Dec. 30, 1947. I. PERLMUTTER 2,433,623

SHOULDER PAD

Filed April 14, 1947

Fig. 1.

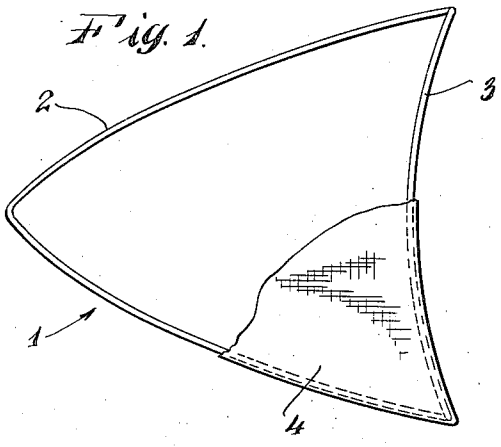


Fig. 7.

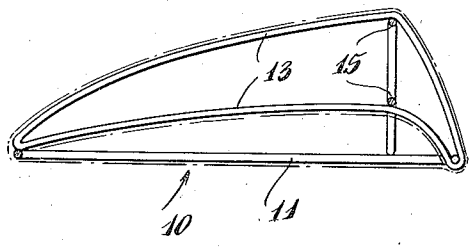


Fig. 2.

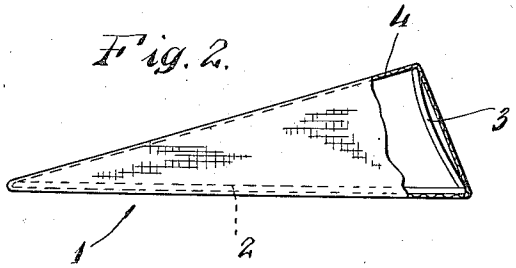


Fig. 3.

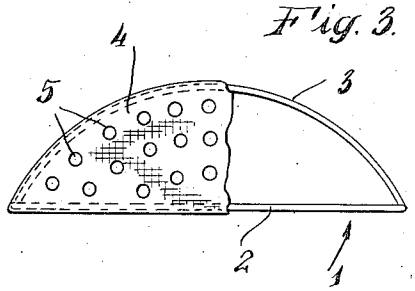


Fig. 4.

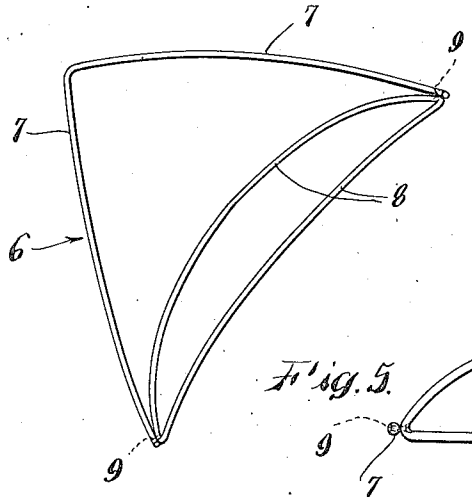


Fig. 5.

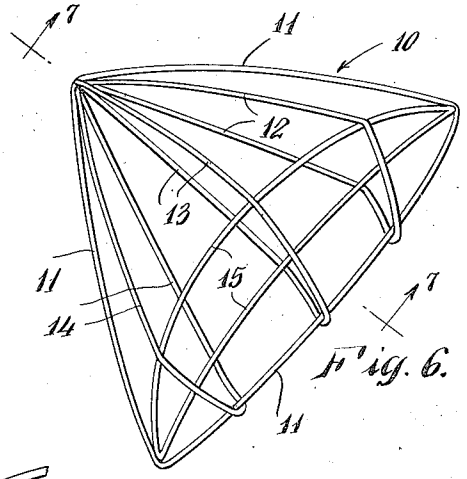


Fig. 6.

INVENTOR.

Irving Perlmutter

BY Henry J. R. Metzler

Agt.

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SHOULDER PAD

Irving Perlmutter, Bronx, N. Y.

Application April 14, 1947, Serial No. 741,284

4 Claims. (Cl. 2—268)

1

The present invention relates to improvements in pads especially of the type used in the shoulder portions of garments.

Nearly all of the millions of shoulder pads yearly produced consist of a cotton-wadding filler, covered with a matching rayon or rayon-cotton material. These pads have all the great disadvantage, that they have to be removed before washing or cleaning the garment and aterwards have to be sewed in again, because the cushioning material of the filler changes its shape and cushioning quality when it is soaked by water, cleaning fluid, or the like. The removing and replacing of shoulder pads for each washing or cleaning of a garment increases considerably the cost and the time necessary for washing or cleaning. Moreover, the presently used shoulder pads usually do not fit precisely the shape of the shoulder of an individual wearing a garment, or if they are made to fit more or less well, their manufacture requires a considerable amount of skill and time, thus increasing the price of shoulder pads unreasonably.

Therefore, one object of the present invention is the provision of a shoulder pad of the character described which is hollow and does not necessarily have to be provided with a cushioning filler, so that the shoulder pad can be left on the garment during the washing or dry-cleaning process.

Another object of the present invention is the provision of a shoulder pad of the character described which can be made, without an increase in manufacturing cost, in such a manner that it will fit precisely into the shoulder portion of a garment or to the anatomical shape of an individual wearer of a garment, and which never will change its shape or lose its original form due to long time wearing or cleaning or the like.

A further object of the present invention is the provision of a device of the character described which can be made entirely of plastic material or of any other material, which is particularly well adapted for mass production processes, but which in specific cases can be provided with a soft envelope and/or with soft filler for instance if it is used in connection with very thin material for ladies' or children's wear or the like.

Still another object of the present invention is the provision of a device of the character described which is light in weight, simple in construction, resilient, inexpensive to manufacture, but sturdy and durable and well adapted to withstand the rough usage to which devices of this type are frequently subjected.

2

Yet a still further object of the present invention is the provision of a device of the character described which is particularly well adapted to be shaped into a concavo-convex form thus constructing an entirely new type of shoulder pad which is substantially cup-shaped, encompassing the shoulder like a shell and which I call a "drop shoulder pad" or a "cup shoulder pad."

Furthermore, another object of the present invention is the provision of a device of the character described which consists of a resilient frame work which can be contained in one or several envelopes, so that by increasing or decreasing the number of envelopes the size of the shoulder pad can be altered without the necessity of manufacturing a large number of frames of different sizes. In this way the number of frames to be manufactured or to be kept in stock by a tailor or the like can be reduced to a minimum.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

In the accompanying drawings the preferred forms of the invention have been shown.

In said drawings:

Figure 1 is a plan view of a preferred embodiment of my invention;

Figure 2 is a side view of the same;

Figure 3 is a front view;

Figure 4 is a perspective view of a frame member;

Figure 5 is a fractional side view of the frame of Figure 4 showing a detail;

Figure 6 is a perspective view of a modification of the frame; and

Figure 7 is a cross-sectional view on the line 7—7 of Figure 6.

Similar reference characters refer to similar parts throughout the several views.

Referring first to Figures 1 to 3, the numeral 1 denotes a complete shoulder pad made in accordance with my invention. The main feature of my new and improved device is a thin resilient rod 2 which is shaped as a V having outwardly curved side portions, and a sickle-shaped resilient thin rod 3 whose pointed extremities are secured to the extremities of the V-shaped rod so as to form therewith a concavo-convex wedge-shaped triangular frame which is adapted

for being attached to a garment in place of a shoulder pad. The rods 2 and 3 can be made of wood, plastic material, aluminum, steel wire or of any other suitable material and they can be made as a unit or connected to one another by means of soldering, gluing, welding or the like. In many cases this frame alone can be attached to the shoulder portion of a garment, particularly if the garment is made of heavy material. In other cases an envelope 4 can be provided for, which fits tightly around the frame. This envelope 4 can be made of cloth, silk, plastic material or the like, and it can be provided with perforations 5. The size of the shoulder pad 1 can be increased by encompassing the frame into several envelopes 4 (plurality of envelopes not shown), so that the number of frames to be manufactured or to be kept in stock by a tailor or the like can be reduced to a minimum.

Instead of an envelope 4 there can be provided thin walls of plastic material which fill the space between the rods 2 and 3 or only one such wall can be provided for, which fills the space between the arch portions of the rod 3. Said thin wall or walls can be made as a unit with the parts 2 or 3, particularly if said walls and the parts 2 and 3 consist of plastic material, or the wall or walls can be secured to the rods 2 or 3 by any suitable means.

A slight modification is shown in Figures 4 and 5, where it will be seen that the V-shaped rod 7 of the frame 6 has its end portions pivotably connected to the sickle-shaped rod 8.

This pivot connection can be made in the form of any suitable hinging means, or a pivot pin 9 can be extended through the extremities of the rod 7 and the pointed end portions of the rod 8.

The modification of Figures 6 and 7 relates to the aforementioned new type of shoulder pad which is substantially cup-shaped, encompassing the shoulder like a shell and which I call a "drop shoulder pad" or a "cup shoulder pad." In this case the frame 10 consists of a sickle-shaped resilient thin rod 15, of a triangle 11 whose sides preferably are curved outwardly consisting of thin resilient rods and having two of said rods secured to the pointed extremities of said sickle-shaped rod in such a manner that the latter is rightangularly disposed to the triangle and in spaced relation to the third rod of said triangle, and three thin resilient frame members 12, 13, and 14 which are at one extremity joined to each other as well as to the juncture of the two first mentioned rods of the triangle 11. The frame members 12, 13 and 14 diverge from said juncture and are secured to and angularly disposed to said sickle-shaped rod as well as to the third rod of said triangle 11. The frame member 13 is slightly larger than the frame members 12 and 14, each of said three frame members running from said juncture upwardly to the upper arch portion of said sickle-shaped rod 15, then down to the front rod of the triangle 11, then up to the lower arch portion of rod 15, and finally downwardly and back to the aforementioned juncture. While only three frame members 12, 13 and 14 are shown in the present instance, it will be obvious that more than three, or fewer, frame members can be used for each shoulder pad. As indicated by dash-and-dotted lines in Figure 7, the frame 10 can also be contained in one or more envelopes in the manner explained in connection with the envelope 4 of Figures 1 to 3, or a thin wall can be provided between the frame members 12, 13 and 14 and the rods of the triangle 11.

A soft filler of fibrous material as used in ordinary shoulder pads is normally not necessary in the case of my new and improved shoulder pad, particularly not in the case of the modification of Figures 6 and 7. However, if this device is used in connection with very thin material for ladies' or children's wear or the like, such a soft filler can be inserted between the parts of the frame or into the envelope 4. In any of the modifications shown, the frame can be made to fit precisely the garment or the shoulder of the individual wearer, and a higher precision can be attained in making such frames than in making the ordinary wadded pads. Moreover, the frame or the insert for shoulder pads will retain its original shape and form irrespective of long time use and/or cleaning, laundering, or pressing of the garment.

Since certain changes may be made in the above article and different embodiments of the invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

It is also to be understood that the following claims are intended to cover all of the generic and specific features of the invention herein described, and all statements of the scope of the invention which as a matter of language might be said to fall therebetween.

Having thus fully described my said invention, what I claim as new and desire to secure by Letters Patent is:

1. A device of the character described comprising a sickle-shaped resilient thin rod, a triangle having outwardly curved sides consisting of thin resilient rods and having two of said rods secured to the pointed extremities of said sickle-shaped rod in such a manner that the latter is rightangularly disposed to the triangle and in spaced relation to the third rod of said triangle, and three thin resilient frame members being at one extremity joined to each other as well as to the juncture of the two first mentioned rods of said triangle whence they diverge and being secured to and angularly disposed to said sickle-shaped rod as well as to the third rod of said triangle, each of said three frame members running from said juncture upwardly to the upper arch portion of said sickle-shaped rod, then down to said third triangle rod, then up to the lower arch portion of said sickle shaped rod, and then down and back to said juncture, all substantially as described.

2. A shoulder pad comprising a sickle-shaped resilient thin rod, a triangle having outwardly curved sides consisting of thin resilient rods and having two of said rods secured to the pointed extremities of said sickle-shaped rod in such a manner that the latter is rightangularly disposed to the triangle and in spaced relation to the third triangle rod, three thin resilient frame members being at one extremity joined to each other as well as to the juncture of the two first mentioned rods of said triangle whence they diverge and being secured to and angularly disposed to said sickle-shaped rod as well as to the third rod of said triangle, a casing of soft material enclosing tightly said triangle and said frame members, and a filler of cushioning material within said casing, each of said three frame members running from said juncture upwardly to the upper arch portion of said sickle-shaped rod, then down to said third triangle rod, then up to the lower arch portion of said sickle-shaped rod,

and then down and back to said juncture, all substantially as described.

3. A shoulder pad comprising a sickle-shaped resilient thin rod, a triangle having outwardly curved sides consisting of thin resilient rods and having two of said rods secured to the pointed extremities of said sickle-shaped rod in such a manner that the latter is rightangularly disposed to the triangle and in spaced relation to the third triangle rod, three thin resilient frame members being at one extremity joined to each other as well as to the juncture of the two first mentioned rods of said triangle whence they diverge and being secured to and angularly disposed to said sickle-shaped rod as well as to the third rod of said triangle, a casing of soft material enclosing tightly said triangle and said frame members, and a filler of cushioning material within said casing, each of said three frame members running from said juncture upwardly to the upper arch portion of said sickle-shaped rod, then down to said third triangle rod, then up to the lower arch portion of said sickle-shaped rod, and then down and back to said juncture, all substantially as described.

4. A shoulder pad comprising a sickle-shaped resilient thin rod, a triangle having outwardly curved sides consisting of thin resilient rods and having two of said rods secured to the pointed extremities of said sickle-shaped rod in such a manner that the latter is rightangularly disposed to the triangle and in spaced relation to the third

triangle rod, three thin resilient frame members being at one extremity joined to each other as well as to the juncture of the two first mentioned rods of said triangle whence they diverge and being secured to and angularly disposed to said sickle-shaped rod as well as to the third rod of said triangle, and thin resilient walls being provided between said frame members and said triangle rods so as to fill the space between said frame members and said triangle, each of said three frame members running from said juncture upwardly to the upper arch portion of said sickle-shaped rod, then down to said third triangle rod, then up to the lower arch portion of said sickle-shaped rod, and then down and back to said juncture, all substantially as described.

IRVING PERLMUTTER.

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