June 10, 1947. F. B. ZACKS 2,422,161

SHOULDER PAD

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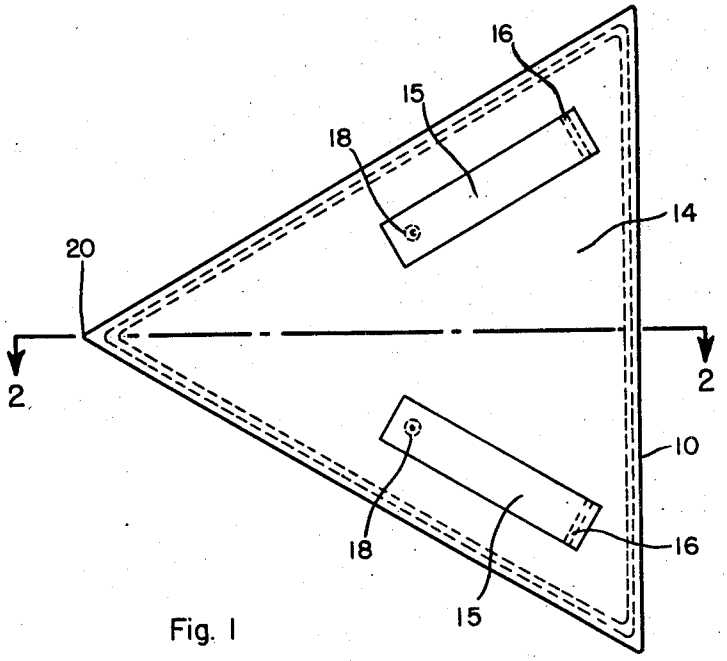


Fig. 1

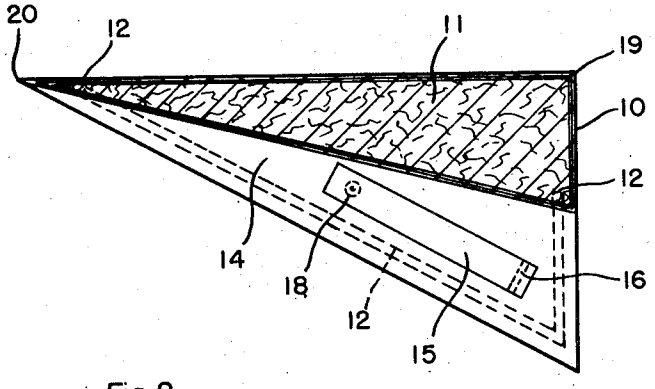


Fig. 2

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Fig. 6

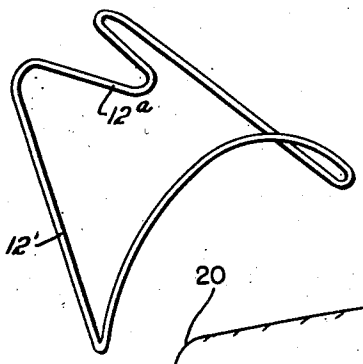
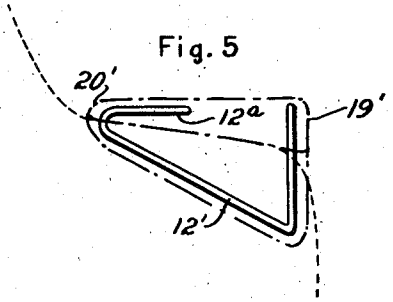


Fig. 5



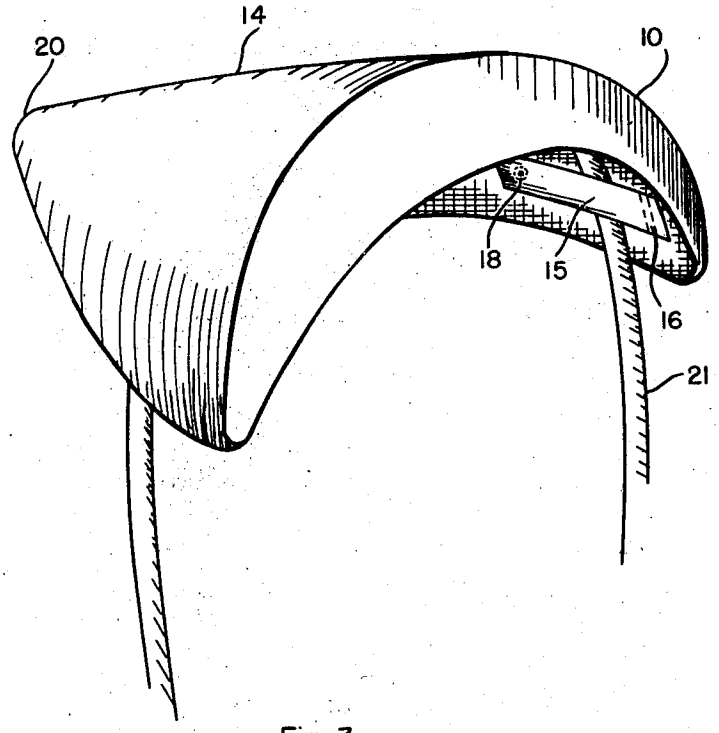
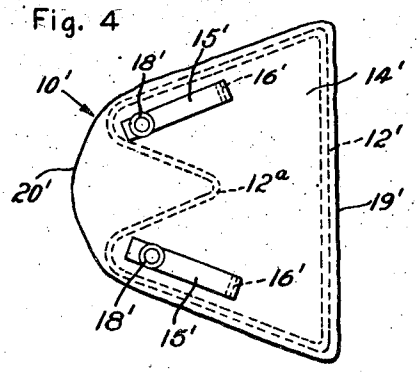


Fig. 3

Fig. 4



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Patented June 10, 1947 2,422,161

UNITED STATES PATENT OFFICE

2,422,161

SHOULDER PAD

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Application December 21, 1946, Serial No. 717,637

10 Claims. (Cl. 2—268)

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This invention relates to shoulder pads and, in particular, to shoulder pads especially adapted for feminine wear.

It has been the general practice in the past to alter the shapes of wearing apparel, particularly women's dresses, coats, and the like by sewing into the shoulders thereof pads of various sizes and shapes. The sewed-in pads were disadvantageous in that it was bothersome to remove them from the garment each time the garment was cleaned or pressed, and it was extremely difficult to re-sew these pads in the same position in the garment, which is necessary in order to maintain the proper squared modish shoulder configuration.

Accordingly, numerous attempts have been made to obviate the difficulties inherent in these pads. For example, it has been proposed to provide a pad having on the under portion thereof a strap designed to be slipped under the straps of the under garments of the wearer and thus position the pad. Since this pad was not attached directly to the garment to which it gave shape, it was necessary that considerable tension be put upon the strap in order to fixedly position the pad on the shoulder of the wearer. These pads are usually made of soft light material for reasons of comfort, so that a tensioned strap drew the pad out of shape. In this connection it is important to note that the exact form given to the shoulder of a garment by this pad is of major importance and even slight deformations are highly undesirable.

It is an object of this invention, therefore, to provide a shoulder pad which is capable of imparting a desired configuration to the shoulder portion of a garment and which is entirely separate from the garment when in wearing position.

Another object of this invention is to provide a shoulder pad adapted to be molded into its proper shape upon the shoulder of the individual wearer.

Still another object of this invention is to provide a shoulder pad which is independently supported as respects the garment to which it gives shape and is so held in place as to provide comfort to the wearer, and simultaneously maintain the desired shoulder configuration in the garment.

A further object of the present invention is to provide a shoulder pad which is light, inexpensive, and adaptable to a large variety of garments and which depends in no manner for support from the garment to which it gives shape.

A still further object of this invention is to provide a shoulder pad for molding the shoulder configuration of garments which combines the

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features of being independently supported as respects the garment by tension means frictionally engaging the shoulder strap of the under garment of the wearer and of being sustained by a reinforcing support member for maintaining the desired configuration of the shoulder pad while under the tension of the tensioning means.

Other objects and advantages of the present invention will become apparent from the following detailed description thereof when read in conjunction with the accompanying drawings in which

Figure 1 is a bottom plan view of a shoulder pad embodying the present invention,

Figure 2 is a sectional view of the pad shown in Figure 1 taken on line 2—2,

Figure 3 is a view in perspective of the pad shown in Figure 1,

Figure 4 is a bottom plan view of a shoulder pad illustrating another embodiment of the invention,

Figure 5 is a view in front elevation of the same embodiment, the reinforcing support element being shown in full lines and the contour of the pad in broken lines, and

Figure 6 is a perspective view of the wire reinforcing support member employed in the alternative embodiment.

In general, the present invention comprises the shoulder pad including in combination the shape-imparting reinforcing support member positioned within the pad and a tensioned strap located on the under side of the pad and so positioned as to frictionally engage a garment strap passed between the pad and the tensioned strap.

In order to more fully disclose the invention, a particular embodiment thereof is shown in the accompanying drawings in which there is shown a pad 10 filled with a fibrous material 11. The pad 10 may be of the usual or conventional shape given to most pads of this description and the fibrous material 11, while generally extremely light and fluffy in nature, may be composed of any one of a mixture of the materials now in common use in producing pads for garments. A support or shape-maintaining member 12 is positioned within the pad 10 as shown in Figures 1 and 2. In the particular embodiment disclosed herein, this skeletal support member 12, as shown, is a metal wire having a somewhat triangular outline and having a curved shape along one edge of the triangle. There are a variety of materials which may be employed as a support member and which may be fashioned in a variety of shapes. The support member 12 functions both as an element for imparting form to the pad 10 as well as an element to retain the shape of the pad when subject to the tension of straps, as hereinafter described.

It is also desirable that the support member 12 have a certain amount of resiliency or springiness, but it is essential that it be pliant so as to be yet capable of being bent in order to shape the pad to fit the shoulder and to remain in the configuration into which it is bent so as to give the desired outline to the garment.

On the under side 14 of the pad 10, a pair of straps or tapes 15—15 are shown each of which has one end sewed to the under side 14, as shown at 16, and the other end, as shown at 18, detachably fastened to the under side 14 of the pad by means of suitable snap fasteners. The straps or tapes 15—15 are preferably composed of an elastic material and the snap fasteners 18 are so positioned relative to the sewed end of the tapes 15—15 that it is necessary to stretch the tapes in order to fasten them on the pad, thus tensioning them in position.

As in the case of the usual shoulder pad of this description, the pad shown in Figures 1 and 2 contains a maximum amount of fibrous material 11, or padding, at the outer shoulder end 19, the padding decreasing gradually to a minimum at the inner end 20 which is disposed nearest the neck. In order to position the shoulder pad on the shoulder of the wearer, the garment strap 21, as shown in Figure 3, is passed between the retaining tapes 15—15 and the under side 14 of the pad.

In adjusting the shoulder pad comprising the present invention to the particular wearer, the reinforcing support member 12 is bent to such a position as fits the shoulder and simultaneously provides the desired outline. The retaining tapes are so attached as to be under constant tension and thus considerably increase the frictional contact between the tapes and the under garment strap upon which the pad 10 is positioned. The support member 12, while holding the pad into the desired configuration, also resists or offsets the tension stresses caused by the fastening of the tapes 15—15, and thus prevents the collapsing or distortion which would occur in a case of the soft yieldable pad preferred in this connection.

A number of variations and alterations in the above described embodiment of the invention will become apparent to those skilled in the art. For example, the shape of the pad may be considerably altered and rounded contours imparted thereto as is frequently customary in pads of this type. The reinforcing support member may be altered not only as to material and cross-sectional configuration, but also as to its shape and the manner of support within the pad. One example of such an alteration is shown in Figures 4, 5 and 6 of the drawings, and in this case the shape of the reinforcing support member is changed from that of an equilateral triangle to a trapezoidal configuration having a reentrant angle 12a in the short side thereof so as to produce double apices. The same reference numerals are employed in Figures 4, 5, and 6 as in the other figures but with the addition of primes. Such a configuration of the support member 12' is advantageous because no wire is directly over the shoulder bone and the pad may be more comfortable to wear. A further advantage of this configuration lies in the fact that the snap fasteners 18 may be positioned at or near the apices of such a figure and give added resistance to the stresses raised by the elastic tensioned strap 15'. The tapes 15'—15' are also subject to variation both as to material with which they are made and as to the number of tapes, although elastic tapes are preferred and a plurality of elastic tapes are essential to produce the best mode of the present invention.

In summary, the present invention resides in the shoulder pad having in combination tensioned straps or tapes for positioning the pad and a reinforcing support member for imparting shape to the pad and simultaneously resisting the distorting tension stresses raised by the tapes. In practicing the present invention, a shoulder pad is produced which is supported upon the wearer independently of the garment to which it gives configuration and which is capable of retaining its position upon the shoulder of the wearer. This pad is further advantageous in that it is not deformed by the attachment means and is readily adjustable and conformable to varying shoulder configurations. Furthermore, this improved shoulder pad is light, comfortable, and easily manufactured.

What is claimed is:

1. In a shoulder pad of the class described, which comprises a soft yieldable body member, the combination of an attaching tape having means securing its ends to the underside of the pad so that the tape is in tension, said tape adapted to frictionally engage the shoulder straps of an undergarment of the wearer, and a reinforcing support element for said body member for imparting shape to the pad and at the same time resisting the tension stresses set up by the tensioned tape and thus preventing deformation of the pad.

2. In a shoulder pad of the class described, which comprises a soft yieldable body member, the combination of an elastic attaching tape having means securing its ends to the underside of the pad so that the tape is in tension, said tape adapted to frictionally receive the shoulder straps of an undergarment of the wearer between said tape and the underside of the pad, and a reinforcing support element embedded in said body member for imparting shape to the pad and at the same time resisting the tension stresses set up by the tensioned tape and thus preventing deformation of the pad.

3. In a shoulder pad of the class described, which comprises a soft yieldable body member, the combination of two or more attaching tapes, means securing the ends of said tapes to the underside of the pad so that the tapes are in tension and disposed in spaced relationship transversely of the extent of the shoulder, said tapes adapted to frictionally receive the shoulder straps of an undergarment of the wearer between said tapes and the underside of the pad, and a reinforcing support element for said body member for imparting shape to the pad and at the same time resisting the tension stresses set up by the tensioned tapes and thus preventing deformation of the pad.

4. In a shoulder pad of the class described, which comprises a soft yieldable body member, the combination of a pliant reinforcing support member for imparting and maintaining the shape of the pad, and a tensioned retaining tape secured at its ends to the underside of the pad and extending approximately in the direction of the extent of the shoulder, said tape providing means for frictionally engaging a garment shoulder strap passed between the body member and the tape, said reinforcing member being pliant enough to render it capable of being bent to various shapes to conform the pad to individual shoulders while

at the same time sufficiently stiff to resist distortion of the pad by the tensions set up by the retaining tape.

5. In a shoulder pad of the class described, which comprises a soft yieldable arched body member, the combination of a pliant somewhat resilient reinforcing support member embedded in said body member for imparting and maintaining the shape of the pad, and a tensioned retaining tape secured at its ends to the underside of the pad and extending approximately in the direction of the extent of the shoulder, said tape providing means for frictionally engaging a garment shoulder strap passed between the body member and the tape, said reinforcing member being pliant enough to render it capable of being bent to various shapes to conform the pad to individual shoulders while at the same time sufficiently stiff to resist distortion of the pad by the tensions set up by the retaining tape.

6. In a shoulder pad of the class described, which comprises a soft yieldable arched body member of a roughly triangular configuration, the combination of a pliant reinforcing support member embedded in said body member and approximately following the triangular periphery thereof for imparting and maintaining the shape of the pad, and a tensioned retaining tape secured at its ends to the underside of the pad and extending approximately in the direction of the extent of the shoulders, said tape providing means for frictionally engaging a garment shoulder strap passed between the body member and the tape, said reinforcing member being pliant enough to render it capable of being bent to various shapes to conform the pad to individual shoulders while at the same time sufficiently stiff to resist distortion of the pad by the tensions set up by the attaching tape.

7. In a shoulder pad of the class described, which comprises a soft yieldable arched body member of a roughly triangular configuration, the combination of a pliant somewhat resilient reinforcing support member comprising a wire frame embedded in said body member and approximately following the triangular periphery thereof for imparting and maintaining the shape of the pad, and a tensioned retaining tape secured at its ends to the underside of the pad and extending approximately in the direction of the extent of the shoulder, said tape providing means for frictionally engaging a garment shoulder strap passed between the body member and the tape, said reinforcing member being pliant enough to render it capable of being bent to various shapes to conform the pad to individual shoulders while at the same time sufficiently stiff to resist distortion of the pad by the tensions set up by the attaching tape.

8. In a shoulder pad of the class described, which comprises a soft yieldable arched body member of a roughly triangular configuration, the combination of a pliant reinforcing support member comprising a wire frame embedded in said body member and approximately following the periphery thereof except adjacent an apex of the triangular configuration nearest the neck of the wearer, where said frame is provided with a reentrant angle, said frame serving to impart and maintain the shape of the pad, and a tensioned retaining tape secured at its ends to the underside of the pad and extending approximately in the direction of the extent of the shoulder, said tape providing means for frictionally engaging a garment shoulder strap passed between the body member and the tape, said reinforcing member being pliant enough to render it capable of being bent to various shapes to conform the pad to individual shoulders while at the same time sufficiently stiff to resist distortion of the pad by the tensions set up by the attaching tape, said reentrant angle providing a gap in the contour of the frame to relieve any possible pressure on the crown of the shoulder.

9. In a shoulder pad of the class described, which comprises a soft yieldable body member, the combination of two or more elastic attaching tapes, means securing the ends of said tapes to the underside of the pad so that the tapes are in tension and disposed in spaced relationship transversely of the extent of the shoulder, each upon the opposite side of the crown of the shoulder from the other, said tapes adapted to frictionally receive the shoulder straps of an undergarment of the wearer between said tapes and the underside of the pad, and a reinforcing support element for said body member for imparting shape to the pad and at the same time resisting the tension stresses set up by the tensioned tapes and thus preventing deformation of the pad, said tape securing means comprising a permanent connection at one end of each tape and a quick detachable connection at the other end thereof.

10. In a shoulder pad arrangement of the class described, a body member of a roughly triangular contour in plan, one apex portion adapted to be disposed toward the neck of the wearer and an upwardly convex outward margin adapted to be positioned adjacent the outer edge of the shoulder, said body portion comprising a mass of soft yieldable padding material decreasing somewhat in thickness toward the above mentioned inward apex portion, a fabric covering for said padding, and a reinforcing support member consisting of a pliant, deformable, somewhat resilient wire contained within the fabric covering, said wire being of substantially endless configuration conforming to the marginal contour of the pad including the sides of the triangle which converge toward the neck, and the convex side adjacent the outer edge of the shoulder, but being provided with a reentrant angle at the aforesaid apex portion of the pad, whereby a gap is provided in the contour of the reinforcing support member adjacent said apex portion to relieve any uncomfortable pressure on the crown of the shoulder, the whole comprising a conformable shoulder pad which may be molded to the shape of the individual shoulder.

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