

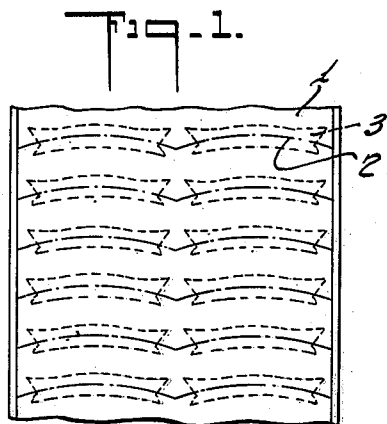
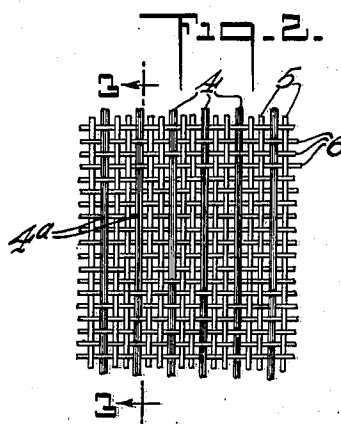
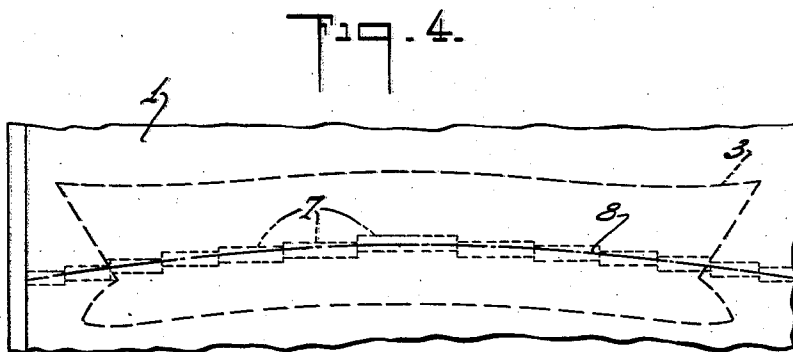
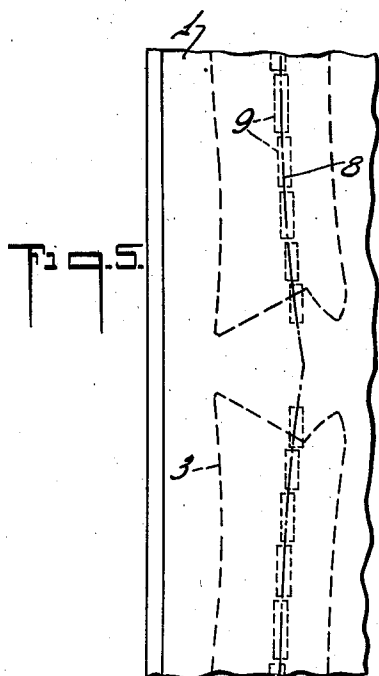
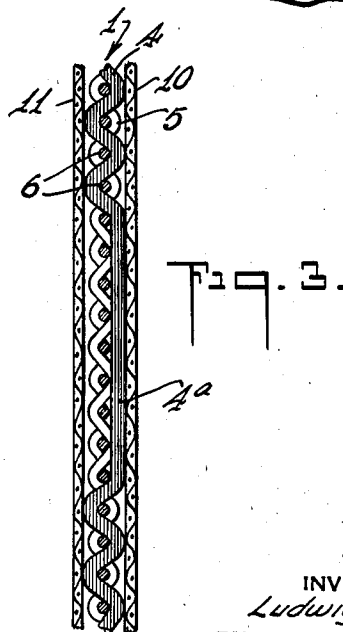
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INTERLINING FABRIC

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INTERLINING FABRIC

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5 Claims. (Cl. 139—385.5)

This invention relates to an interlining for use in the manufacture of chemically stiffened launderable articles of wearing apparel, such as collars and cuffs, having a predetermined fold line.

5 The invention is applicable particularly to the manufacture of such articles consisting of several plies of fabric, generally three, of which at least one, usually the interlining, contains threads of a latently adhesive substance, for example, a
10 cellulose derivative such as cellulose acetate. The adhesive properties of these yarns are developed by treatment with a suitable solvent and the plies are permanently united by the application of pressure, or pressure and heat, to form
15 a somewhat stiffened but easily launderable composite fabric which is preferably pervious to air and water.

It has been found that it is undesirable to stiffen the article along and in the vicinity of
20 the fold line. Various proposals have been made to avoid such stiffening of the fold line. For example, it has been proposed to omit the yarns of latently adhesive material in the region of the fold line. It has also been suggested to cover the
25 yarns with a strip of paper or other material at the fold line zone to prevent adhesion. It has further been proposed to break the adhesion along the fold line by the introduction of a probe.

30 One of the objects of my invention is to provide an interlining in which the latently adhesive yarns are so arranged that they will cause adhesion along the fold line zone of only one of the outer plies and thus avoid undue stiffening of the
35 article at and in the vicinity of the fold line.

A further object of the invention is to provide an interlining in which the latently adhesive yarns are arranged to produce a fold line of predetermined curvature.

40 The interlining made in accordance with this invention is characterized by the fact that along the fold line zone the latently adhesive yarns are disposed wholly or substantially on one side only of the fabric. A fabric of this character is easier
45 to weave than is one where the latently adhesive yarns are omitted at the fold line. Furthermore, the use of my interlining avoids the necessity, and the added expense, of any shielding or probing operation to avoid adhesion at the fold line.

50 Further objects and advantages of the invention will appear from the following description thereof, reference being had to the accompanying drawing, in which:

55 Figure 1 is a diagrammatic plan view of a piece of the interlining fabric showing the position of

the fold lines in dot and dash lines, and the manner of cutting a plurality of collar linings from the piece in dotted lines;

Fig. 2 is a plan view of a piece of the interlining showing the arrangement of the weave in the vicinity of the fold line;

Fig. 3 is a cross-sectional view of the interlining, on an enlarged scale, taken on the line 3—3 of Fig. 2, interposed between two outer plies;

Fig. 4 is a diagrammatic plan view showing the stepped block weave of the latently adhesive warp yarns at the fold line zone; and

Fig. 5 is a diagrammatic plan view of a modification of the interlining wherein the latently adhesive yarns are woven in the weft.

Referring now to Figure 1, 1 indicates a piece of interlining fabric for use in the manufacture of a three ply fused collar of the fold over type. The fold lines are indicated by the dot and dash lines 2, and the shape of the individual collar
20 linings into which the fabric is cut are represented by the reference character 3.

Fig. 2 shows a weave of the fabric illustrated in Figure 1 at or about the fold line. The weave construction consists of latently adhesive warp threads 4, non-adhesive warp threads 5, and non-adhesive filler threads 6. The warp threads 4 are preferably cellulose acetate threads of 250 denier and counting about 40 to the inch. The non-adhesive warp threads 5 preferably consist of #50 cotton thread woven about 80 to the
30 inch. In other words, the warp contains about twice as many cotton threads as acetate, every third warp thread being of acetate. The filler threads 6 consist entirely of cotton or other non-adhesive material, preferably #30 cotton threads woven about 90 to 100 per inch.

In the construction of the interlining, the warp threads 4 and 5 are interwoven with the filler threads 6 in the normal manner, that is, alternately crossing over and under one another, except that in the region of the fold line each of the warp threads 4 has a portion 4a that floats over a plurality of filler threads 6. On referring to Fig. 2, it will be noted that in the example shown, each warp thread portion 4a floats over nine filler threads, thus producing a strip of approximately one-tenth of an inch wide which contains the latently adhesive threads on one side only. It is to be understood that the number of the filler threads over which the acetate warp threads float may be appreciably increased.

The floating of the acetate warp threads 4 is arranged in blocks extending across the width of 55

the interlining material 1, which blocks or areas are indicated diagrammatically in Fig. 4 by the reference character 7. It will be noted that these blocks are arranged in step-like order and follow the general curvature of the line 8 corresponding to the fold line 2. A Jacquard loom is preferably used in weaving the curved fold line. If it is desired to form a straight fold line, as, for example, in weaving a lining for use in cuffs, then the weaving may be done on an ordinary loom.

Fig. 5 shows a modification of the invention in which the acetate yarns are woven in the weft and have portions that float over the warp threads instead of floating over the filler threads, and thus produce a construction in which the floating portions of the warp threads are arranged in block-like formations 9 that extend lengthwise of the fabric and follow the general curvature of the line 8 corresponding to the fold line. In this instance, the blocks 9 are separated from each other by narrow spaces of about three to four filler thread widths.

In Fig. 3 the interlining 1 is shown interposed between two outer plies 10 and 11 of ordinary fabric. It will be seen from this figure that the outer ply 10 only will adhere to the interlining in the region of the fold line and that no adhesion will be effected between the second outer ply 11 and the interlining in that region, thus reducing the stiffness and increasing the flexibility of the composite fabric along the fold line zone.

I claim:

1. An interlining fabric having a predetermined fold zone, comprising a fabric woven of warp and weft yarns of non-adhesive material, said fabric including yarns of latently adhesive material that are interwoven with the yarns of non-adhesive material in the areas above and below the fold zone but are not interwoven therewith in the area of the fold zone, said yarns of latently adhesive material arranged to float over the yarns of the non-adhesive material on one surface only of the fabric in the area of the fold zone.

2. An interlining fabric having a predetermined fold zone, comprising yarns of latently adhesive material and yarns of non-adhesive material running in one direction and interwoven with yarns of non-adhesive material running in a crosswise direction, the yarns being interwoven in the areas above and below the fold zone and the yarns of latently adhesive material arranged to float over the yarns of the non-adhesive material on one surface only of the fabric in the area of the fold zone.

3. An interlining fabric having a predetermined fold zone, comprising yarns of cellulose derivative and yarns of cotton running in one direction and interwoven with cotton yarns running in a crosswise direction, the yarns being interwoven in the areas above and below the fold zone and the cellulose derivative yarns arranged to float over the cotton yarns on one surface only of the fabric in the area of the fold zone.

4. An interlining fabric having a predetermined curved fold zone, comprising a fabric woven of yarns of latently adhesive material and yarns of non-adhesive material, the yarns being interwoven in the areas above and below the fold zone, the yarns of the latently adhesive material arranged to float over the yarns of the non-adhesive material on one surface only of the fabric in the curved fold zone area.

5. An interlining fabric having a predetermined curved fold zone, comprising a fabric woven of yarns of latently adhesive material and yarns of non-adhesive material, the yarns being interwoven in the areas above and below the fold zone, the yarns of the latently adhesive material arranged to float over the yarns of the non-adhesive material on one surface only of the fabric in a predetermined zone, the floating portions of the latently adhesive yarns being formed in a series of stepped blocks arranged along a curved line corresponding substantially to the curvature of the fold zone.

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