No. 857,492. PATENTED JUNE 18, 1907.

G. SCOTT.

PROCESS OF NECKING GARMENTS.

APPLICATION FILED MAR. 26, 1907.

Fig. 1.

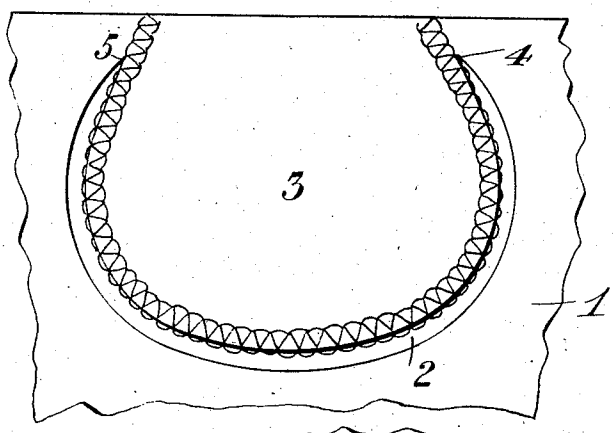
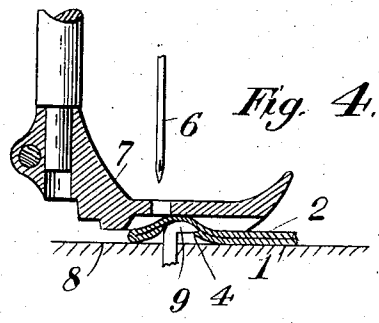


Fig. 4.



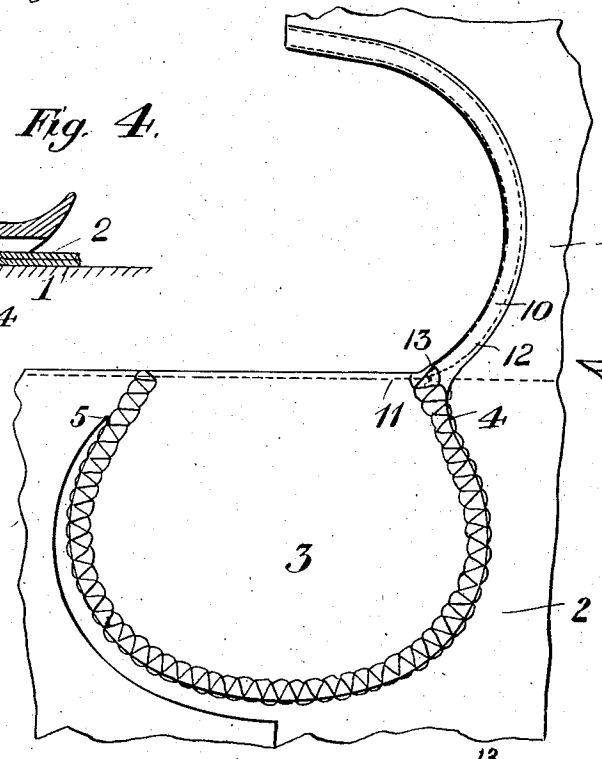


Fig. 2.

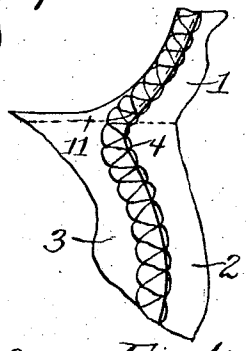
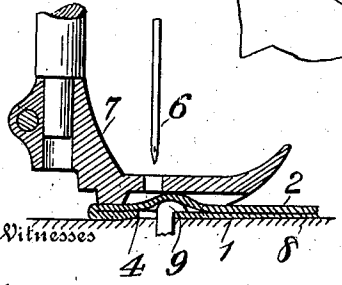


Fig. 6.

Fig. 5.



Witnesses

F. L. Durand.

Grace P. Brereton

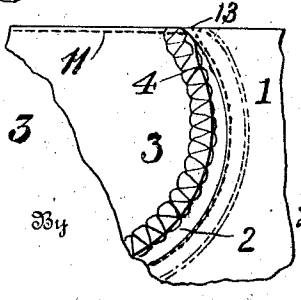


Fig. 3

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UNITED STATES PATENT OFFICE.

GEORGE SCOTT, OF AMSTERDAM, NEW YORK, ASSIGNOR TO UNION SPECIAL MACHINE COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

PROCESS OF NECKING GARMENTS.

No. 857,492. Specification of Letters Patent. Patented June 18, 1907.

Application filed March 26, 1907. Serial No. 364,620.

To all whom it may concern:

Be it known that I, GEORGE SCOTT, a citizen of the United States, residing at Amsterdam, in the county of Montgomery, State of New York, have invented certain new and useful Improvements in Processes of Necking Garments, of which the following is a description, reference being had to the accompanying drawing, and to the letters and figures of reference marked thereon.

My invention consists of certain improvements in the art of making the neck portions of garments and the purpose of my invention is to facilitate the securing of the overlapping ply or plies at the said neck portion of the garment, and to provide a turned over portion at the top of the neck, whereby a more durable product is secured.

In the application of Bernard Zimmerman, Serial No. 181,970, filed November 20th, 1903, is described a process of making the neck portions of garments wherein a web of fabric is folded to form overlapping plies of fabric, and the neck portion is formed by cutting one of the plies beginning at the edge of the fold, and by a substantially simultaneous operation deflecting one of the cut edges, while the other cut edge is secured to the lower ply by overstitching. My invention, however, is an improvement upon the process set forth in the above application and consists in piercing the upper ply of fabric at a point distant from the edge of the fold, separating the two plies of fabric, severing one of them upon a predetermined line deflecting one of the cut edges, while the other is overstitched to the lower ply of fabric by substantially a simultaneous operation with the cutting of the fabric.

My process also consists in folding under the deflected cut edge and stitching the same to the upper ply of fabric, thus forming a neck portion of a garment having a folded edge at the top of the neck, which is much more durable and serviceable than the garment produced by the Zimmerman process, wherein the cutting operation begins at the edge of the fold in the fabric.

In the accompanying drawings:—Figure 1 is a view illustrating the application of my invention to the production of the neck portion of a garment, showing in plan view the plies of fabric after they are folded and one of them is cut on a predetermined line and one of the cut edges is stitched down to the other ply of fabric. Fig. 2 is a view similar to Fig. 1, showing the finished garment as opened out at the top or shoulder and the deflected cut edge as folded underneath the upper ply and stitched thereto: Fig. 3 is a view similar to Fig. 1 showing the upper ply of fabric folded down upon the lower ply of fabric. Fig. 4 is a sectional view showing a presser foot, a needle and a trimming blade with said trimming blade piercing the lower layer of fabric which in the illustration shown in Figs. 1, 2 and 3 is the upper ply 1 of the folded fabric. Fig. 5 is a view similar to Fig. 4, showing the cutting blade as penetrating between the two layers lifting the upper layer from the lower layer and severing the lower layer in advance of the stitching operation. Fig. 6 is a detail view of a modification, showing the overstitching as continuing around the edge of the front portion of the garment.

In the practice of my process, a knitted web is folded on the line of the shoulder, so as to form front and back plies or folds 1 and 2, or such plies or folds are united on the line of the shoulders.

In order to form the neck opening, the front ply or fold 1 of the fabric is cut, so as to form a central segment 3, which lies upon the back ply or fold 2, and is secured thereto, around the edge by overstitching, one line of which passes through and unites the two plies of fabric, and the other line passes through the single ply only, the cross threads of the overstitching covering the cut edge of the garment.

In order that an uncut folded portion may be formed at the top part of the neck of the garment, so as to strengthen the neck portion of the garment at this point, I have caused the cutting operation to begin at a point 4, distant from the edge of the fold, and also caused the cutting to cease at a point 5 some distance from the edge of the fold at the other side of the neck portion. The overstitching preferably extends to the top of the neck portion, and the cutting of the ply which is performed substantially simultaneously with the overstitching, does not take place until after a certain portion has been stitched. The upper ply is then pierced by a cutting knife and the knife caused to penetrate between the plies, sever the upper ply and deflect one of the cut

edges away from the stitching which follows directly behind the cutting, and substantially simultaneously therewith, as above noted.

When my process is performed by a machine, I preferably use a machine having two needles or a zigzagging needle for producing two rows of stitches side by side, such needle or needles being combined with a looper, a shuttle or other means for connecting said stitches, or for interlooping them, or for connecting them by means of an extra thread or threads on that side of the garment where the cut edge of the ply is presented. Such machines are common in the art, and in carrying out my invention, I add thereto a cutter acting in advance of the needle or needles, and such cutter is so constructed and arranged that a sharp projecting point may be caused to pierce one of the plies from its surface during the stitching operation, enter between the plies, separate one ply from the other, sever one of said plies and deflect one of the cut edges away from the stitching mechanism, so that only one of the cut edges will be stitched to the other ply.

In Figs. 4 and 5 of the drawing, 6 indicates the needle or needles of a machine of the character above referred to; 7 is the presser foot which holds the material upon a work support 8; 9 is the cutting blade which in Fig. 4 is shown as raising the plies of fabric and the piercing point just about to enter the lower ply of fabric.

In Fig. 5, the cutting blade has entered between the plies or fabric, and is separating the upper ply from the lower ply, while the lower ply is being severed. In cutting and stitching a neck portion such as shown in Figs. 1, 2 and 3, the folded fabric is placed in the machine with the upper ply 1 of said figures upon the work support, and is, therefore, shown in Figs. 4 and 5 as the lower ply. This cutting blade is so controlled that the same may be thrown into or out of operation at will by the operator, so that when a folded web is fed to such a machine, the overstitching begins at the folded edge, and when the proper point is reached the cutter is raised into cutting position, and the cutter immediately pierces the lower layer of fabric in advance of the stitching operation, so that the cutting and stitching from that time on will be substantially simultaneous.

When the point 5, as shown in Fig. 1, is reached, the cutter is immediately lowered from cutting position, the cutting operation then ceases and the stitching continues to the edge of the fold in the web. After the folded web of fabric has been cut, and stitched, as shown in Fig. 1, the deflected edge which was not secured by the stitching, is folded underneath the upper ply 1, as shown in Fig. 2. In order that this may be accomplished, the front ply of fabric is slitted at the middle portion thereof, the edge is then folded underneath the upper ply 1, as shown in Fig. 2. This fold, as shown in Fig. 2, extends from the cutting point 4, around the edge of the upper ply 1. A line of stitching 11 is then run across the top of the neck portion, and around the edge of the upper ply 1. A second line of stitching 12 is run along the free edge of the fold, and secures the same to the upper ply. It will be obvious, however, that instead of using a line of stitching such as shown in the drawings, that the fold may be secured to the upper ply 1, by a line of overstitching, such as used in securing the segment 3 to the ply 2. It will also be obvious that the overstitching which secures the segment 3 to the back portion of the garment, may be continued around the edge of the front portion of the garment, thus securing the fold to said front portion.

It will thus be seen that by my process of forming the neck portion of a garment, wherein the front portion of said garment is pierced at a point distant from the edge of the fold, and the cutting operation ceases at a point distant from the edge of the fold on the opposite side of the neck and the deflected cutting edge of the upper ply is folded underneath and stitched thereto, that I have produced a garment having a folded edge 13, at the top of the neck portion, and that said folded edge reinforces the neck portion at the top, and gives to the garment greater strength and durability at this point. By the previous method of forming garments, where the severing of the upper ply begins at the edge of the fold, said garment is greatly weakened at this point.

While I have described above, that I preferably use a machine having two needles, or a zigzagging needle for producing two rows of stitches, side by side, it will be understood that other stitch-forming mechanism may be used, so long as the result obtained is produced.

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

1. The method herein described of uniting overlapping plies of fabric, consisting in piercing one of said plies at a point distant from its edge, cutting said ply on a predetermined line, and by a substantially simultaneous operation deflecting one of the cut edges, securing one of said cut edges to the lower ply by overstitching, one line of said overstitching passing through and uniting the two plies and the other line passing through the single ply only, the cross threads of the overstitching covering the last mentioned cut edge; substantially as described.

2. The method herein described of necking underwear, consisting in folding the web of fabric to form overlapping plies, inserting a knife in one of said plies at a point distant from the edge of the fold, cutting said ply on

a predetermined line and by a substantially simultaneous operation deflecting one of the cut edges and securing the other cut edge to the lower ply by a double row of stitches, one row passing through the two plies and the other through the single ply and uniting said rows of stitches so as to cover the last mentioned cut edge; substantially as described.

3. The method herein described of necking underwear, consisting in folding the web of fabric to form overlapping plies, inserting a knife in one of said plies at a point distant from the edge of the fold, cutting said ply on a predetermined line and by a substantially simultaneous operation deflecting one of the cut edges and securing the other cut edge to the lower ply by a double row of stitches, one row passing through the two plies and the other through the single ply and uniting said rows of stitches so as to cover the last mentioned cut edge, and folding the deflected cut edge underneath the upper ply of fabric and securing the same thereto, so that the fold extends around the edge of the upper ply, and continues to the point of cutting, forming a reinforce for the top portion of the neck; substantially as described.

4. The method herein described of uniting overlapping plies of fabric, consisting in piercing one of said plies at a point distant from its edge, cutting said ply on a predetermined line, and by a substantially simultaneous operation deflecting one of the cut edges, securing one of said cut edges to the lower ply by overstitching, the cross threads of the overstitching covering the last mentioned cut edge; substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses.

GEORGE SCOTT.

Witnesses:
C. McNEIL,
CHAS. E. HARDIES.