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LE ROY H. RAND
DRESS SHIELD CONSTRUCTION

2,516,800

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Fig. 1.

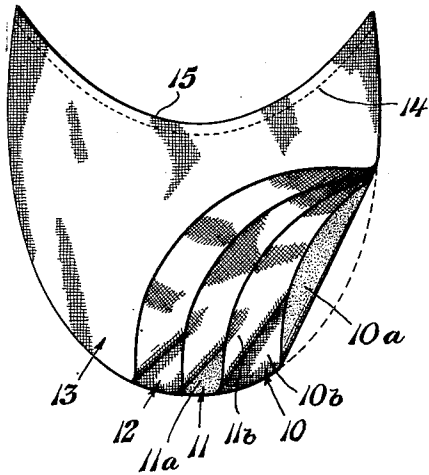


Fig. 2.

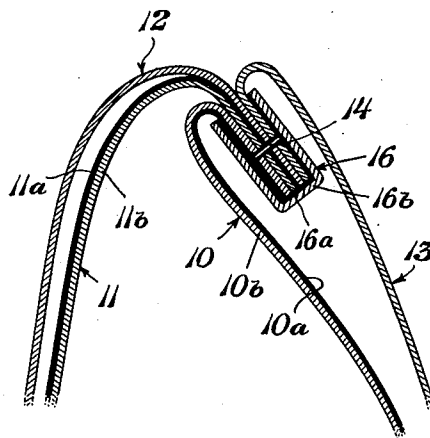
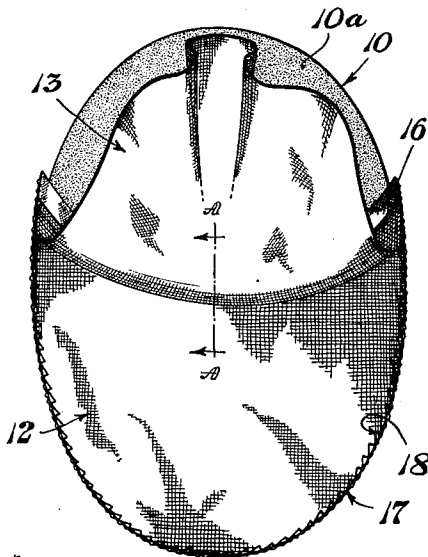
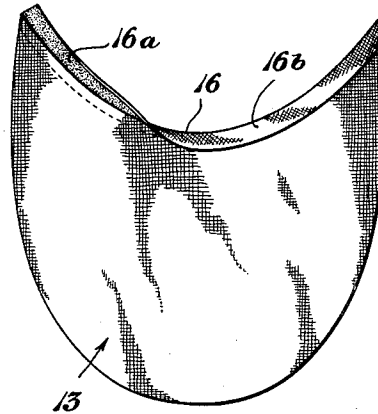


Fig. 5.

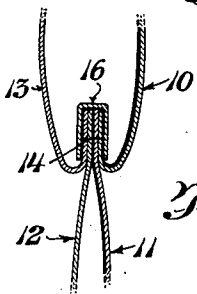


Fig. 4.

Le Roy H. Rand,
INVENTOR.

BY

KARL W. FLOCKS
Attorney.

UNITED STATES PATENT OFFICE

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DRESS SHIELD CONSTRUCTION

Le Roy H. Rand, Brooklyn, N. Y., assignor to
Rand Rubber Company, Brooklyn, N. Y., a cor-
poration of New York

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1 Claim. (Cl. 2—58)

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This invention relates to dress shields and more particularly to dress shield construction.

Prior to the instant invention dress shields have been manufactured by stitching together two crescent shaped pieces of waterproof sheet material along the concave margins thereof, applying a waterproof tape on the stitched margins, then stitching together two crescent shaped pieces of woven fabric along the concave margins thereof, then laying the woven fabric over the waterproof sheet material and hem-stitching or binding the convex margins to form the finished shield. This prior construction is relatively expensive and requires the use of relatively skilled operators to produce a satisfactory product.

It is an object of the instant invention to teach the production of an efficient novel dress shield which shall be relatively inexpensive to manufacture.

It is another object of the invention to teach a novel method of manufacturing dress shields.

It is a further object of the invention to provide a novel dress shield.

Other objects and the nature and advantages of the instant invention will be apparent from the following description taken in conjunction with the accompanying drawings, wherein:

Figure 1 is a plan view of the four crescent pieces which are elements of the dress shield in accordance with the invention, with the concave margins of the pieces stitched together to illustrate one stage of the dress shield manufacturing process;

Fig. 2 is a plan view illustrating a further step in the manufacturing process;

Fig. 3 is a plan view illustrating a further step in the manufacturing process;

Fig. 4 is a fragmentary sectional view taken along line A—A of Fig. 3 and looking in the direction of the arrows; and

Fig. 5 is an exaggerated sectional view similar to the sectional view in Figure 4.

Referring to the drawings, the sheet material of which the dress shield is to be made is arranged on the cutting table in the following manner: first a layer of pyroxylin coated fabric 10 with the coated side 10a thereof facing downwardly and the uncoated side 10b thereof facing upwardly; second a layer of pyroxylin coated fabric 11 with the coated side 11a thereof facing upwardly and the uncoated side 11b thereof facing downwardly; third a layer of uncoated fabric 12; and fourth a layer of uncoated fabric 13.

The four layers of sheet material are then

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simultaneously cut into crescent shape illustrated in Figure 1. This cutting step may be effected by a die so that each layer of the cut material will be identical in size and shape with the other three layers. Instead of cutting only four layers at one time, multiples of four layers may be simultaneously cut with unit of four layers arranged as shown in Figure 1 and as described above.

The four cut layers, shown in Fig. 1, are then stitched together at 14 adjacent the concave margins 15.

A reinforcing binding tape 16 of pyroxylin coated fabric having a coated side 16a and an uncoated side 16b is activated on the coated side 16a with a suitable activator such as butyl acetate or amyl acetate and then pressed over the margins 15 as shown in Figure 2 in a manner to cover the stitching 14, the pressure being sufficient to effect a flat neat binding, a waterproof joint at the stitching 14 and wherever the coated side 16a of the tape 16 contacts the layers 10, 11, 12, and 13.

As shown in Figures 3, 4 and 5, the two outer layers 10 and 13 are then folded back on themselves. The two inner layers 11 and 12 are then bound together at their convex margins 17 by the binding stitching 18. The two outer layers 10 and 13 are also bound together at their convex margins in a similar manner by binding stitching not shown to form the finished shield. If desired the finished shield may then be pressed to form a neat effective dress shield of tailored appearance with the reinforcing tape 16 completely hidden from view.

Though the elements 10, 11, and 16 have been described as being made of pyroxylin coated fabric, it is to be understood that equivalent waterproof sheeting such as rubber, plastic or the like may be substituted and that a suitable cement or equivalent sealing and/or actuating agent may be substituted for the butyl or amyl acetate.

It will be obvious to those skilled in the art that various changes may be made without departing from the spirit of the invention and therefore the invention is not limited to what is shown in the drawings and described in the specification, but only as indicated in the appended claim.

I claim:

The process of manufacturing a dress shield comprising: arranging a first layer of waterproof sheeting on a cutting table, arranging a second layer of waterproof sheeting over the first layer,

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arranging a third layer of sheet material over the second layer, arranging a fourth layer of sheet material over the third layer, cutting the four layers simultaneously into the general shape of a crescent, stitching the four layers together along their concave margins, applying a water-proof binding to the outside of the stitched concave margins of the four layers and sealing the stitching at said concave margins and sealing the binding to the concave margins of the inner and outer layers and the concave marginal edges of the four layers, then folding back the two outer layers and binding their convex margins together, binding the convex edges of the two inner layers together.

LE ROY H. RAND.

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The following references are of record in the file of this patent:

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