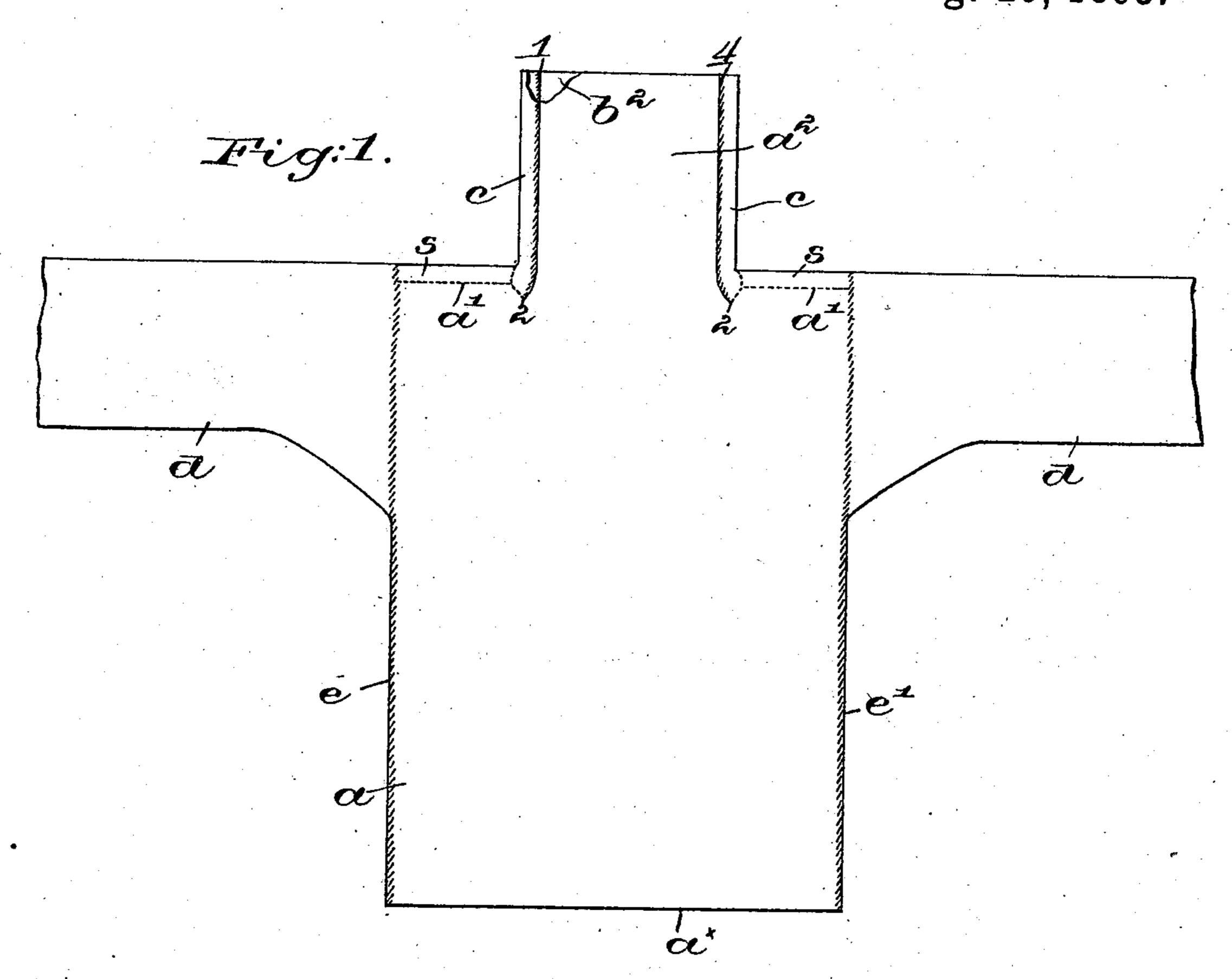
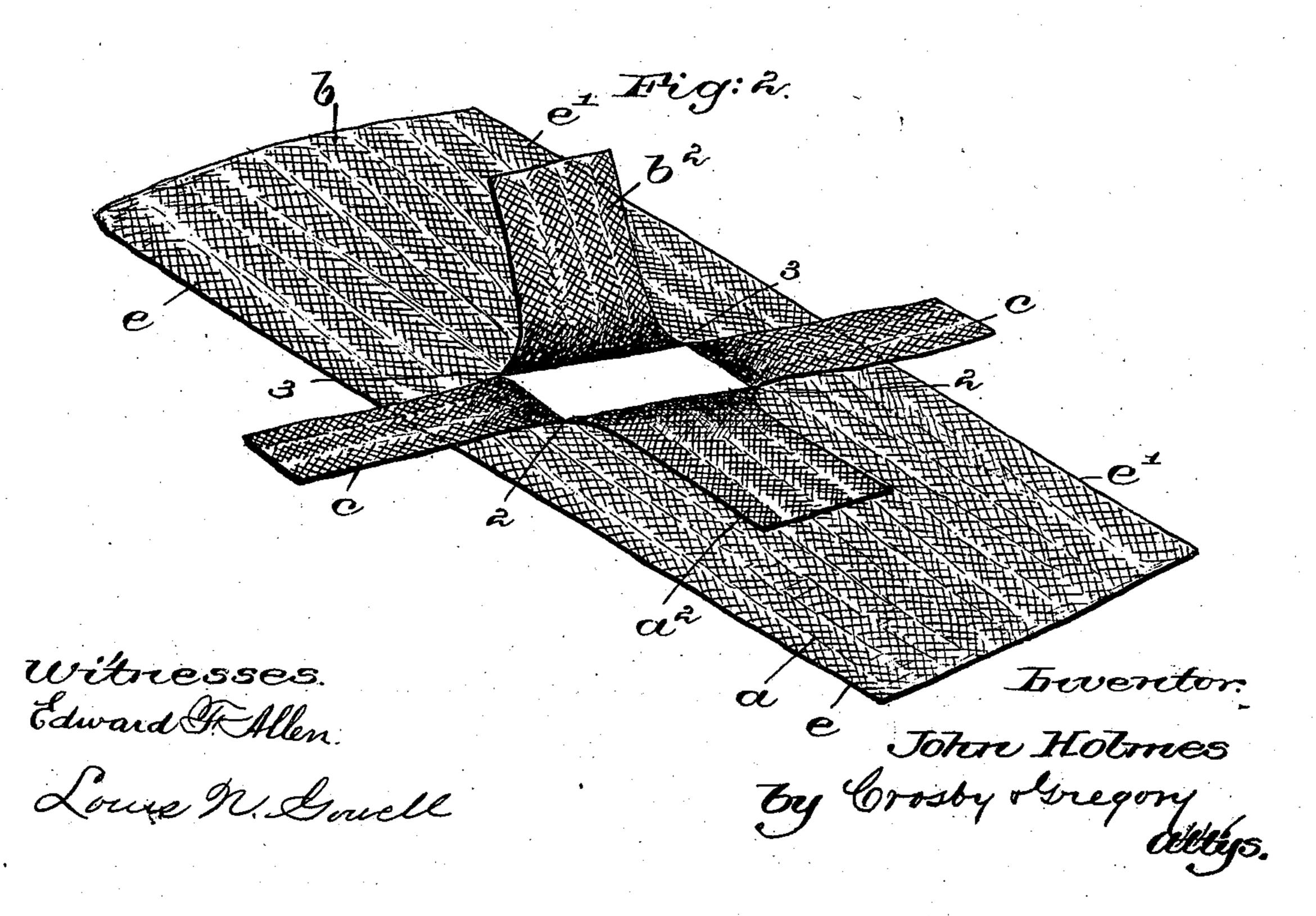
## J. HOLMES.

KNIT GARMENT AND METHOD OF MANUFACTURING SAME.
No. 504,108.

Patented Aug. 29, 1893.





## United States Patent Office.

JOHN HOLMES, OF BOSTON, MASSACHUSETTS.

## KNIT GARMENT AND METHOD OF MANUFACTURING SAME.

SPECIFICATION forming part of Letters Patent No. 504,103, dated August 29, 1893.

Application filed October 10, 1892. Serial No. 448, 389. (No specimens.)

To all whom it may concern:

Be it known that I, John Holmes, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Knit Garments and Methods of Manufacturing the Same, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

10 Heretofore knit garments of the jersey and sweater class having a comparatively small neck opening, have been made without a seam on the shoulder at the junction of the front and back pieces, and the collar has been made 15 of two sections which either form continuations, between the shoulders, of the back and front pieces respectively, or are knitted separately, the said sections being thereafter united along their longitudinal edges to make 20 a continuous collar around the neck opening. The weakest part of the garment so made is at the point where the base of the collar joins the top part of the shoulder, i. e., at the ends of the neck opening, the strains appearing to 25 diverge from such points, a separation of the fabric and formation of a hole thereat frequently resulting. In many cases the neck opening is substantially a transverse slot between the shoulder portions, and as a result 30 it often happens that the collar is so small in proportion to the rest of the garment that it will bind.

This invention has for its object the production of a knitted garment of the jersey or sweater class having its front and back connected by lengthened knit shoulder portions of the same width from front to back, located at the sides of the neck opening to form a fullness thereat, the collar being secured at its lower edge to the edges of the neck opening, the distance between the front and back edges, and thereby the size of the neck opening, being regulated by varying the length of the shoulder portions from front to back. The method of manufacturing such a garment also forms a part of my invention.

Figure 1 represents in rear elevation, partly broken out, a knit garment embodying my invention, and Fig. 2, in perspective shows the front and back, and the several neck sections before they are united.

The garment herein shown is of the class I the divergent strains upon the shoulders at

generally known as jersey or sweater, one distinguishing feature of which is a continuous collar. One half of the garment as a, which 55 I have herein designated as the back portion, is knitted as a flat web, it being commenced, let it be supposed, at  $a^{\times}$ , see Fig. 1, on the desired number of needles, up to about the lines a', a', at which point I run off a portion 60 of the web from the needles between the points 2, 2, and continue to knit on the needles at each side of said points, to form the shoulder portions s, herein shown as knitted to about the points 3, 3, see Fig. 2, correspond- 65 ing substantially with the positions of the points 2, 2, of the back, as shown in Fig. 1. These shoulder portions increased in length and of the same width from front to back make a fullness in the garment at their inter- 70 section with the neck, taking up the strains which at such points are very great, and said portions form the ends of the neck opening. The shoulder portions having been made as long from front to back as desired, the nee- 75 dles temporarily put out of action are again put into operation and knitting is then resumed on the entire number of needles and continued for the front portion b to the lower edge thereof, when it is run off. It will be 80 remembered that the garment has a longitudinal seam along each side thereof from the lower edge to the arm scyes.

To complete the collar, I have herein shown separate side sections c, c, and front and back 85 sections  $a^2$ ,  $b^2$ , which I may make in any usual manner, as by picking the loops of the fabric along its edge between the points 2, 3, first one side and then the other, upon the desired number of needles of a knitting machine, 90 and knitting flat narrow webs which when completed form the said side sections, and similarly between the points 2, 2, and 3, 3. The longitudinal edges of the said side sections are then sewed to the adjacent edges of the back and front collar sections respectively in lines 1, 2 and 4, 2, completing the collar.

The garment is completed by uniting the edges e, e', of the back and front portions. 100 The sleeves d, d, may be knitted and put into the garment in any usual way.

By making the garment as herein described, the divergent strains upon the shoulders at

the base of the neck are taken up by the increased length of the shoulder portions, which are of the same width from front to back and the garment is made as strong at such points as at any other portion thereof, and the collar can be made of any desired size by varying the length of the shoulder portions and thus increasing or decreasing the distance between the points 2, 3.

It is obvious that the length of the neck opening cannot be varied without altering the width of the garment, and in order to vary the perimeter of said opening I vary the width of the opening from front to back, as described.

In my herein described garment none of the edges are cut edges, and the seams are all smooth seams when completed by sewing.

I am aware that knitted shirts have been made with a collar knitted in a flat web by gradually dropping out needles at each side of the center line from the front of the opening toward its widest portion, and then bringing in the needles gradually in reverse order for the back of the opening, such web being thereafter folded over and a tubular portion knitted upon the lower edges thereof to form the body portion of the shirt. And I am also aware that ladies' garments have been knitted with very large neck and shoulder openings, the shoulder strap portions narrowing from the front and back of said opening to its widest part, but such construction I do not claim.

I claim—

1. A knitted garment having its front and back formed of a flat web connected by continuous lengthened knitted shoulder portions s, s, of the same width from front to back, located at the sides of the neck opening, to form a fullness thereat, and a collar secured at its lower edge to the edges of the neck opening, variations in the length of said shoulder portions from front to back regulating the distance between the front and back edges of, and thereby the size of the neck opening, substantially as described.

2. A knitted garment having its front and back connected by lengthened knitted shoul-

der portions s, s, to form an enlarged neck opening, the front and back edges thereof being substantially in line with the ends of the 50 shoulder portions, and a series of flat webs secured to the edges of the neck opening and united along their longitudinal edges to form a collar, substantially as described.

3. A knitted garment having its front and 55 back formed of a flat web connected by continuous lengthened knitted shoulder portions s, s, at the sides of the neck opening, and of the same width from front to back, to form a fullness thereat, and collar sections knitted 60 upon the finished edges of the said neck opening to form a collar, substantially as described.

4. The herein described method of knitting garments, which consists in knitting a flat web to form one-half of the garment, and run- 55 ning off a portion thereof from the needles between the shoulder portions to form the front of the neck opening; continuing the knitting with all the previously thrown down needles at each side of the finished section to 70 form shoulder portions of the desired length and of the same width from front to back and with finished edges, then throwing all the needles into action and completing the web to form the other half of the garment, and com- 75 plete the neck opening attaching a collar to the finished edges of the neck opening so formed, and uniting the side edges of the half portions of the garment under the arm seyes, substantially as described.

5. A knitted garment having its front and back connected by substantially rectangular lengthened knitted shoulder portions s, s, of the same width from front to back, at the sides of the neck opening to form a fullness 85 thereat, and enlarge the neck opening, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN HOLMES.

Witnesses:

G. W. GREGORY, JOHN C. EDWARDS.