

Feb. 8, 1955

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2,701,368

STITCHLESS GARMENT CONSTRUCTION

Filed June 20, 1951

2 Sheets-Sheet 2

Fig. 2.

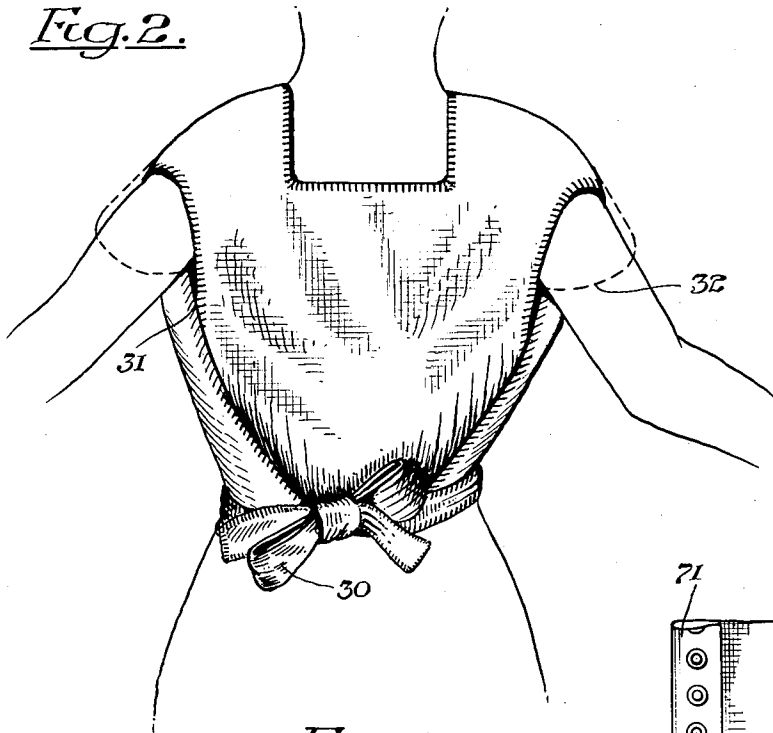


Fig. 3.a

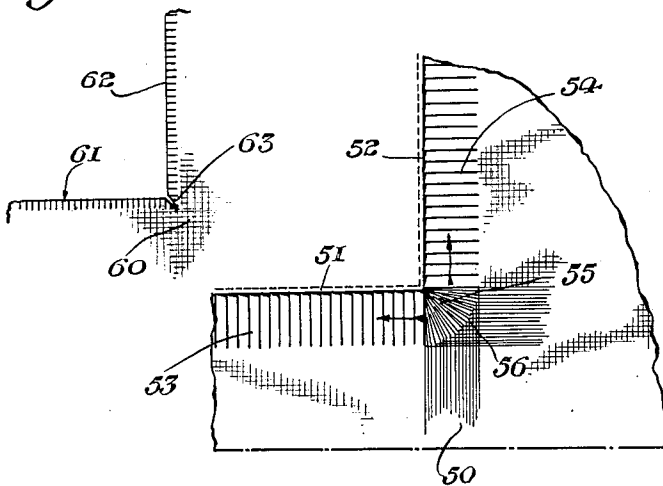


Fig. 3.

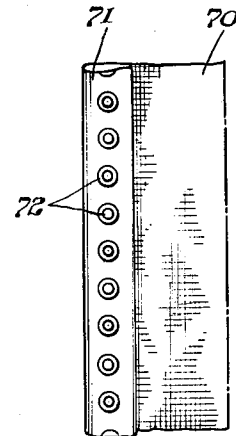


Fig. 4.

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STITCHLESS GARMENT CONSTRUCTION

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Application June 20, 1951, Serial No. 232,528

11 Claims. (Cl. 2—243)

This invention relates to a garment and in particular to a blouse characterized by being free in its completed form of stitching to hold its parts together.

The considerations which enter into the manufacture of women's garments are, of course, styling and price and comfort, for the more style or variety which can be offered for a given price, the greater will be the market. Simplicity of manufacture is the principal factor in reducing the cost of a garment.

Accordingly a fundamental object of the instant invention is to provide a garment construction which is about as simple as can be devised and which permits the incorporation therein of a variety of styles.

It is a second object of the invention to provide a garment easy to manufacture, which is preferably characterized by being made from a single piece of material.

It is a still further object of the invention to provide a method of cutting a blouse from a single piece of material whereby the strength is retained at the points where sharp changes in direction of cut occur.

Other objects and advantages will in part be obvious and will in part appear hereinafter.

The instant invention comprises a garment, in its preferred embodiment formed of a single sheet of material cut to a geometric pattern wherein the pattern permits the incorporation of variations in the shape of the neckline and sleeves, the invention being embodied in a garment, such as a blouse, and a pattern having the features of construction, combination of elements and arrangements of parts hereinafter to be described in greater detail.

Referring to the drawings—

Fig. 1 constitutes a layout of the pattern illustrating the manner in which the garment is cut from a single sheet of material.

Fig. 2 is an illustration of one way in which a finished garment is worn by a wearer.

Fig. 3 is an illustration of the preferred method of finishing the garment at corners, such as the inside corners where a rectangular outline is being formed.

Fig. 3a is an illustration of the same type of corner where the treatment thereof does not follow my preferred practice.

Fig. 4 illustrates an edge treatment which incorporates eyelets therein.

Referring back to Fig. 1, 10 represents a body of material which will preferably be of a rectangular form having an overall width sufficient to span the shoulders of the expected wearer of the garment and a length sufficient to reach from the waistline in front up over the individual's shoulder and down again to the waistline in back. It is to be understood that the garment is of a type which does not require accurate sizing and can be made in small, medium and large sizes, as will be apparent as the description proceeds.

To form the outline of the simplest version of the garment, for example, a blouse, essentially the body of a large I is defined in the rectangle of material by lines 11 and 12, which establish the width and general size thereof. Transverse lines 13 and 14 define the overall length of the garment and are extended to a width greater than that defined by lines 11 and 21, so that lateral extensions or ties 15, 16, 17 and 18 may be defined.

In laying the garment out on a large rectangular piece, line 13 can be drawn a short distance from one end thereof to leave a section 19 beyond the ties 15 and 16 to define a piece which will ultimately form a matching

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scarf. Similarly at the other end of the section an extension 20 may be defined of a length appropriate to form, for example, a portion of a skirt, such as an apron. The optional feature of including this skirt or apron extension thereon is indicated in the diagram by means of line 21 to demonstrate that it may or may not be employed to suit the convenience of the manufacturer. Where such an extension is formed on each end of the garment, the parts of a skirt are formed.

Substantially centrally in the body section of the piece an aperture 21 is cut, which may be of any geometric form it is desired to employ in the neckline of the garment. Thus the neckline may have a square outline 22, a rectangular one 23, or a V type 24.

Placed laterally of the central aperture there may also be sleeve elements left in the garment which may take any desired outline. For purposes of illustration, rectangular sleeve elements 25 and semi-circular elements 26 have been shown. It is, of course, apparent that the outline of the sleeve, its size, and thus its length, may be varied to suit the option of the designer.

The simplest version of the garment when laid out as described and cut along lines 11, 12, and 13 defines essentially a rectangular body piece having a centrally located aperture and terminal lateral extensions at the long ends thereof to form ties. The extra piece 19 which comes out of the starting material will have as its length the width of the bolt from which the garment is cut and will form an adequate scarf. Similarly at the other end, piece 20 will form an apron or section of a skirt. The pieces 27 and 28 which are cut out along the sides of the body element will serve as collars, should it so be desired. Also the piece removed corresponding to the aperture 21 may be employed to form a rosette, according to the technique of the manufacturer.

Inasmuch as the garment thus made in its finished form is completely free of stitches to hold the parts together, the edge treatment adopted to complete the unit will generally be matched to the characteristics of the garment itself. It is also selected to provide such decorative effect as may be consistent with the texture of the material. Often manufacturers go to great trouble and cost to provide trim for manufactured garments, which takes the form of braids, fringes and the like, to give the desired decorative and attractive look. Of course, this factor adds considerable labor and cost to the item. By following the technique of this invention, to be described in connection with Figs. 3 and 4, this cost and expense of dressing the blouse can be eliminated by incorporating appropriate decorative features into the material to give even this simple garment the desired fancy touch, and yet retain the fundamental objective of furnishing the garment as a stitchless one.

In Figure 2 the preferred manner in which the garment is worn is illustrated and it will be seen that the ties 17 and 18, for example, which would be part of the front panel of the blouse there shown, are tied behind the wearer and the ties 15 and 16 form the bow 30 shown in the figure. The front and rear panels formed by the body of the garment overlap under the arms and by making the garment of appropriate width, the point 31 at which they cross is brought close up under the arm, approximately to the level where a conventional sleeve would be attached. The front panel may be tucked neatly in formfitting fashion around the body of the wearer and held closely in place, again in formfitting or looser fashion, depending upon how the bow 30 is tied.

The sleeve takes a simple drape shape and is essentially an elemental one in the simplest form. If sleeves are desired, projections corresponding to 25 and 26 are left on the body of the garment, to form a relatively short sleeved blouse, an extension of any appropriate outline, generally rectangular or semi-circular corresponding to 25 or 26, may be left on the garment and be dimensioned to define a sleeve 32 as indicated in dotted lines in Figure 2. This, of course, is subject to such variations as the designer sees fit to embody into the pattern.

The garment may be formed of any of a variety of materials with such treatments of the edges as appear to be consistent with the material used. Preferably, of course, materials characterized by a locked weave which

will not fray or ravel when the unfinished cut edge is used in the garment are preferred. However, conventional weaves may be used if provision for the edges is made. One method of utilizing the conventional weave and assuring that there will be no fraying is to impregnate the edges with plastic, metallized material or the like, which should, of course, be insoluble in water and other cleaning fluids.

Thus, in Fig. 3, in recognition of the fact that conventional weaves are likely to become frayed, a means is indicated for treatment of those edges and for cutting the required sharp corner openings in the material in forming the outline. Thus, referring to the drawing 50 represents a body of material and 51 and 52 constitute cuts meeting each other at substantially right angles, such as would be made defining the ties 14 and 15 in the main section or in the cutting of a rectangular neckline. For treatment of the edges at the corner to prevent objectionable fraying thereof, the dozen or more threads constituting the warp of the weave approaching those edges are removed, leaving the weft as a fringe 53 and 54. Correspondingly in the corner which is thus left the tab 55 is unraveled as shown thereby, creating a somewhat rounded inside edge 56 for the corner element, while yet giving it a finished fringed or feathered appearance, in conformance with the required pattern desired.

Figure 3a illustrates the effect of merely raveling edges 61 and 62 of material 60. Concentration of stresses will generally tear it at 63.

A further variation of the garment which would add to its sport appearance may be derived as shown in Fig. 4 by turning an edge of the material 70 to form trim 71 and mounting therein a series of spaced eyelets 72. The result is that when the garment is slipped onto a wearer openings 72 in adjacent edges line up and any appropriate lacing of any desired color may be utilized in drawing these edges together.

As indicated, any of the large variety of materials available in the market may be used. The garment has the advantage that its simplicity permits forming it from any of a large variety of materials of any texture by the most unskilled of operators, for the utility of the garment is apparent from its form for it is the simplicity with which it is made which renders it possible for anyone to have as many as she wishes of any of a variety of material patterns. For variation and individual treatment of the garment, the edges may be laced as indicated, they may be serrated, fringed or feathered. The number of combinations possible of different neckline treatment increases the number of different materials used is employed in the various possible combinations. In use, the garment has the advantage that its simplicity renders it easy to make and its freedom from stitches or consequent binding makes it a delight to wear and launder as there are no seams to gather or "pucker." A further utility therefor can be derived by extending the length of the body from the desired hemline in front as shown in Figure 1 to a desired hemline in back to provide a skirt.

As noted the making of clothes has always been of major interest to women and, hitherto, to make appropriate garments needle and thread, or machine operation, were required. Many women find themselves handicapped by the lack of knowledge of sewing technique and at times even by lack of appropriate thread and needle.

In accordance with this invention any textile materials can be adopted for the simple fabrication of garments such as blouses, aprons, dresses and robes without the use of needle and thread or sewing machine, and yet provide style and comfort in garments having desired necklines, appropriate sleeve, belt and sash effects. For instance, jersey or tricot may be given a decorative finish by slashing fringed edges which will give the garment not only an attractive appearance, but will permit it to be washed and retain the same attractive appearance. A stitchless garment made in accordance with this invention of this material, when worn, drapes about the figure with elasticity and grace beliving its simple form.

Many other fabrics can be made into stitchless blouses or stitchless garments by employing suitable modifications of the technique characterizing my invention. For instance, a silk, cotton, rayon, nylon acetate, wool, heavy or sheer textile of a woven material can be made into a stitchless garment when treated to create a fringed edge effect as described in connection with Fig. 4 wherein the inside corners most likely to tear are rounded.

A distinct advantage of the technique is that a blouse can be cut so there will be no waste of material whatsoever, the pieces being planned to give generous scarves and collars and a rosette fashioned from the neckline, as noted in connection with Fig. 1.

Of course these stitchless simplified features can be extended to more complicated garments by the addition of a belt. Edges of the garments may be closed all around by punching eyelets on a turned in edge as noted in connection with Fig. 4. In such an embodiment adjacent edges of the garments may be joined with a lacing for the sport effect so derived.

Commercially the invention has the great advantage of not requiring machinery and maintenance thereof, which is a great expense in manufacturing of garments. Likewise the necessity of keeping up supplies of matching sewing threads, buttons, etc. involved in machine manufacture is eliminated.

Because of these eliminations and simplifications in manufacturing technique, it is possible with my invention to produce a garment which is new and different, easy to manufacture, easy to wear, easy to launder and, above all, very efficient in use of goods and economical in making of the garment.

Having described the invention with only a limited number of embodiments it is to be understood that variations may be made without departing from the spirit or scope of the invention thereof and the definition thereof is to be limited as set forth in the appended claims.

What is claimed is:

1. A stitchless, seamless garment comprising a planiform element having at least one inside corner, edges of said garment running in the direction of courses of threads thereof, inside corners being defined by an arc of small radius joining edges defining said corners, edges of said garment being given a finished appearance by fringing.

2. The garment in accordance with claim 1 formed of resilient fabric having edges cut at uniform frequent intervals into the body of the fabric, essentially perpendicular to the edges thereof to form a fringe of substantially square tabs around said garment.

3. A stitchless garment of a planiform fabric element having at least one inside corner, the fabric being of woven texture having warp and woof threads, said garment having means for gathering it about the waist of a wearer to hold it in place, inside corners in said planiform garment being defined by a fringe of both warp and woof threads thereof, said fringe extending into and around said inside corner.

4. A garment in accordance with claim 3 being formed to serve as a skirt, wherein fabric means for fastening it about the waist are integral therewith.

5. A stitchless, seamless garment comprising a generally rectangular element having at least one inside corner, lateral extensions on opposite sides of the long edges thereof, edges of said garment running in the direction of courses of threads thereof, said edges being given a finished appearance by fringing, shoulder portions therein formed to define a substantially centrally located aperture as a head opening, so that when fitted to a wearer extensions on the sides thereof may be fastened to each other around the waist of a wearer to secure the garment in place, inside corners of said garment being defined by an arc of small radius joining edges defining said corners.

6. A garment in accordance with claim 5, in which the fabric is of resilient non-raveling texture having edges cut at uniform frequent intervals into the body of the fabric, essentially perpendicular to the edges thereof to form a fringe of substantially square tabs around said garment.

7. A garment in accordance with claim 5, in which the fabric is of woven texture, edges of said garment being fringed and inside corners thereof having the fringe formed of warp and woof threads.

8. A garment in accordance with claim 5, in which the rectangular element is extended to provide at least one depending panel.

9. The method of forming a fringed apron from a woven fabric having warp and woof threads, comprising laying the outline of the apron on the fabric, whereby said apron will have inside corners, said outline including lateral extensions to define waist ties integral therewith, severing said outline from said fabric and finishing the inside corners of said apron so they carry a fringe of warp

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and woof threads extending into and around said inside corner.

10. The method of forming a fringed opening in a woven fabric having warp and woof threads, comprising cutting the fabric along an outline generally corresponding to the shape of the said opening, releasing inside corners of said opening by cutting into the said corners in the directions of the weave of the fabric, and fringing the residual section of material formed on the body of fabric by said cuts to form a fringe of warp and woof threads extending into and around said inside corners.

11. The method of forming a fringed opening in a woven fabric having warp and woof threads, comprising cutting into the fabric along a line generally corresponding to the shape of said desired opening, said opening being oriented to have axes corresponding to the courses of threads in said fabric, releasing threads around said opening parallel to said cut forming fringed corners in

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said opening thereby, then cutting said released threads and trimming the length of said threads around said corners to form a substantially uniform fringe.

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