Jan. 24, 1933. N. ZUCK 1,895,117

SHOULDER PAD AND METHOD OF MAKING SAME

Filed Feb. 7, 1931

Fig. 5

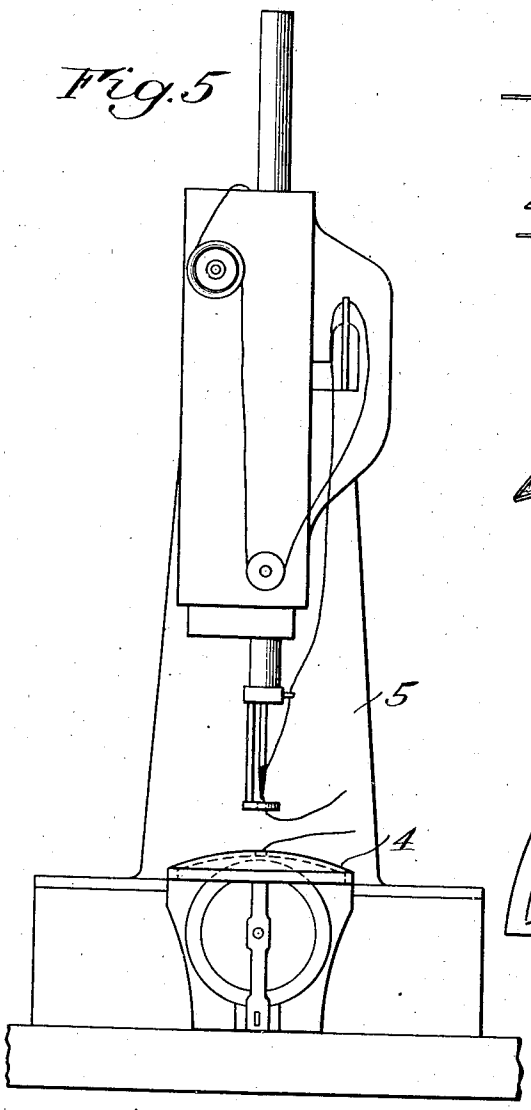


Fig. 3

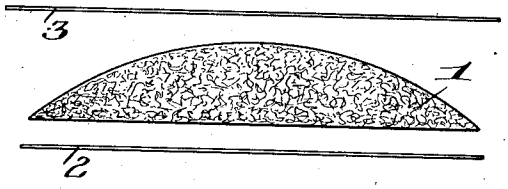


Fig. 2

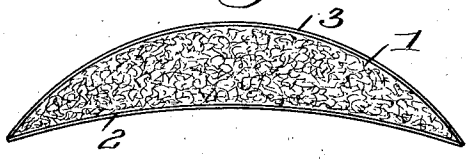


Fig. 1

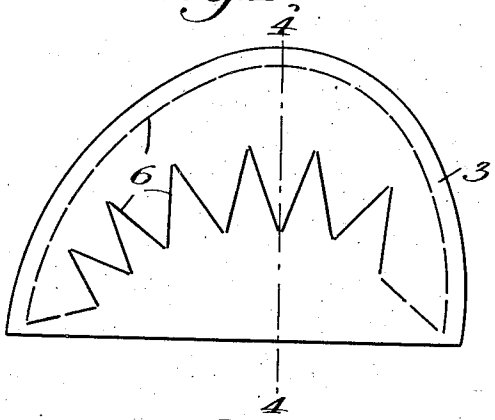


Fig. 4

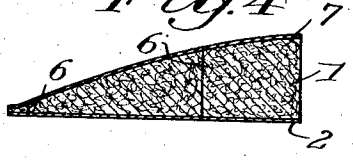
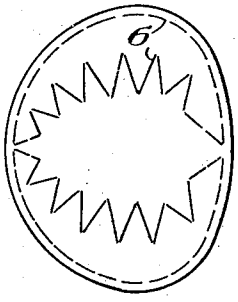


Fig. 6



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SHOULDER PAD AND METHOD OF MAKING SAME

Application filed February 7, 1931. Serial No. 514,255.

This invention relates to improvements in shoulder pads and method of making same, and especially to shoulder pads of the kind used in the lining of garments to maintain proper shoulder lines thereof.

The principal object of this invention is to provide a pad of this kind having the proper form and which is cheaply constructed of inexpensive materials.

Another object of the invention is the provision of a shoulder pad and method of making the same which is substantially concavo-convex in form so that its inner surface is normally of the shape of the inner surface of the shoulder of the garment, and its outer surface of the proper shape for the outer surface of the shoulder of the garment.

Still another object of the invention is the provision of a shoulder pad of this kind which is so formed that it readily fits the form of the shoulder without buckling.

A still further object of the invention is to provide a method of making shoulder pads which consists in forming a plano-convex pile of suitable fibrous material and arranging the same between layers of suitable textile fabric, bending the pile over a cylindrical surface or mandrel, stitching the ends separately and cutting the pile between the stitchings to form a pair of pads.

To these and other ends, the invention consists in the construction and arrangement of parts that will appear from the following description when read in conjunction with the accompanying drawing, the novel features being pointed out in the claims at the end of the specification.

In the drawing:

Fig. 1 is a plan view of a shoulder pad constructed according to one embodiment of the invention;

Fig. 2 is a side elevation of the same;

Fig. 3 is a side elevation of the pad showing the upper and lower coverings separated therefrom;

Fig. 4 is a transverse vertical section of the pad taken substantially on line 4—4 of Fig. 1;

Fig. 5 is a front elevation of a sewing machine equipped with a curved mandrel for forming the pad, and

Fig. 6 is a plan view of a pair of pads as formed before being separated, and drawn on a somewhat reduced scale.

Referring specifically to the drawing in which like reference numerals refer to the same part in all the figures, 1 represents a pile of suitable fibrous material, such as cotton, felt or the like. This pile is formed of the general outline shown in Fig. 6 and having its greatest thickness at the center and tapering in all directions toward the outer edge, so that it is substantially of the plano-convex form shown in Fig. 3 and of a size to form a pair of pads. Arranged on opposite faces of this pile are layers of textile fabric 2 and 3 of any suitable material which are cut to the general form of the pile. The upper layer 3 which is arranged on the convex side of the pile is larger in all its dimensions than the layer 2 which is arranged in contact with the plane surface of the pile. When the pile is bent to the form of the finished pad indicated in Fig. 2, the opposite surfaces of the pile are somewhat increased in breadth, so that it is necessary to make the layers 2 and 3 somewhat greater in size than the surfaces with which they cooperate.

The pile is arranged between the layers 2 and 3 and bent or flexed over a mandrel 4 having a curved or cylindrical surface which imparts to the blank the desired concavo-convex form shown in Fig. 2. The blank is then stitched, as shown at 6, while on the mandrel either by hand or by means of a basting machine 5 of any usual or conventional form. It will be noted that the opposite ends of the blank are stitched separately so that it may be cut when stitched to form a pair of pads without cutting the stitching. The pair of shoulder pads, formed as above described, are right and left without further change.

A shoulder pad thus constructed has a thick outer edge at 7, Fig. 4, thickest at its middle point and tapering both forwardly and rearwardly therefrom. It also tapers inwardly in all directions from said middle point of the outer edge, thus forming a convex upper surface. The lower surface con-

forms to the shape of the mandrel on which it was formed, and is curved upwardly in cylindrical form. It will thus be noted that the pad is of general concavo-convex form, having a lower surface formed to conform substantially to the shape of the shoulder of a person, and hence the pad is not bent or flexed when the garment is worn and therefore retains its normal form. Such a pad is more durable and satisfactory than pads heretofore made, split on their upper surface to spread when flexed, or notched out on their lower surfaces to permit them to flex without buckling or breaking.

Although only one shoulder pad is illustrated and described herein, and only one method of making the same is described, it will be understood that this application is intended to cover the various changes in the method of making or modifications of the pad which come within the spirit of the invention or scope of the following claims.

I claim:

1. The method of making a pair of complementary shoulder pads which consists in forming a blank comprising a filler of soft, yielding, substantially homogeneous material, thickest at a point at or adjacent its center and having its upper surface inclined in all directions therefrom to meet its lower surface in an oval curve, arranging layers of fabric on its upper and lower surfaces to form a pile, flexing the pile to form the lower surface in a hollow curve, stitching the layers to each other and to the filler in two separate seams corresponding to the pads to be formed, and cutting the blank between said seams to form a pair of pads.

2. The method of making shoulder pads which consists in forming a filler of soft, yielding material having a plane lower surface and a convex upper surface forming a layer of fabric of a size larger in area than the plane surface and forming a second layer of fabric larger in area than the convex surface of the filler, arranging the first layer of fabric in contact with the plane surface of the filler with its outer edge protruding therefrom, arranging the second layer of fabric in contact with the convex surface of the filler with its outer edge protruding therefrom in contact with the protruding edge of the first layer to form a pile, flexing the pile to form the lower surface in a hollow cylindrical curve, and stitching the layers of fabric to each other and to the filler while maintaining the pile in said flexed condition to secure the layers of fabric to the filler and the pile in flexed condition.

In witness whereof, I have hereunto signed my name.

NICHOLAS ZUCK.