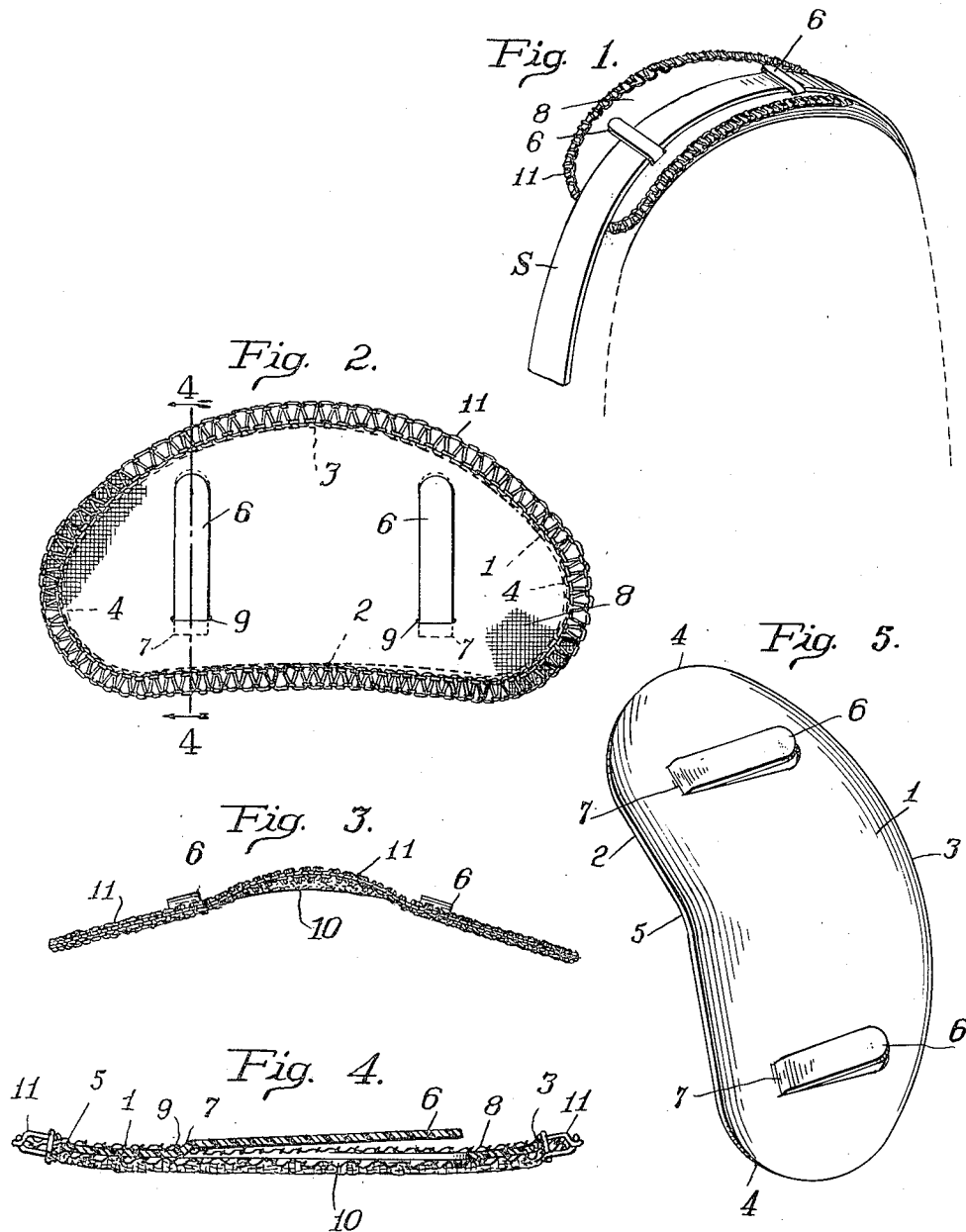


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SHOULDER PROTECTOR SHIELD

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SHOULDER PROTECTOR SHIELD

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1 Claim. (Cl. 2—2)

This invention relates to shoulder protector shields for protecting the shoulders from creasing or cutting under supporting straps such as are used for ladies' brassieres. Although the invention has broader application, it will be described as applied to brassiere straps.

Such straps worn as supports for brassieres have been notoriously uncomfortable due to their creasing and cutting tendencies on the shoulders of the wearer. This tendency is increased in proportion to the supporting tension of the straps. Obviously, heavy-busted women have more difficulty than light-busted women and the greater the uplift on the bosoms the greater difficulty in cutting. However, under almost all conditions the shoulder straps on brassieres perform a very necessary and desirable function because the proper and stylish fitting of brassieres requires them to be held up securely and effectively to resist all sagging tendencies. This means supporting tension on all shoulder straps.

Many devices have been made heretofore to render shoulder straps of this kind more comfortable. However, such devices have failed to attain popularity and commercial success for a variety of reasons.

In my former application, Serial No. 132,770, filed December 13, 1949, now Patent No. 2,633,573, granted April 7, 1953, I have set forth an improved form of shoulder protector shield that will conform comfortably to the shape of the shoulder and will retain its position thereon under the shoulder strap without danger of its being dislodged in service.

One object of this invention is to improve the construction of shoulder protector shields to provide for greater comfort to the wearer and to assure that there will be no tendency for the shoulder straps to cut into the shoulders or to pull unduly thereon, and to distribute the weight uniformly over extended areas of the shoulder.

A further object of the invention is to improve the construction of shoulder protector shields by providing not only for the construction thereof of suitable plastic material which will provide an effective surface for protecting the shoulders, but also to provide a covering material for the plastic or body of the shields that may be washed or otherwise cleaned and thus kept in sanitary condition.

Still another object of the invention is to provide a shoulder protector shield that may be manufactured inexpensively, with a stable body portion formed of plastic or other suitable sheet material, and protected by a covering thereover which is retained effectively on the sheet, as by stitching, to permit of ready cleaning or washing thereof, which will keep the shield in sanitary condition.

These objects may be accomplished according to one embodiment of the invention by forming a body portion of suitable sheet material, such as plastic, nylon or the like, which is shaped to conform readily to the shoulder and has shoulder strap retaining means thereon. Preferably the retaining means is in the form of transverse fingers extending across the opposite end portions of the body portion for engaging over and retaining the shoulder strap in place on the shield. This body member is preferably enclosed by a covering material that extends over the entire area thereof on both sides and is secured thereto in an effective manner, whereby it will be retained on the shield when the latter is washed or otherwise

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cleaned. This avoids the tendency of separation of a lining that may be applied by glue or other adhesive, that would not retain its place when the shield is subjected to washing. By enclosing the body member in a protecting fabric that extends over both the top and bottom surfaces thereof, the body member may be enclosed in an envelope that is completely washable without danger of separation.

This embodiment of the invention is illustrated in the accompanying drawings in which:

Fig. 1 is a perspective view of the shield as applied to the left shoulder, and showing the position of the shoulder strap with respect thereto;

Fig. 2 is a top plan view of the shield;

Fig. 3 is an edge view thereof before application to the shoulder;

Fig. 4 is a cross-section therethrough on the line 4—4 in Fig. 2; and

Fig. 5 is a perspective view of the shield body member detached.

This shoulder protector shield is adapted for use in the manner set forth in my prior application, Serial No. 132,770, filed December 13, 1949. It may be used for each of the shoulder straps, preferably being made in pairs to be applied to the right hand and left hand straps, respectively, only the left hand strap and shield being illustrated in Fig. 1 although it will be understood that the shield is identical in each instance and is reversed in position according to the shoulder to which it is applied. The shoulder strap is shown generally at S in Fig. 1.

The shield preferably comprises a body portion, generally designated by the numeral 1, and shown detached in Fig. 5, and a cover envelope applied thereover, as hereinafter described.

The body portion 1 preferably is formed of a body of relatively stiff, somewhat resilient material, that is thin and yieldable to conform readily to the contour of the shoulder and yet to distribute the pull and strain of a shoulder strap over the area of the shoulder so as to protect the latter against undue localized pressure, or cutting action thereby. I have found that a suitable plastic material may be used for this purpose, such as nylon, that is made relatively thin and properly shaped. It will bend both longitudinally and transversely, and yet serves effectively to protect the shoulder.

While the shield can be made from a sheet of material, it is preferred that it be molded or formed in a die. This is desirable particularly when forming the body portion 1 of nylon because such nylon is obtainable usually in a powdered form and must be molded under heat and pressure. By forming the body in this manner, the desired contour and shape are obtained more readily.

This sheet preferably is somewhat kidney-shaped in plan, as viewed in Fig. 2, having a concave edge portion 2 that is turned in the direction of the outer end of the shoulder and a convex longitudinal edge 3 that is turned toward the neck. I have found that this shape tends to conform the shield to the shoulder more readily, and to retain its position thereon. The opposite ends of the body member 1 may be curved or rounded, as indicated at 4.

The body member 1 is also curved transversely, somewhat channel shaped, having its opposite edges 2 and 3 deflected upward relative to the intermediate portion so as to retain a shoulder strap thereon, and extending lengthwise of the body portion. The outer edge 2 is also given a sharp upward bend intermediate the length thereof, as indicated at 5 in Fig. 5, immediately over the outer end of the shoulder.

Strap retaining members are indicated at 6, extending transversely of the body member 1, adjacent the opposite ends thereof. The retaining members 6 are in the form

of fingers, each of which is anchored at 7 at its outer end to the body member 1, as shown particularly in Fig. 4. The fingers 6 may be formed by slitting the sheet and offsetting the fingers upwardly from the surface thereof sufficiently to enable the shoulder strap or straps to be slipped under the fingers and to slide lengthwise thereunder without undue pressure on the strap or straps.

The envelope or covering material for enclosing the body member 1 is formed in this embodiment of the invention of a covering fabric 8, suitably slotted at 9 to slip over the fingers 6, and extending throughout the top surface of the body member 1, except over the fingers. A separate bottom sheet is shown at 10 covering the bottom side of the body member 1, and preferably is formed of cotton flannel, or a suitable soft down material to hold or absorb perspiration, and to fit comfortably on the shoulder. These sheets 8 and 10 are secured together around the edges of the body 1, preferably by stitching, such as binding stitching indicated at 11 in the drawings. The sheets 8 and 10 may be stitched directly together or through the edge portion of the body member 1, as desired, and cooperate to form the envelope for enclosing the latter.

The envelope may be made of any suitable material, but preferably is washable. It may be washed by hand directly on the body member 1, without removal therefrom.

The top side 8 may be made of chiffon nylon fabric that is so transparent and smooth that it makes it very easy to slip under the shoulder strap as the woman can be dressed completely, have her bra on and all she has to do is slip it under her shoulder strap or straps after she is dressed. It is not necessary to put the shoulder protector shield on before the bra is on the person. That is why I made it so she can slip it right under the strap in a moment's time and it is not necessary to remove the bra to put that in as you are more sure and it is more correctly put on and on the right spot when she already has her bra on and hooked. That is all she has to do is to slip it under her strap or straps and that will stay securely all day.

The bottom side 10 is washable flannel. The flannel is absorbent cotton flannel and absorbs perspiration, and the top side 8 is a smooth fabric. Of course, it can be made of any other materials. The edge 11 will be such that it will not fray out so it is not necessary to take it off. It can also be used without any cover. If the user wants to put a new one on it can be done very easily, but the reason it is made from washable fabrics is so that it could be washed.

If desired, the envelope may be separated from the body member 1 for replacement, by removing a portion of the stitching at one edge and slipping the envelope off the body member. The envelopes may be sold separately from the shield and stitched only around a portion of the circumference thereof, the remaining side being open for application to the body member after which the user can stitch the initially open side in closed relation.

I found that the soft covering material cannot be secured effectively by adhesive to the bottom surface of the plastic member because the adhesive separates therefrom in use and especially when an attempt is made to wash or clean this protective material. Nevertheless, the latter does collect perspiration and becomes soiled, and the shield could not be worn for any appreciable length of time unless it were made of a material that could be laundered. Nevertheless, no satisfactory provision has been made heretofore for cleaning or laundering these shields, but this result is accomplished according to the present embodiment of the invention, when the shield not only forms a protective covering for the shoulder but is capable of being laundered whenever desired, readily and simply.

The protective shield may be applied to each shoulder

strap S, or set of shoulder straps, by slipping the shield inward over the shoulder, with the fingers 6 overlying the strap or straps S. Both of the fingers extend in the same direction from the point 7 where they are attached to the body member 1 at the outer edge of the shield to retain the shoulder strap or straps S effectively on the shield without danger of becoming detached therefrom. At the same time, these fingers 6 yieldably grip the strap or straps S, but permit relative sliding movement during adjustment of the shield without danger of the latter becoming displaced during use. The shoulder protector shield will take in more than one strap at the same time if necessary as the fingers 6 will hold any number of straps. The fingers have no covering and that is why the shield slides in easily under the shoulder strap or straps.

While the shield is described as intended primarily for holding the shoulder straps of the bra, it is also contemplated that it may be used for holding other articles of wearing apparel. It has been mentioned above that more than one shoulder strap may be retained in each shield. This one shield may accommodate the shoulder straps of the bra and also the slip and even a corselette. Moreover, the shield may be used for other articles of apparel than those mentioned; even play suits, bathing suits, evening gowns with straps. In the latter event, the shield may be sewn or formed of other shapes than that illustrated, and made to look like a part of the costume. It may also be secured in the garment as a part of the shoulder portion thereof. It has many other uses than those mentioned and is not intended to be restricted thereto.

The curvature of the edges 2 and 3 has been designed to cause the shield to fit most comfortably on the shoulder and to be retained in place during use. It fits without pressure, is soft and comfortable, and always may be maintained in clean and sanitary condition.

While the invention has been illustrated and described in one embodiment, it is recognized that variations and changes may be made therein without departing from the invention as set forth in the claim.

I claim:

A shoulder protector shield for use with a shoulder strap of a garment, comprising an elongated sheet of relatively thin and somewhat stiff material, said sheet having longitudinal side edges arranged to extend over the shoulder, shoulder strap retaining members spaced longitudinally of said sheet in position to receive and retain a shoulder strap thereunder, each of said retaining members comprising a relatively long flat body formed in one integral piece with the sheet adjacent a longitudinal side edge thereof and struck out from the body of the sheet and extending transversely throughout the major portion of the width of the sheet, an envelope enclosing the non-metallic sheet at the top and bottom surfaces thereof, said envelope including a top fabric sheet and a bottom sheet of absorbent flannel secured together around the edges of the stiff sheet, the top fabric sheet having slots therein at the integral ends of the retaining members through which slots the retaining members extend and with the opposite ends separated from the elongated stiff sheet for insertion of the shoulder strap therebetween, the top fabric sheet underlying said retaining members substantially throughout the length of the retaining members.

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