Sept. 21, 1954 C. F. CRAWFORD 2,689,350

COMBINATION SHOULDER PAD AND STRAP CUSHION

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Fig. 1

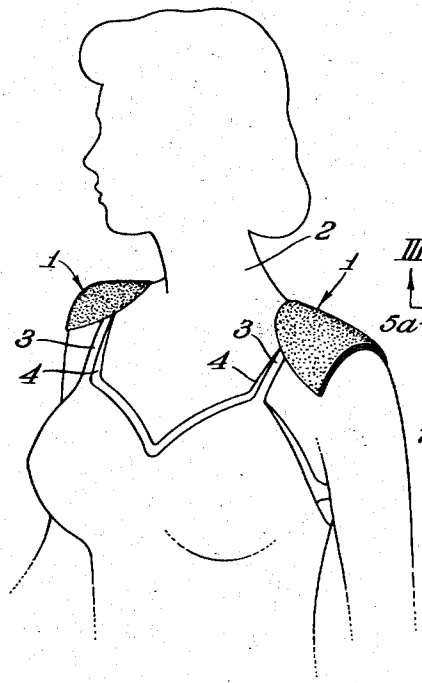


Fig. 2

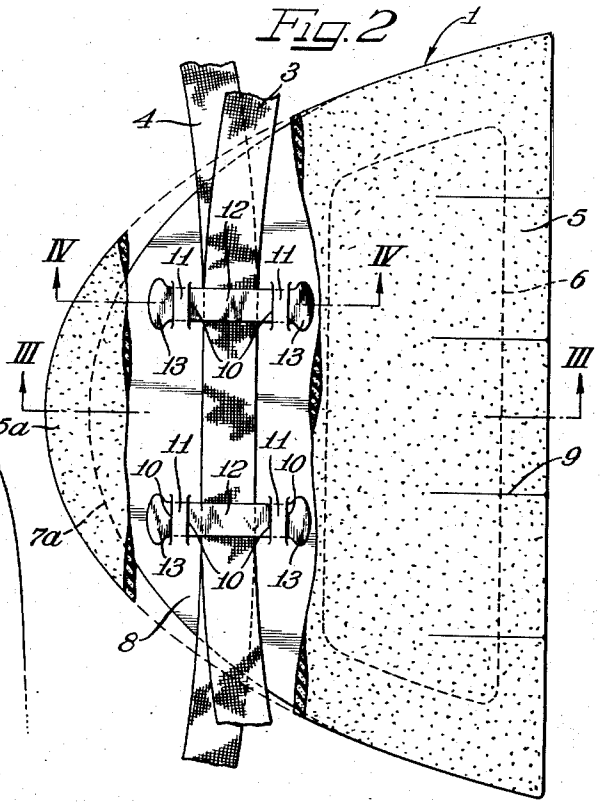


Fig. 3

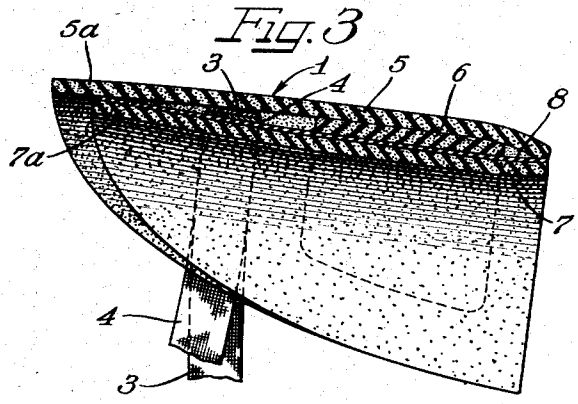


Fig. 4

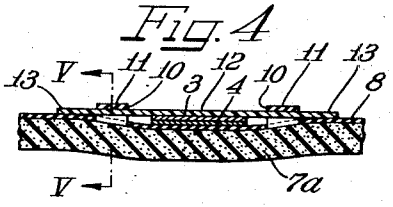
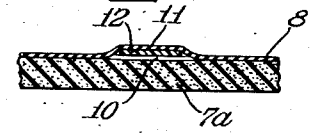


Fig. 5



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Fig. 7

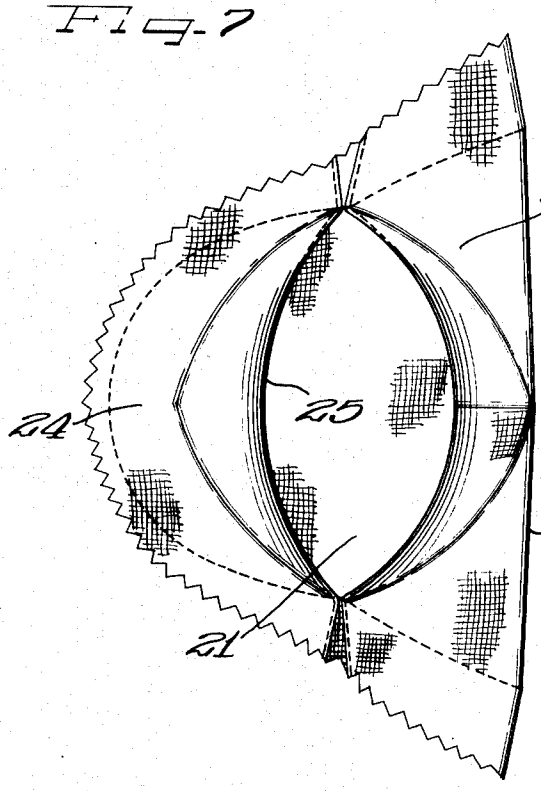


Fig. 6

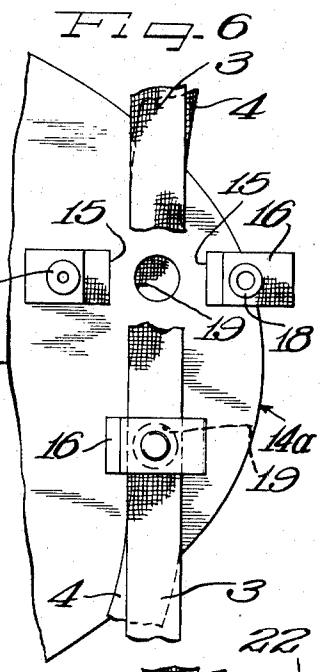


Fig. 9

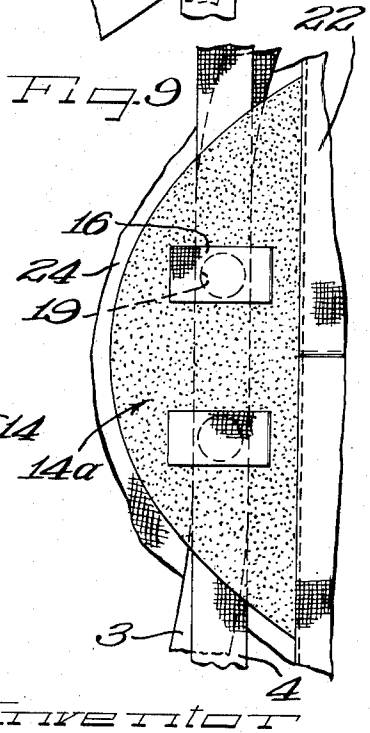
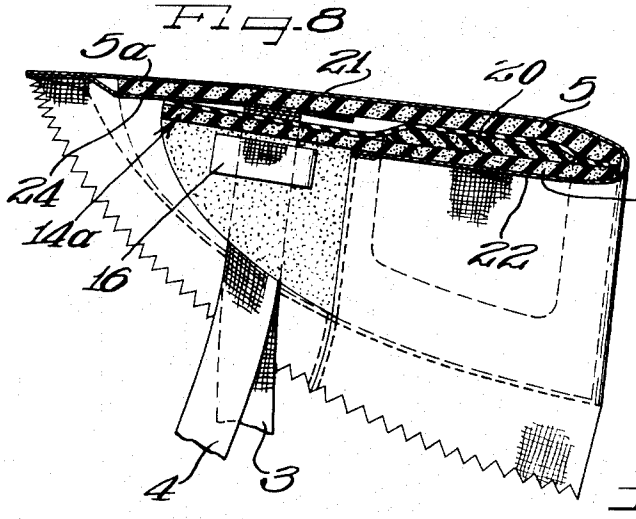


Fig. 8



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Patented Sept. 21, 1954

2,689,350

UNITED STATES PATENT OFFICE

2,689,350

COMBINATION SHOULDER PAD AND STRAP CUSHION

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Application July 26, 1951, Serial No. 238,721

8 Claims. (Cl. 2—268)

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This invention relates to improvements in a combination shoulder pad and strap cushion of the type highly desirable for use over the shoulder of a wearer inside an outer garment to impart a desirable form to the shoulders and enhance the overall appearance and hang of the outer garment, and at the same time cushion the straps of an undergarment or undergarments to prevent those straps from chafing or pressing into the shoulder of the user, although the invention may have other uses and purposes as will be apparent to one skilled in the art.

In the past, it has been customary to attach shoulder pads directly to the inside of an outer garment such as a dress or the like, and accordingly when that garment was sent out for cleaning, it was necessary to remove the shoulder pads therefrom, and then sew them or otherwise reattach them upon return of the garment. Also, where shoulder pads have been attached directly to the outer garment, movements of the outer garment relatively to the shoulder caused slippage of the pad to the discomfort of the user, and forced the user to make unsightly adjustments of the garment and pad at frequent intervals.

Of course, connections have been heretofore provided between shoulder pads and the shoulder straps of undergarments, but the object there was mainly to keep the shoulder strap of the undergarment from slipping out of position and becoming exposed or sliding off the shoulder. It is also known that in many cases shoulder straps of undergarments are so tight as to chafe the shoulder of the user or actually to press a somewhat permanent groove into the user's shoulder and the shoulder pad itself, most frequently associated with the outer garment, afforded no relief.

With the foregoing in mind, it is an important object of the instant invention to provide a shoulder pad which may readily be attached to the strap of an undergarment only, and which remains free from an outer garment, thus permitting outer garments to be changed while the shoulder pads remain in position on the wearer's shoulders.

Another object of this invention is the provision of a combination shoulder pad and strap cushion wherein a cushioning device is provided with means for engagement with the shoulder strap of an undergarment, shaped to provide a proper shoulder pad to support an outer garment, and is further provided with cushioning or pressure absorbing means disposed between

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the shoulder and the undergarment strap to eliminate any chafing of the shoulder.

It is also an object of this invention to provide a shoulder pad having an exposed soft gripping undersurface so as to gently cling to the body of the user beneath the shoulder pad, and yet allow free movement of an outergarment over the pad.

A further object of the invention resides in the provision of a shoulder pad of cushioning material provided with a removable cover which may be taken off, and separately laundered and ironed, and then the pad may be reinserted for further use, whereby a single pair of pads is all that is needed by the wearer, and that single pair of pads may be used with various covers of different colors.

Another feature of the invention resides in the provision of a shoulder pad having a removable cover associated therewith, the cover being of such shape and disposition relatively to the pad as to completely enclose the upper portion of the pad, while exposing a lower portion of the pad directly beneath the straps of an undergarment so as to provide not only a cushioning effect to prevent chafing of the shoulder, but also allow the pad to cling to the shoulder to prevent slipping.

Still another feature of the invention resides in the provision of simple and easily operable means incorporated in a shoulder pad for engaging the pad with the strap or straps of undergarments.

Still a further feature of this invention resides in the provision of a shoulder pad made of cushioning material having separable flaps on the inner portion of the pad, between which the shoulder strap of an undergarment may extend.

Also a feature of this invention is the provision of a shoulder pad made of cushioning material, with the inner portion thereof divided to provide superposed flaps, with means carried by the upper face of the lower flap to removably engage the shoulder strap of an undergarment and anchor the entire pad thereto.

It is a further object of the invention to provide a shoulder pad or the like made of foam latex, and which may readily be laundered whenever desired, the pad being graduated in thickness from the outer edge to the inner, and the inner portion being in the form of separable flaps between which the shoulder strap of an undergarment may extend, the upper flap extending inwardly beyond the lower flap to provide a gradual outward increase in thickness of the pad.

While some of the more salient features, characteristics and advantages of the instant invention have been above pointed out, others will become apparent from the following disclosures, taken in conjunction with the accompanying drawings, in which

Figure 1 is a pictorial illustration showing a pair of shoulder pads embodying principles of the instant invention in operative position on the shoulders of a user, but with the cover removed for purposes of clarity;

Figure 2 is an enlarged top plan view of one of the shoulder pads of Fig. 1, showing the pad pressed flat for purposes of illustration, and with parts broken away to reveal the structure associated therebeneath;

Figure 3 is a transverse vertical sectional view through the shoulder pad, taken substantially as indicated by the line III—III of Fig. 2, looking in the direction of the arrows, and showing the pad in its natural shape;

Figure 4 is an enlarged fragmentary vertical sectional view taken substantially as indicated by the line IV—IV of Fig. 2;

Figure 5 is an enlarged fragmentary transverse sectional view taken substantially as indicated by the line V—V of Fig. 4;

Figure 6 is a fragmentary enlarged plan view of the bottom flap of the pad, illustrating a different means for attaching the shoulder straps of an undergarment to the pad;

Figure 7 is a bottom plan view of a removable cover for the pad, showing the slot in the bottom flap of the cover expanded;

Figure 8 is a view of the same character as Fig. 3, showing a slightly different construction for the pad, and illustrating the cover attached to the pad; and

Figure 9 is a fragmentary bottom plan view of the left hand portion of Fig. 8 to illustrate the exposure of an under portion of the pad with the cover applied.

As shown on the drawings:

In Fig. 1 I have illustrated a pair of like shoulder pads 1—1 in proper wearing position on the shoulders of a user 2, diagrammatically illustrated. In this instance I have shown a pair of shoulder straps associated with each shoulder pad 1, a shoulder strap 3 being attached to an undergarment such as a slip, and the shoulder strap 4 attached to an undergarment such as a brassière. It is obvious that if the user desires only one shoulder strap to be associated with the respective pad, or removably connected to the pad, the other shoulder strap may ride freely over the inner portion of the pad or be disposed entirely beneath the pad.

In most cases, however, it will be desired to connect all of the undergarment shoulder straps to the pad so that these shoulder straps will be maintained in alignment. It is to be especially noted, as clearly seen in Fig. 1, that regardless of how many straps may be connected to the pad, the straps are completely concealed by the pad which has a portion overlying them, and thus an outer garment will rest smoothly and evenly on a pad and there will be no undulation in the garment to betray the use of the pad or the fact that there are shoulder straps associated with it.

In the illustrated embodiment of the invention, the pad is preferably made of foam latex because of its lightness in weight, soft texture, and the gentle gripping action afforded by such material so that it will softly cling to the shoulder of the user. As will more fully appear later herein, the pad is used with a removable cover that prevents the pad itself from clinging to an outer garment. Obviously, other cushioning material might well be used, but foam latex not only gives the above advantages but also may be laundered whenever desired.

The illustrated embodiment of the invention seen in Figs. 1 to 5, and illustrated without its cover, is shown as being laminated or made up of layers, but it will be understood that the pad may be molded if so desired. With the laminated arrangement, three layers, 5, 6 and 7, have been utilized. It will be noted that the layer 6 is not nearly as wide as the layers 5 and 7, but is secured to and between these layers at the outer portion of the pad so as to give the same a thicker part at the extremity of the shoulder. These layers are adhesively or equivalently secured together, and preferably the lower layer 7 is provided with a thin sheet of latex 8 secured over its upper face so as to provide a skin-like covering. This covering is, of course, of greater tensile strength than the layer 7 when the latter is made of foam latex.

The entire pad preferably has the general contour of half an oval, and is transversely curvate or arcuate to fit smoothly over the shoulder of the user. If the pad is molded, that shape may be molded into it. However, where the laminations are used, as illustrated, the upper lamination or sheet 5 is preferably provided with a series of spaced V-shaped notches leading in from the outer edge thereof, and when this sheet is attached to the other layers, the notches are closed together as at 9 in Fig. 2, thus giving the entire pad a natural curvature.

Inside the inner edge of the middle lamination 6, the pad is divided so that the laminations 5 and 7 terminate in superposed but separate flaps 5*a* and 7*a*. At this point it should be noted, with reference to Figs. 2 and 3, that the upper flap 5*a* extends inwardly beyond the lower flap 7*a* so that there is a smooth and gradual increase in thickness from the inner edge of the pad to the outer edge thereof.

The shoulder straps 3 and 4 extend between the flaps 5*a* and 7*a*, being entirely concealed by the flap 5*a*, while the flap 7*a* affords a cushion beneath the straps so that the straps do not press in or chafe the shoulder of the user. Means are provided, preferably on the upper surface of the lower flap 7*a*, to removably attach the pad to the shoulder strap or straps. These particular means are more fully set forth, described, and claimed in my copending application for patent entitled "Cushion Holder for Shoulder Straps," filed March 29, 1951, Serial No. 218,202.

The illustrated means embody two spaced pairs of adjacent slits through the skin-line cover 8 only on each side of the center line of the pad, the slits being indicated at 10, and each pair of slits forming a free loop 11. With the exception of the four loops 11, the cover 8 is tightly secured to the upper face of the lower lamination 7—7*a*. Through each pair of loops is a holding element 12 in the form of a flat strip having enlarged end portions 13—13, so that the holding elements in general have the shape of a flat dumbbell. These elements may be of any suitable material, transparent or opaque, and are preferably made of a suitable thermoplastic or thermosetting plastic. The enlarged head portions 13—13 are preferably slightly wider than the associated loop 11, so that the loop must be stretched slightly when the

head portion of the holding element passes therethrough, thus providing easily removable anchorage of the shoulder straps which extend under the holding element as seen clearly in Fig. 2, and yet accidental dislodgement of the straps is readily prevented. It is a simple expedient to slip one head portion **13** through its adjacent loop, place the straps under the body portion of the holding member **12**, and reinsert that head portion through its respective loop.

It will be noted that the covering **8** is preferably relatively smooth, as distinguished from the other surfaces of the foam rubber pad. Thus, a smooth non-drag surface is provided beneath the shoulder straps of the undergarments.

In Fig. 6 I have illustrated a different manner in which to anchor the shoulder straps **3** and **4** to the lower flap of the pad. In this instance, a lower flap **14** is disclosed provided with a skin-like covering, and corresponding exactly to the above discussed lamination **7** and its covering **8**. In this instance, the lamination or flap **14**, in the free portion **14***a* thereof, is provided with two pair of spaced slits **15—15**, and through each pair of slits a securing ribbon **16** or the equivalent is threaded. Complemental snap members are associated with the ends of each ribbon **16**, one end carrying a male snap element **17** and the other end a female snap element **18**, which may be secured together over top of the shoulder straps **3** and **4** as seen in the lower portion of Fig. 6. An aperture **19** is provided through the flap portion **14***a* directly inside the point where the snap elements will be when engaged with each other so that these snap elements may be received by the aperture, and no greater thickness is added to the pad as a whole.

With reference to Fig. 8, it will be seen that in this instance the entire pad-like member includes the above mentioned lamination **5**, the just above described lamination **14**, and an intermediate lamination **20** of less width, corresponding to the above discussed lamination **6**. In this instance, however, the lamination **20** is secured to the lamination **14**, and the skin-like covering extends over the top of the lamination **20**. The resultant structure is of the same shape and function as above described.

In Figs. 7, 8 and 9 I have shown a removable cover, alone in Fig. 7, and associated with the pad in Figs. 8 and 9. Obviously, it should be understood that this cover is intended to be utilized with the structure described in connection with Figs. 1 to 5 inclusive, in identically the same manner it is illustrated in Figs. 8 and 9.

With reference now to Fig. 7 it will be seen that the cover comprises one piece of material to provide a top **21** and an underflap **22** only partially the width of the top, this piece of material being reversely folded as at **23**. Another piece of material **24** provides another bottom flap, and these bottom portions of the cover are separated by a slot **25** which may be expanded as seen in Fig. 7 for the reception of the pad.

This cover is preferably made of a smooth slick material, a silk, rayon, or nylon fabric being very satisfactory for the purpose. Such covers may be provided in any desired color and a number of differently colored covers may be used with each shoulder pad, depending on the character of the outer garment and the color of the various undergarments.

The cover is placed over the pad in the manner seen in Figs. 8 and 9. It will be noted that the underflap **22** of the cover extends under the

lamination **14** but not under the part **14***a* thereof to which the shoulder straps are attached, while the underflap **24** extends between the two flap portions **5***a* and **14***a* of the pad, thus leaving the underside of the flap **14***a* exposed for clinging contact with the body of the user. It will be noted, however, that the top **21** of the cover totally encloses the upper portion of the pad so that an outer garment will contact only the cover, and slip freely thereover whereby unsightly adjustments of the outer garment and shoulder pads heretofore necessitated have been completely eliminated. The outer garment should be free to move relatively to the pad and its cover, without displacing the pad in any way whatever. It will be noted that it is a simple expedient to remove the cover from the pad, and separately launder and press the cover whenever desired.

It will also be noted that when the shoulder straps are attached to the pad, the pad is entirely carried by the shoulder straps and no connection of that pad with an outer garment is necessary. Consequently, outer garments may be changed at will without thought of shoulder pads, the shoulder pads remaining attached to the undergarment straps during the changing of the outer garment. It will further be noted that the entire combination of the shoulder pad and shoulder strap cushion and the cover therefor is pleasing in appearance, does not cause any objectionable undulations in the outer garment resting thereon, provides a suitable soft clinging action against the skin of the user, permits free movement of the outer garment relatively to the pad, and the cover and pad may be separately laundered at will whenever desired, and the whole may be economically manufactured.

It will be understood that modifications and variations may be effected without departing from the scope of the novel concepts of the present invention.

I claim as my invention:

1. In a shoulder pad, a member of cushioning material to overlie the shoulder of a user, a portion of said member being divided into a pair of separable superposed flaps, and means to hold a shoulder strap between the flaps and anchor the pad to the strap, said means provided on and carried by only one of the flaps.

2. In a shoulder pad, a member of cushioning material to overlie the shoulder of a user, a portion of said member being divided into a pair of separable superposed upper and lower flaps, means provided on the upper face of only the lower flap to hold a shoulder strap between the flaps and anchor the pad to the strap, said pad being of foam latex to provide a soft gripping action both against the body of the user, and a skin-like smooth upper face on the lower flap where the strap overlies the flap.

3. In a combination shoulder pad and strap cushion, a fabricated cushioning member having the general contour of a half oval and being naturally transversely curvate to fit over the shoulder of a user, said member including at least a triple thickness in the shoulder extremity portion thereof, the opposite portion being of double thickness and divided into separate superposed upper and lower flaps between which a shoulder strap may extend, the upper flap extending beyond the lower flap, and means provided on the lower flap only to removably engage a shoulder strap and anchor the entire member to the strap.

4. In a shoulder pad, a member of cushioning

material to overlie the shoulder of a user, the portion of said member opposite to a shoulder extremity portion thereof being divided into a pair of separable superposed upper and lower flaps between which a shoulder strap may extend, and a removable cover of slick material over said member, one portion of said cover extending between said flaps to leave the lower flap exposed for soft gripping contact with the shoulder of the user.

5. In a shoulder pad, a member of cushioning material to overlie the shoulder of a user, the portion of said member opposite to a shoulder extremity portion thereof being divided into a pair of separable superposed upper and lower flaps, means provided on the upper face of the lower flap to hold a shoulder strap between the flaps and anchor the pad to the strap, said pad being of foam latex to provide a soft gripping action against the body of the user, and a removable cover of smooth material having a slit in an intermediate part of the bottom thereof through which said member may be inserted and removed, a part of said cover extending between said flaps to leave the lower flap exposed for contact with the body of the user.

6. In a shoulder pad, a member of cushioning material to overlie the shoulder of a user, the portion of said member opposite to a shoulder extremity portion thereof being divided into a pair of separable superposed upper and lower flaps between which a shoulder strap may extend, the lower flap having a pair of spaced slits therethrough, a strap holding ribbon threaded through said slits, and complemental snap fastener elements on the ends of said ribbon.

7. In a shoulder pad, a member of cushioning material to overlie the shoulder of a user, the portion of said member opposite to a shoulder extremity portion thereof being divided into a pair of separable superposed upper and lower flaps between which a shoulder strap may extend, the lower flap having a pair of spaced slits therethrough, a strap holding ribbon threaded through said slits, complemental snap fastener elements on the ends of said ribbon, and said lower flap having an aperture therethrough between said slits to receive said fastener elements when engaged so the elements will not add to the thickness of the pad.

8. In a shoulder pad, a member of cushioning material to overlie the shoulder of a user, the portion of said member opposite to a shoulder extremity portion thereof being divided into a pair of separable superposed upper and lower flaps between which a shoulder strap may extend, the lower flap having a pair of spaced slits therethrough, a strap holding ribbon threaded through said slits, complemental snap fastener elements on the ends of said ribbon, said lower flap having an aperture therethrough between said slits to receive said fastener elements when engaged so the elements will not add to the thickness of the pad, said member being of soft rubber-like material, and a removable cover of smooth slick fabric over said member except for said lower flap which remains exposed for clinging contact with the body of the user.

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