

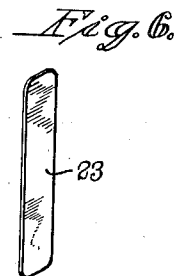
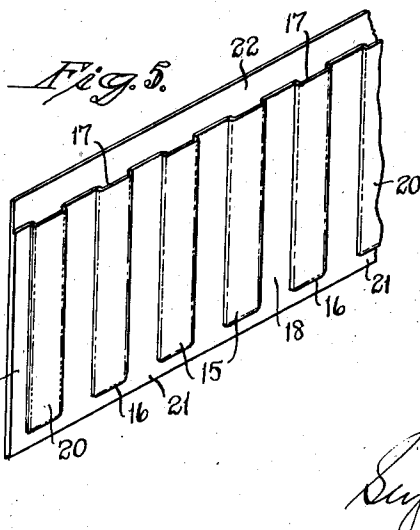
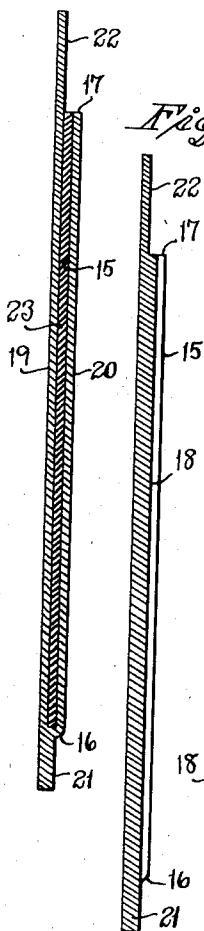
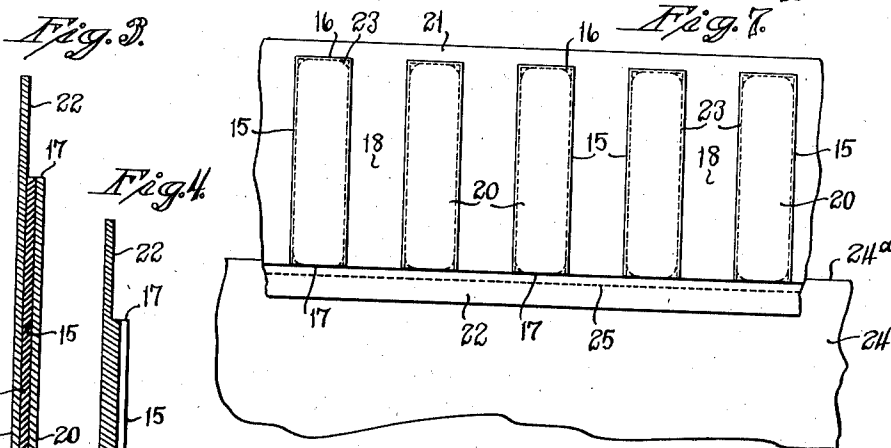
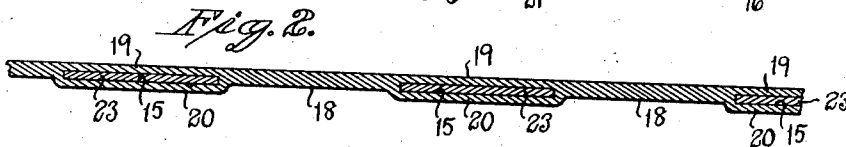
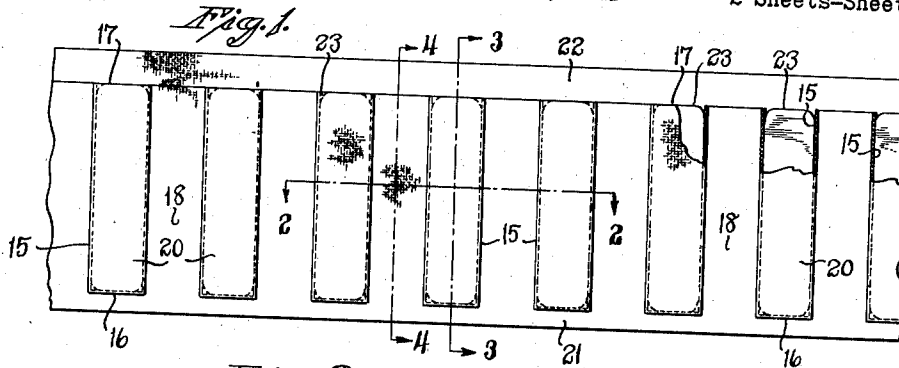
Nov. 3, 1942.

J. A. HENDLEY
STIFFENING-FABRIC

2,301,047

Filed Jan. 17, 1941

2 Sheets-Sheet 1



Inventor
by James A. Hendley
Seymour Earl Nichols
Attorneys

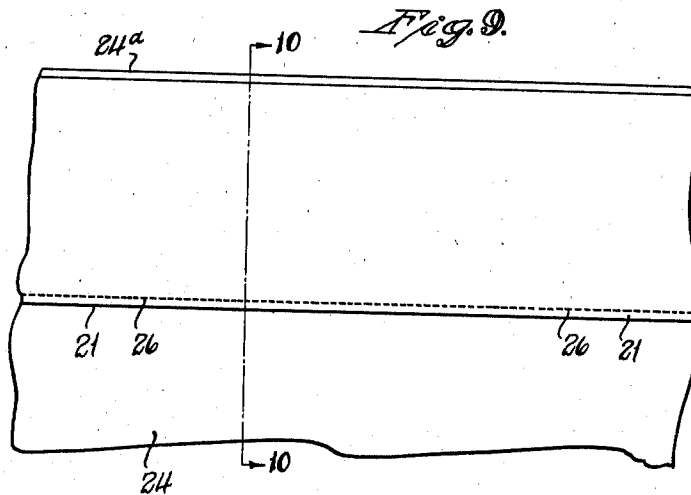
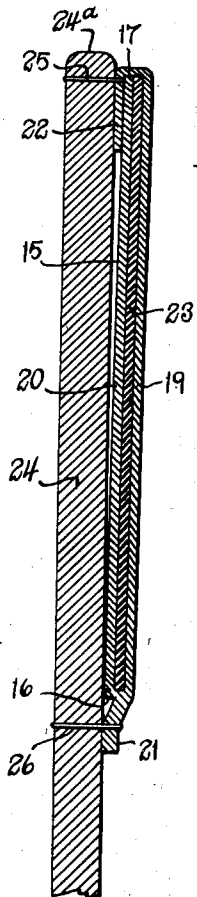
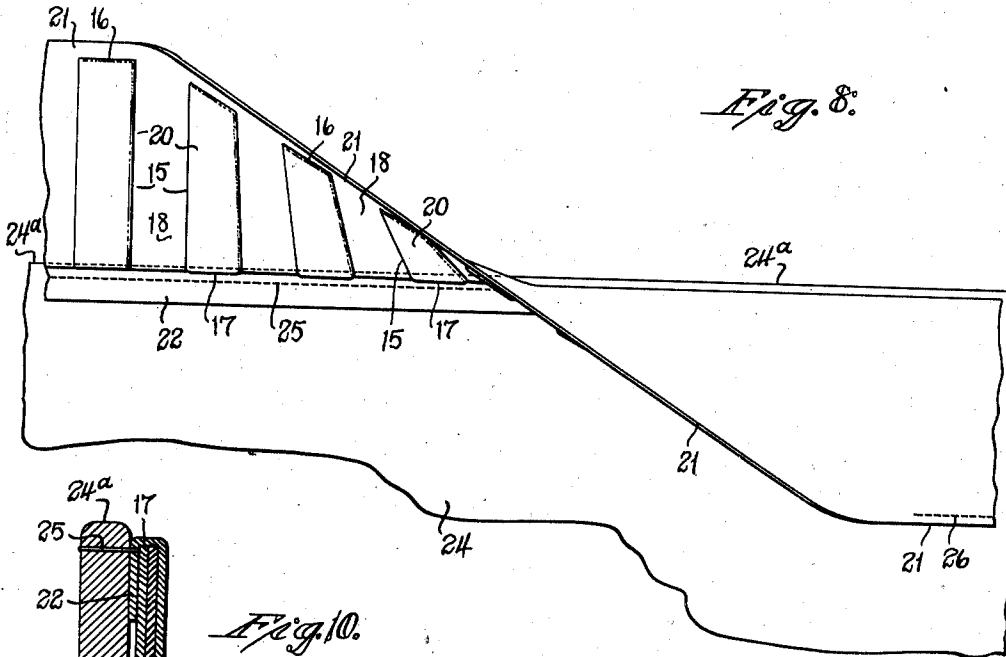
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2 Sheets-Sheet 2



Inventor
by James A. Hendley
Seymour E. Nichols
Attorneys

UNITED STATES PATENT OFFICE

2,301,047

STIFFENING FABRIC

James A. Hendley, Middletown, Conn., assignor
to The Russell Manufacturing Company, Mid-
dletown, Conn., a corporation of Connecticut

Application January 17, 1941, Serial No. 374,835

1 Claim. (Cl. 2—36)

The present invention relates to improvements in stiffening-fabrics, that is to say, fabrics designed and adapted for being sewn or otherwise secured to garments to stiffen a localized area thereof. The stiffening-fabrics of the present invention are especially well suited for being sewn within the waistbands of men's trousers to guard against such waistbands rolling over in a downward direction. The fabrics of the present invention are also suitable for use as an anti-roll edging in ladies' dresses, girdles, and in a large variety of other situations where an anti-roll effect may be desired.

The present invention also relates to a special mode of combining such a stiffening-fabric with a garment.

One of the objects of the present invention is to provide a superior stiffening-fabric which is economical to produce and effective in use.

A further object of the present invention is to provide a superior stiffening-fabric which may be conveniently secured in place to a garment, such for instance as the waistband of men's trousers, in such manner as to have the ends of its stiffening elements extending close to the edge of the garment.

Another object of the present invention is to provide a superior stiffening-fabric having a series of laterally-extending pockets respectively receiving a stiffening element and wherein the said stiffening elements may be retained in place in the said pockets by the simple expedient of sewing or otherwise securing the fabric to a garment.

A still further object of the present invention is to provide a superior stiffening-fabric in which the object just above referred to may be accomplished without occasioning undue bulkiness.

Another object is to provide a superior garment and stiffening-fabric assembly.

With the above and other objects in view, as will appear to those skilled in the art from the present disclosure, this invention includes all features in the said disclosure which are novel over the prior art.

In the accompanying drawings, in which certain modes of carrying out the present invention are shown for illustrative purposes:

Fig. 1 is a broken face view of a stiffening-fabric of the present invention and looking toward that face of the fabric having the pocket-openings therein and showing some of the pockets partially in section;

Fig. 2 is a broken longitudinal sectional view

taken on the line 2—2 of Fig. 1 but on a larger scale;

Fig. 3 is a transverse sectional view taken on the line 3—3 of Fig. 1 but on a larger scale;

Fig. 4 is a similar view but taken on the line 4—4 of Fig. 1;

Fig. 5 is a broken perspective view of a fragment of the previously-shown stiffening-fabric;

Fig. 6 is a detached perspective view of one of the plate-like stiffening elements;

Fig. 7 is a broken view looking toward the inner face of a waistband and also showing the retaining margin of the stiffening-fabric sewn thereto prior to the folding-over of the said fabric;

Fig. 8 is a fragmental face view of the waistband of a garment and showing the stiffening-fabric of the present invention partially folded over and secured thereto;

Fig. 9 is a broken inner face view of the waistband of a garment showing the stiffening-fabric of the present invention fully secured thereto; and

Fig. 10 is a transverse sectional view taken on the line 10—10 of Fig. 9 but on a larger scale.

The particular stiffening-fabric herein chosen for purposes of illustrating the present invention is in the form of a relatively-long-and-narrow tape and is woven, knitted, or otherwise fabricated, in any one of a variety of manners well known in the art, to provide a plurality of laterally-extending spaced-apart pockets 15, each of which has a closed end 16 and an open end 17.

As will be seen by reference to Fig. 2 in particular, the material in the spaces 18 between the various pockets 15 is in the instance shown substantially equal in thickness to the combined thicknesses of the respective opposite walls 19 and 20 of each of the pockets 15. While the number of piles employed in a fabric produced by weaving in accordance with the present invention may vary widely, it is convenient that the material in the spaces 18 have twice as many plies as either of the walls 19 or 20 of the fabric. Thus, the said walls 19 and 20 may each be one ply in thickness and these plies may be interwoven in the spaces 18 to provide at this point a two-ply thickness.

The closed ends 16 of the pockets 15 terminate short of the adjacent marginal edge of the fabric to provide what may be aptly termed a "stitching-margin" 21 which, as shown, has a thickness corresponding to the thicknesses of the material in the spaces 18. The open ends 17 of the pockets 15 also terminate short of the marginal edge of the fabric which is adjacent thereto to provide

what aptly may be termed a "retaining-margin" 22 which preferably and as shown corresponds in thickness to the thicknesses of the respective walls 19 and 20 of the pockets 15 and is, therefore, thinner and more flexible than the material in the spaces 18 and also thinner than the stitching-margin 21 before referred to.

Inserted into each or selected ones of pockets 15 is a plate-like stiffening element 23 which may be conveniently formed of rust-proofed steel or any other suitable material which will add transverse stiffness to the fabric. Preferably and as shown, the stiffening elements 23 are sized so that their respective ends adjacent the open ends 17 of the pockets 15 will not protrude beyond the said open ends.

By way of illustrating one use of the present invention, reference may be had to Figs. 7 to 10 inclusive, in which the stiffening-fabric above described is shown as attached to the inner face of the waistband 24 of trousers or the like.

In attaching the stiffening-fabric to the waistband 24, the parts are preferably first arranged in the relationship shown particularly well in Fig. 7, in such manner that the face of the fabric upon which the pockets 15 open is facing in the same direction as the inner face of the waistband 24, and the main portion of the stiffening-fabric extends above the upper edge 24a of the said waistband. With the parts in the position just described, the relatively-thin retaining-margin 22 is secured to the waistband 24 in any suitable manner, such for instance as by one or more rows of stitches 25. After the stitching such as 25 has been accomplished and after the desired number of pockets 15 have had stiffening elements 23 installed therein, the stiffening-fabric is folded downwardly, as indicated in the right-hand portion of Fig. 8, and one or more rows of stitches 26 are then passed through the relatively-thick stitching-margin 21 of the fabric, as is especially well indicated in Figs. 8, 9 and 10.

It will be noted and as is especially well shown in Fig. 10 that when the stiffening-fabric is folded over in the manner described and has its stitching-margin 21 secured in place, that the retaining-margin 22 extends over the open ends 17 of the pockets 15 and conceals such open ends, and the adjacent ends of the stiffening elements

23, as well as serving to retain the said stiffening elements in place in the said pockets.

By weaving, knitting, or otherwise fabricating the stiffening-fabric described, in such manner that its retaining-margin 22 is relatively thin as compared to adjoining sections or areas of the fabric, not only is the folding-over of the fabric rendered simple and convenient along a natural folding line, but the bulk of the folded-over portion of the fabric is kept at such a minimum as not to be either unsightly or uncomfortable.

By providing the retaining-margin 22 or its equivalent which is foldable over the open ends 17 of the pockets 15, the necessity for separately stitching or otherwise closing the said open ends is obviated.

The invention may be carried out in other specific ways than those herein set forth without departing from the spirit and essential characteristics of the invention, and the present embodiments are, therefore, to be considered in all respects as illustrative and not restrictive, and all changes coming within the meaning and equivalency range of the appended claim are intended to be embraced therein.

I claim:

The combination with a garment; of a stiffening fabric having a series of transversely-extending laterally-spaced-apart pockets for the reception of stiffening elements; the said pockets having closed ends terminating short of the adjacent edge of the fabric to provide an attaching-margin along said edge of the fabric; the said pockets also having opposite open ends terminating short of the edge of the fabric adjacent said open ends to provide a retaining-margin, and the width of the opening of each said open end being substantially the same as the width of its pocket when the fabric is in completely relaxed condition; stiffening elements in said pockets; said stiffening-fabric having said retaining-margin secured to said garment with the remainder of the stiffening-fabric folded upon itself along said retaining-margin to cause said retaining-margin to overlie said open ends of said pockets and positively hold said stiffening-elements in said pockets; and said attaching-margin also being secured to said garment.

JAMES A. HENDLEY.