

(No Model.)

H. L. SHAVER.
UNDERGARMENT.

2 Sheets—Sheet 1.

No. 551,604.

Patented Dec. 17, 1895.

Fig. 1.

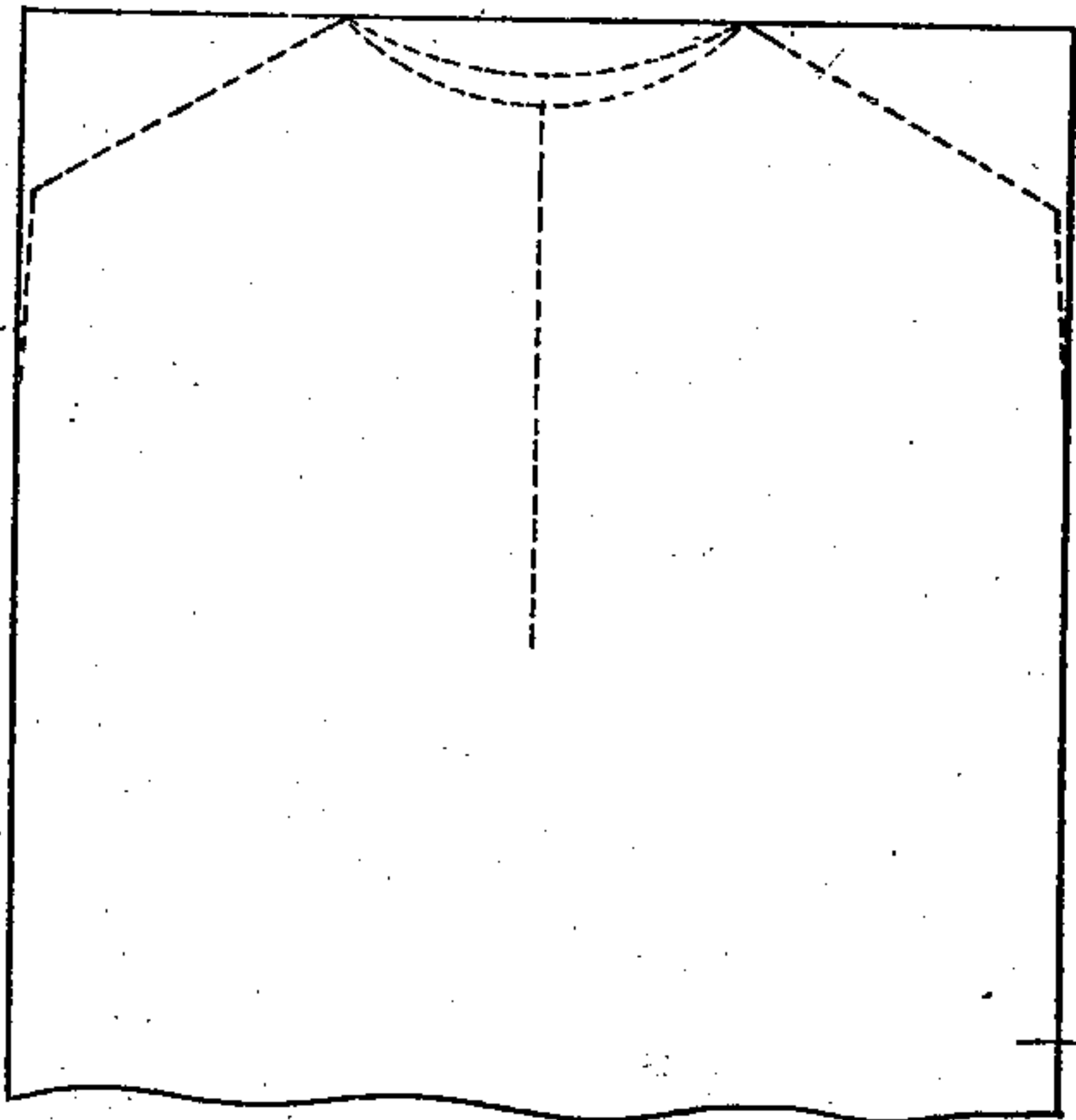


Fig. 2.

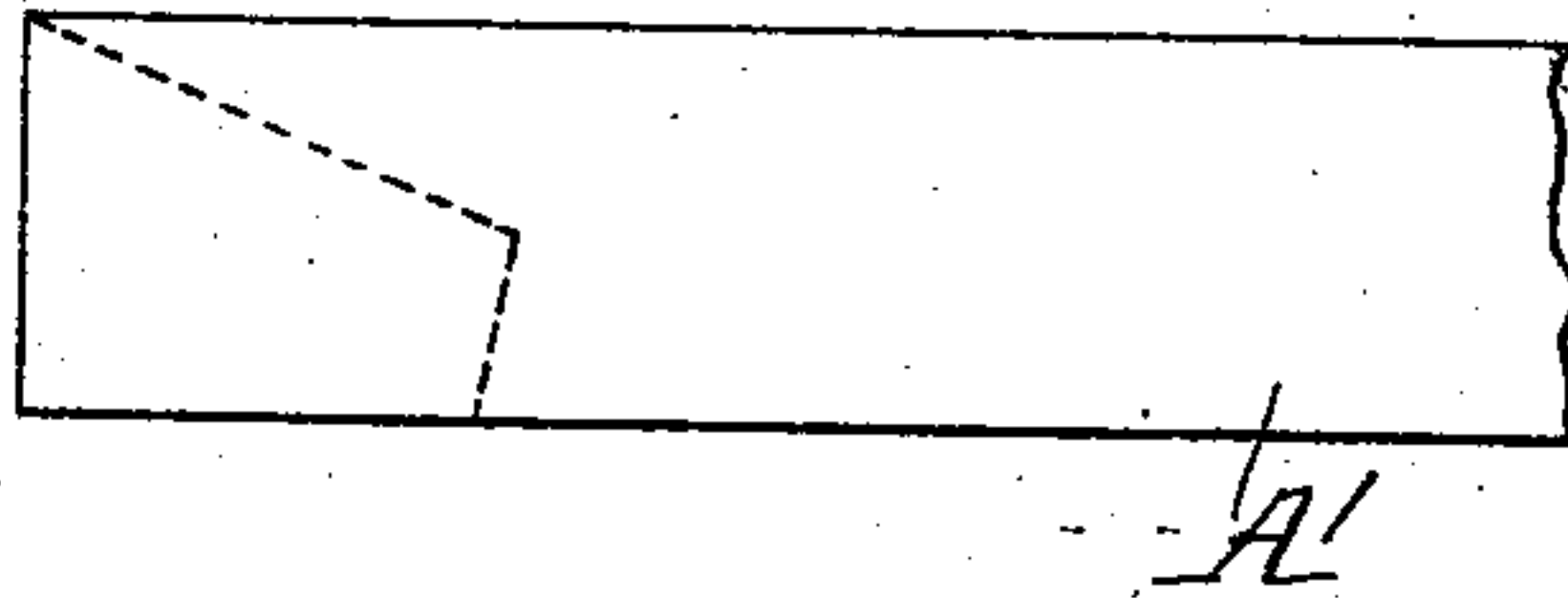


Fig. 3.

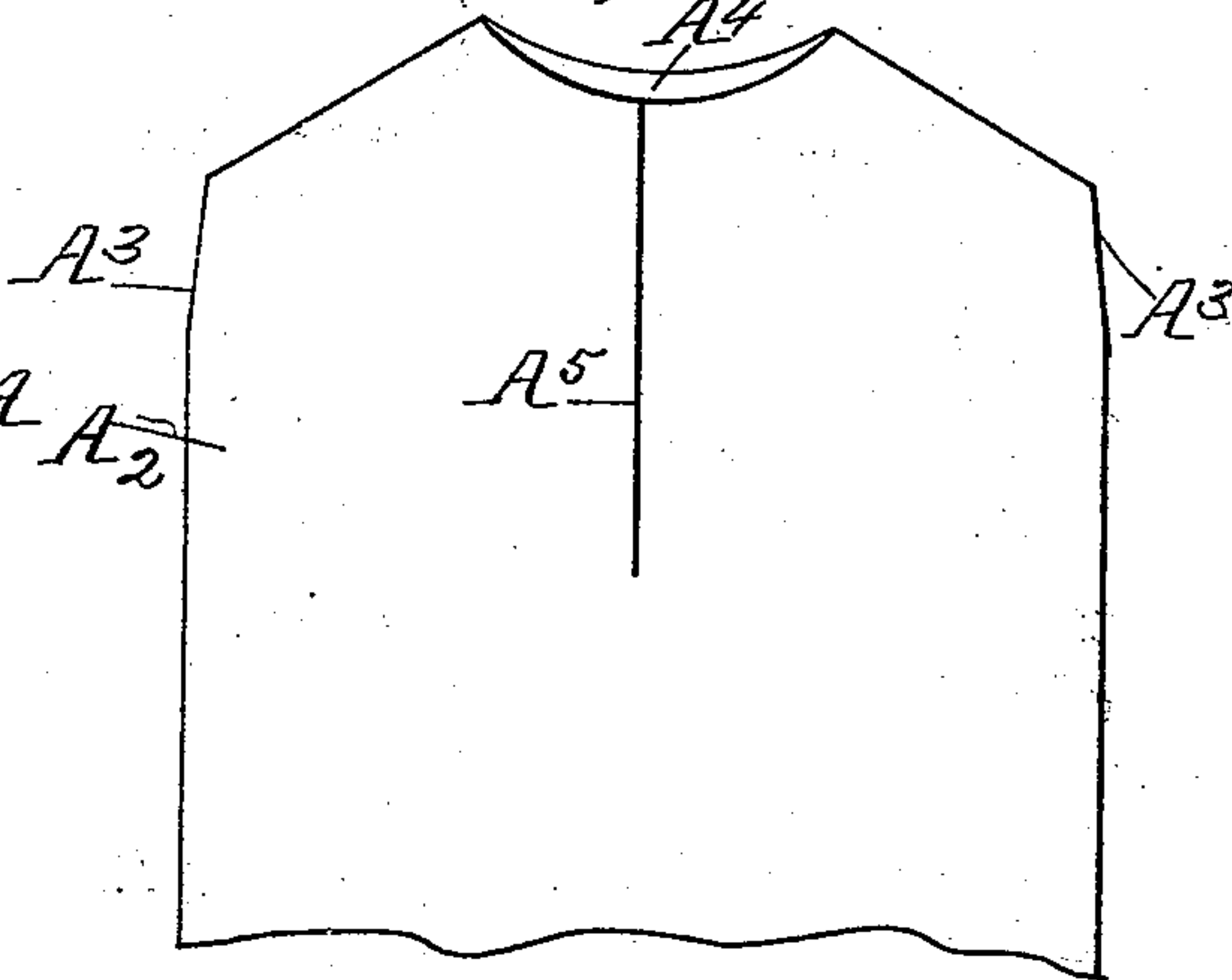


Fig. 4.

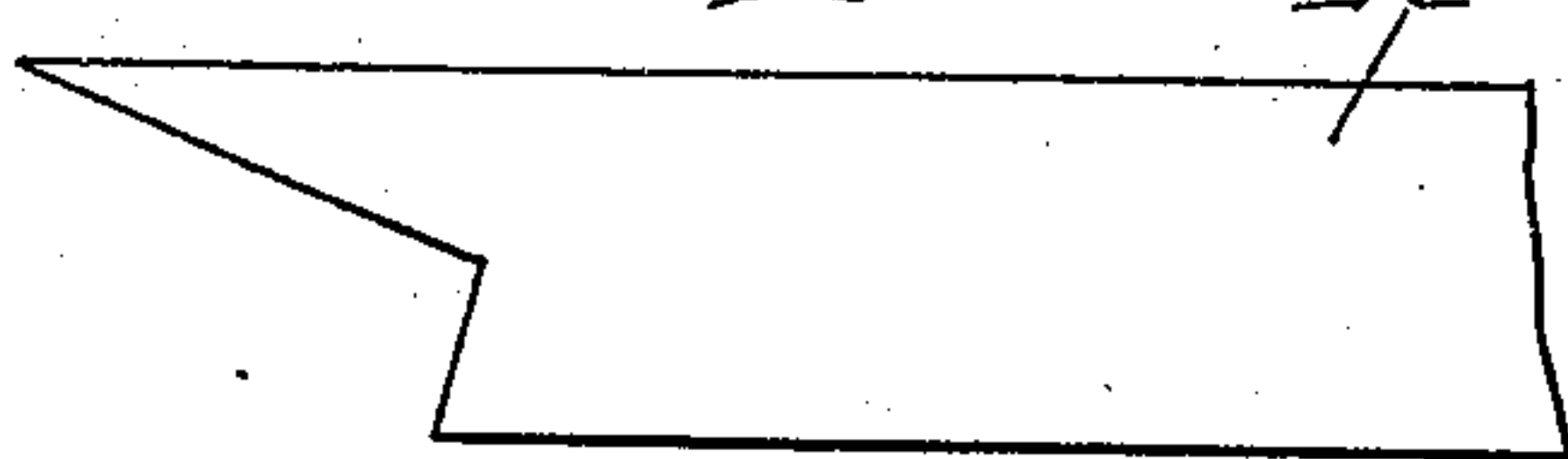


Fig. 5.

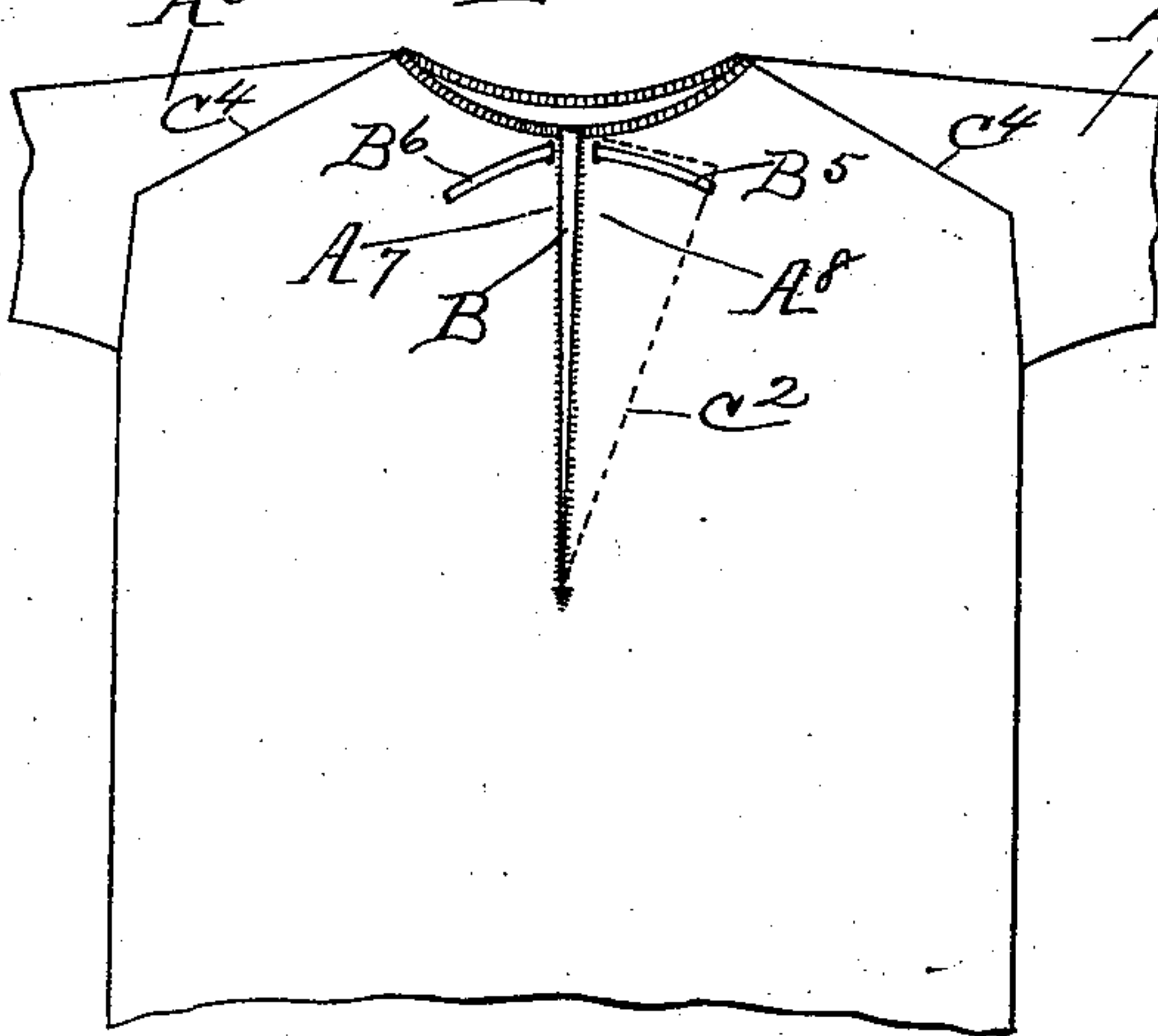
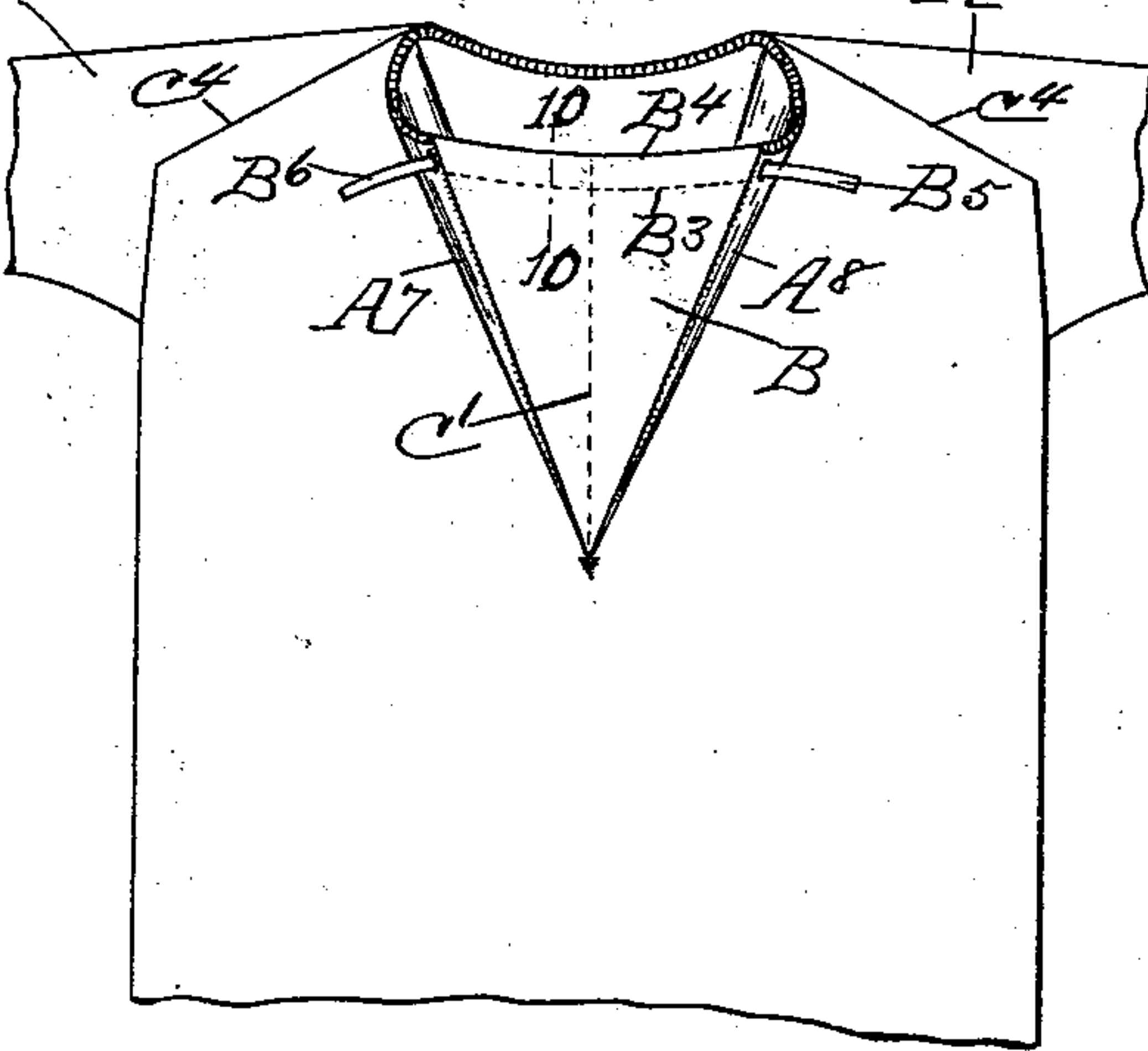


Fig. 6.



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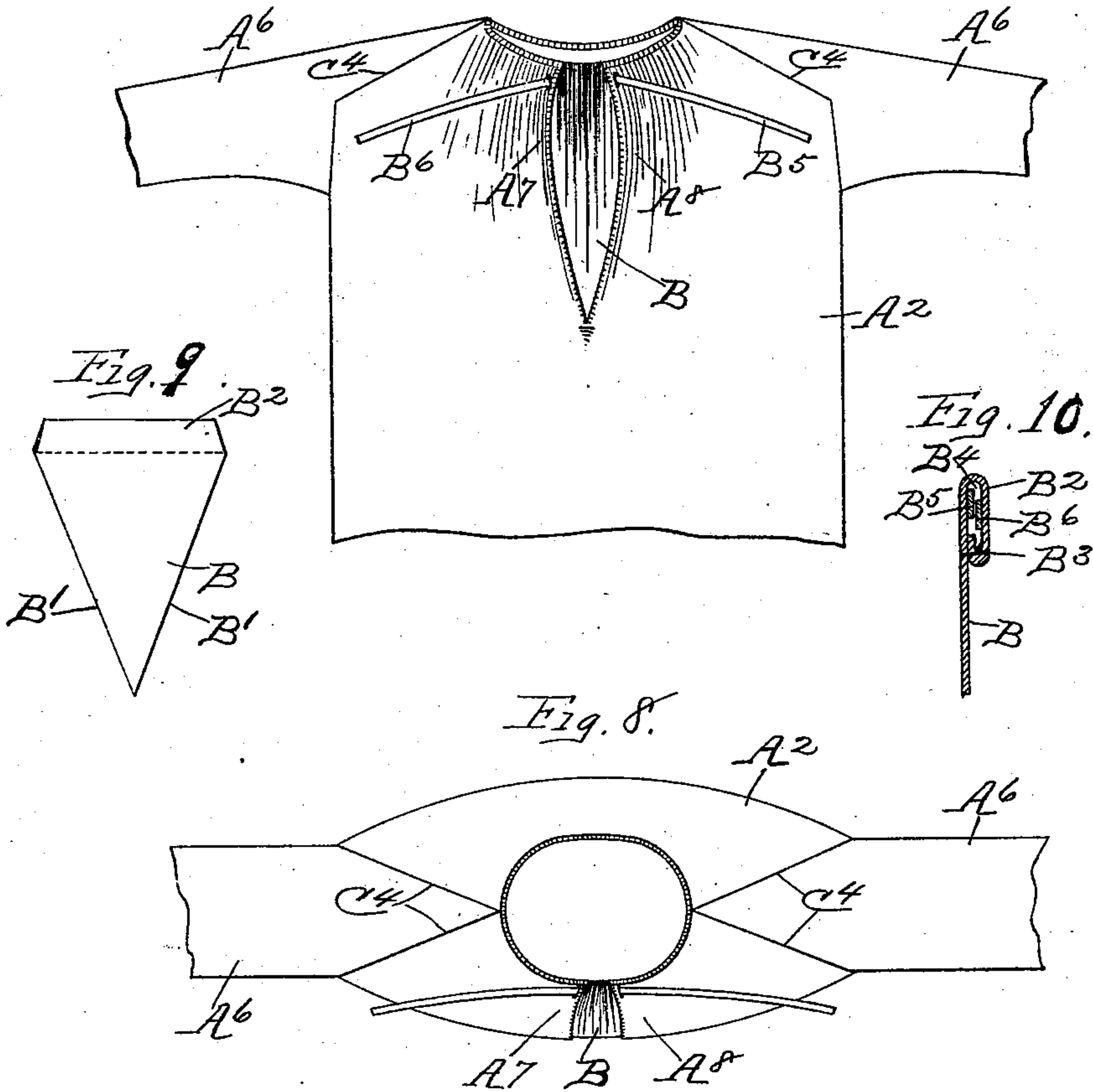
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2 Sheets—Sheet 2.

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Fig. 7. Patented Dec. 17, 1895.



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UNITED STATES PATENT OFFICE.

HENRY L. SHAVER, OF COHOES, NEW YORK.

UNDERGARMENT.

SPECIFICATION forming part of Letters Patent No. 551,604, dated December 17, 1895.

Application filed April 10, 1895. Serial No. 545,176. (No model.)

To all whom it may concern:

Be it known that I, HENRY L. SHAVER, a citizen of the United States, residing at Cohoes, county of Albany, and State of New York, have invented certain new and useful Improvements in Undergarments, of which the following is a specification.

The invention relates to such improvements; and it consists of the novel construction and combination of parts hereinafter described and subsequently claimed.

Reference may be had to the accompanying drawings, and the letters of reference marked thereon, which form a part of this specification.

Similar letters refer to similar parts in the several figures therein.

Figure 1 of the drawings is a plan view of a section of tubular web of knitted fabric of suitable width for the body part of an undergarment. Fig. 2 is a similar view of a like section of fabric of suitable width for the sleeves of an undergarment. Figs. 3 and 4 are similar views of the body and sleeve portions cut from the web-sections on the dotted lines shown in Figs. 1 and 2. Fig. 5 is a plan view of the front of a completed undergarment with the bosom-flaps united by an inserted gore-shaped piece of fabric folded upon itself. Fig. 6 is a view similar to that shown in Fig. 5 with the bosom-flaps separated and the gore-piece unfolded. Fig. 7 is a view similar to that shown in Figs. 5 and 6, with the bosom-flaps partially closed by shirring-strings and the gore-piece gathered in small folds between the flaps. Fig. 8 is a top plan view of the garment as the same would appear on a form with the sleeves extended at right angles to the body. Fig. 9 is a view of the triangular gore-shaped bosom-section. For convenience in illustration, the extremities of the garment are shown broken away. Fig. 10 is a vertical section of the inserted bosom-section on an enlarged scale, taken at the broken line 10 10 in Fig. 6.

My invention is especially applicable to undergarments made of knitted fabric, and to fabric knitted upon cylinder-machines in the form of a tubular web.

The objects of the invention are to improve the fit and appearance of the garment, to facilitate the operation of putting the garment

on and off, and to avoid the use of seams across the top of the shoulder.

Referring to the drawings, A is a section of a flattened tubular web of knitted fabric of a size suitable for the body part of an undergarment, and A' is a suitable section of smaller size for a sleeve.

A² represents the body-section after portions of section A have been cut off on the dotted broken lines in Fig. 1 to form the sleeve-openings A³ and neck-opening A⁴. A slit A⁵ is cut down the front to form a continuation of the neck-opening.

A⁶ represents the sleeve-section after a portion has been cut out from the section A' on the dotted lines in Fig. 2. The cut edges of the sleeve-section are secured by stitches or in any known manner to the cut edges around an arm-opening of the body-section, as seen in Figs. 5, 6, 7 and 8.

B is a triangular or gore-shaped section of either knitted or woven fabric, which is inserted in the bosom of the body part, the oblique edges B' of which are secured by stitching or in any known manner to the edges of the bosom-flaps A⁷ and A⁸, as seen in Figs. 6 and 7. The upper edge B² of the inserted section is folded down along the dotted line in Fig. 10 and its end turned in and secured by a line of stitching B³, as shown in Fig. 6, forming a hem B⁴ adapted to contain the shirring-strings B⁵ and B⁶. The string B⁵ is secured at one end to the bosom-flap A⁷ or contiguous edge of the inserted section, and has its other end projecting out through an aperture in the other flap. The string B⁶ is secured at one end to the bosom-flap A⁸, or contiguous edge of the inserted section, and has its other end projecting out through an aperture in the other flap.

The construction and operation of the shirring-strings may be that of any of the common and well-known forms.

When the garment is not in use the bosom-section may be folded along its middle at the dotted line C' in Fig. 6 to the position indicated by dotted lines C² in Fig. 5, where it lies beneath the bosom-flap A⁸, the bosom-flaps being brought together, as shown in Fig. 5, permitting the garment to be otherwise folded in the usual well-known manner.

When it is desired to put the garment on

or take it off, the flaps are separated until the bosom-section is fully distended, as shown in Fig. 6, thereby affording a large opening for the passage of the wearer's head.

5 After the garment has been put on, the upper parts of the flaps are drawn toward each other by means of the shirring-strings, as desired, to fit the form of the wearer and may be secured in place by tying the project-
10 ing ends of the strings together. I am thus able to make my improved garment fit persons who vary largely in bust measurement.

It is well known that the elasticity of knitted fabric is much greater crosswise than
15 lengthwise of the web.

By means of my improved construction, the sleeve-section is easily expanded crosswise over the shoulder, whereby a comfortable and perfect fit of the sleeve is secured not only
20 the entire length of the arm, but over the shoulder as well; also the cross-seam found in previous constructions over the shoulder, by which the sleeve is joined to the body part, is avoided, thereby greatly adding to the com-
25 fort of the wearer.

By having the junction-seam C^4 between the sleeve and body approximately radial to the neck-opening and inserting a contractile bosom-section, I am able to secure a com-
30 fortable and easy fit of the garment to the shoulders, chest and bosom of the wearer.

If one end of a transversely-elastic web of tubular fabric is secured to one side of a similar web which is comparatively inelastic
35 lengthwise of such side, the elasticity of such end transversely of the web is limited to the elasticity of the seam by which the parts are united; but if one or both of the parts are cut diagonally of the web and the two parts
40 are united along such cut edge or edges there is a resultant elasticity which can be obtained when the parts are secured together side to end. The transverse expansions of the diagonally-cut and united parts co-operate to
45 produce a resultant expansion which promotes the adjustment of the garment to the form of the wearer. The relative transverse expansions of the body part and sleeve parts

depend upon the relative size of the shoulders and chest of the wearer, and will yield one to 50 the other to promote the fit of the garment.

I am able to regulate and control the resultant expansion of the sleeve and body parts, and evenly divide the expansion between the two parts by means of the con- 55 tractile bosom-section, and the adjusting shirring-strings, whereby the fit of the garment is promoted and excessive strain upon parts of the fabric prevented.

What I claim as new, and desire to secure 60 by Letters Patent, is—

1. An undergarment comprising a transversely-elastic body-web of knitted fabric provided with a neck-opening and having arm-holes with a V-shaped shoulder opening 65 terminating near the neck-opening, and transversely-elastic tubular knitted sleeves having an upper V-shaped end-extension integral therewith, the edges of the sleeve-extensions being secured to the edges of the shoulder- 70 openings, whereby the transverse expansions of the diagonally cut and united parts co-operate to produce a resultant expansion which promotes the adjustment of the garment to the form of the wearer, substantially 75 as described.

2. An undergarment comprising a transversely-elastic body-web of knitted fabric provided with a neck-opening and a front slit, and having arm-holes with a V-shaped 80 shoulder-opening terminating near the neck-opening, transversely-elastic tubular knitted sleeves having an upper V-shaped end-extension integral therewith, the edges of the sleeve-extensions being secured to the edges 85 of the shoulder-openings, a non-elastic contractile bosom-section inserted in the front slit, and means for contracting the bosom-section, substantially as described.

In testimony whereof I have hereunto set 90 my hand this 1st day of April, 1895.

HENRY L. SHAVER.

Witnesses:

GEO. A. MOSHER,
FRANK C. CURTIS.