways in accordance with the principles of the invention.

The back section illustrated in Figure 5 includes a yoke 24, the lower edge 25 of which is secured to the upper edge of a lower panel 26. Both of these parts of the back section may be of bias cut material, and when the yoke is used, the flattening of the curvature of the edges of the back section defining the arm openings may be confined, as indicated at 27, to those portions of the edges which are on the lower panel. This back section is secured to the sleeves in the manner above described, so that the flattening or bulges at 27 force additional material into the back section.

In Figure 6, there is shown another form of back section which consists of a yoke 24 and a lower panel 26 with the edges defining the arm holes flattened as indicated at 27. In this back section, the edges of the yoke and lower panel which are connected together are not both straight, but one of these edges is straight and the other convexly curved. As illustrated in Figure 6, the lower edge 28 of the yoke is straight and the upper edge 29 of the lower panel is cut with an upward bulge, so that when the edges are to be secured together, the bulged upper edge of the lower panel is distorted so as to become straight and this forces additional material, represented by the upward bulging of the upper edge of the lower panel, down into the panel, as indicated at 30.

The back section illustrated in Figure 7 differs from that shown in Figure 6 in that the yoke 31 is of straight cut material and the lower panel 32 of bias cut material. With this construction, extra material may be made available across the back by the flattening of the arm hole edges as indicated at 33. When the yoke is straight cut and the lower panel bias cut, the bulges 33 in the arm hole edges are confined to those portions of the edges which are to be connected to the edges of the lower panel, since with the bias cut material, the additional material made available by the bulges is distributed across the back without excessive wrinkling.

In Figure 8, there is illustrated the back of a garment formed of a yoke 34 of straight cut material and a lower panel 35 of bias cut material. The lower edge of the yoke is straight and the upper edge of the lower panel is cut with an upward bulge as indicated at 36, so that when these edges are stitched together to form a straight seam 37, additional material is forced into the panel as indicated at 38. The panel of this garment has arm hole edges cut as shown in Figure 7 and the additional material provided across the shoulders by this construction is indicated at 39.

The new garment is superior for athletic wear to ordinary garments of the same material, because the back section not only yields and stretches by reason of its being bias cut, but also contains additional material in the area across the shoulders. These effects are obtained without detracting from the appearance of the garment in any way, and the garment fits and holds its shape better than one made of elastic material, such as knitted fabric. Also, while the garment is intended primarily for athletic wear, it does not differ in appearance from an ordinary dress or business garment and thus may be worn for general purposes.

While I have explained the invention as embodied in a shirt for athletic wear, it will be understood that it may be employed to advantage in garments of other types such as pajama coats, lounging robes, etc. Such garments, when constructed in accordance with the invention, have the desirable fit of garments of woven material and hold their shape equally well. At the same time, they yield and stretch to a much greater extent than garments of the same material made in the usual way and thus afford greater comfort to the wearer.

I claim:

1. A body garment which comprises the combination of a front section, a back section of bias

cut material, said sections being secured together along their edges and providing neck and arm openings between them, and sleeves having curved end edges secured to the edges of the sections defining the arm openings, said last named edges of the back section having, in the blank, a generally flatter curvature than the portions of the end edges of the sleeves secured thereto, whereby when the edges of the back section were sewn to the edges of the sleeves, a portion of the material of the back section adjacent the sleeves was formed into a fullness in said back section.

2. A body garment which comprises the combination of a front section, a back section of bias cut material, said sections being secured together along their edges and providing neck and arm openings between them, a collar having a curved edge secured to the edges of the sections defining the neck opening, and sleeves having curved end edges secured to the edges of the sections defining the arm openings, the edges of the back section which partly define the neck and arm openings having, in the blank, a generally flatter curvature than the portions of the edge of the collar and the end edges of the sleeves which are secured, respectively, thereto, whereby when the edges of the back section were sewn to the edges of the sleeves, a portion of the material of the back section adjacent the sleeves was formed into a fullness in said back section.

3. A body garment which comprises the combination of a front section, a back section, said sections being secured together and providing neck and arm openings between them, said back section consisting of a yoke and a lower panel of bias cut material having, respectively, lower and upper edges secured together, said arm openings being defined in part by edges of the yoke and panel, and sleeves having curved end edges secured to the edges of the sections defining the arm openings, said last named edges of the back section having, in the blank, a generally flatter curvature than the portions of the end edges of the sleeves secured thereto, whereby when the edges of the back section were sewn to the edges of the sleeves, a portion of the material of the back section adjacent the sleeves was formed into a fullness in said back section.

4. A body garment which comprises the combination of a front section, a back section, said back section consisting of a yoke and a lower panel of bias cut material, said yoke and panel having, respectively, lower and upper edges secured together, one of said edges being cut straight and the other cut convex, said front and back sections being secured together to provide neck and arm openings between them, said openings being defined in part by edges of the yoke and panel, and sleeves having curved end edges secured to the edges of the front section, the yoke, and the panel defining the arm openings, said last named edges of the panel having, in the blank, a generally flatter curvature than the portions of the end edges of the sleeves secured thereto, whereby when the edges of the back section were sewn to the edges of the sleeves, a portion of the material of the back section adjacent the sleeves was formed into a fullness in said back section.

5. A body garment which comprises the combination of a front section, a back section, said sections being secured together to provide neck and arm openings between them, and said back section consisting of a yoke and a lower panel of bias cut material having, respectively, lower and upper edges secured together, and having edges partly defining the arm openings, a collar having a curved edge secured to the edges of the sections defining the neck opening, and sleeves having curved end edges secured to the edges of the sections defining the arm openings, said edges of the back section partly defining the neck and arm openings having, in the blank, a generally flatter curvature than the portions of the edge of the collar and the end edges of the sleeves secured, respectively, thereto, whereby when the edges of the back section were sewn to the edges of the sleeves, a portion of the material of the back section adjacent the sleeves was formed into a fullness in said back section.

6. In a body garment, the combination of front and back sections secured together along their edges and providing neck and arm openings between them, and sleeves having curved end edges secured to the edges of the sections defining the arm openings, said last named edges of the back section having, in the blank, a generally flatter curvature than the portions of the end edges of the sleeves secured thereto, whereby when the edges of the back section were sewn to the edges of the sleeves, a portion of the material of the back section adjacent the sleeves was formed into a fullness in said back section.

7. In a body garment, the combination of front and back sections secured together along their edges and providing neck and arm openings between them, a collar having a curved edge secured to the edges of the sections defining the neck opening, and sleeves having curved end edges secured to the edges of the sections defining the arm openings, said edges of the back section partly defining the neck and arm openings having, in the blank, a generally flatter curvature than the portions of the edge of the collar and the end edges of the sleeves secured, respectively, thereto, whereby when the edges of the back section were sewn to the edges of the sleeves, a portion of the material of the back section adjacent the sleeves was formed into a fullness in said back section.

8. In a body garment, the combination of a front section, a back section secured thereto, said sections providing neck and arm openings between them and said back section being formed of a yoke of straight cut material and a lower panel of bias cut material, said yoke and panel having edges partly defining said arm openings, and sleeves having curved end edges secured to the edges of the sections defining the arm openings, said edges of the lower panel of the back section having, in the blank, a generally flatter curvature than the portions of the end edges of the sleeves secured thereto, whereby when the edges of the back section were sewn to the edges of the sleeves, a portion of the material of the back section adjacent the sleeves was formed into a fullness in said back section.

9. In a body garment, the combination of front and back sections secured together along their edges and providing neck and arm openings between them, and sleeves having convexly curved end edges secured to the edges of the sections defining the arm openings, said last named edges of the back section being, in the blank, concave and throughout at least a portion of their length having a concavity less than the convexity of the end edges of the sleeves to be secured thereto, whereby when the edges of the back section were sewn to the edges of the sleeves, a portion of the material of the back section adjacent the sleeves

was formed into a fullness in said back section.

10. In a body garment, the combination of front and back sections secured together along their lateral edges and providing neck and arm openings between them, sleeves having end edges secured to the edges of the sections defining the arm openings, and a collar having a convexly curved edge secured to the edges of the sections defining the neck opening, the edge of the back section partly defining the neck opening being, in the blank, concave and throughout at least a portion of its length having a concavity less than the convexity of the edge of the collar to be secured thereto, whereby when the edges of the back section were sewn to the edges of the sleeves, a portion of the material of the back section adjacent the sleeves was formed into a fullness in said back section.

11. A body garment which comprises the combination of front and back sections secured together and providing neck and arm openings between them, said back section being a bias cut material, sleeves having curved end edges secured to the edges of the sections defining the arm openings, and a collar having a convexly curved edge secured to the edges of the sections defining the neck opening, the edge of the back section partly defining the neck opening being, in the blank, concave and of a generally flatter curvature than the portion of the edge of the collar to be secured thereto, whereby when the edges of the back section were sewn to the edges of the sleeves, a portion of the material of the back section adjacent the sleeves was formed into a fullness in said back section.

12. A body garment comprising a back and a front, a collar member and sleeves adjoining said back and sewn thereto, said back being formed, at least in part, from a back section member cut with a curvature different from the curvature of one of said adjoining parts where it is sewn to said adjoining part, said difference in curvature causing an excess of material in said back section, which excess of material in the sewing together of the parts forms a fullness in the back adjacent said adjoining part.

13. A body garment comprising a back and a front, a collar member and sleeves adjoining said back and sewn thereto, said back being formed, at least in part, from a back section member of bias cut material cut with a curvature different from the curvature of one of said adjoining parts where it is sewn to said adjoining part, said difference in curvature causing an excess of material in said back section, which excess of material in the sewing together of the parts forms a fullness in the back adjacent said adjoining part.

AUSTIN N. OPPENHEIM.