

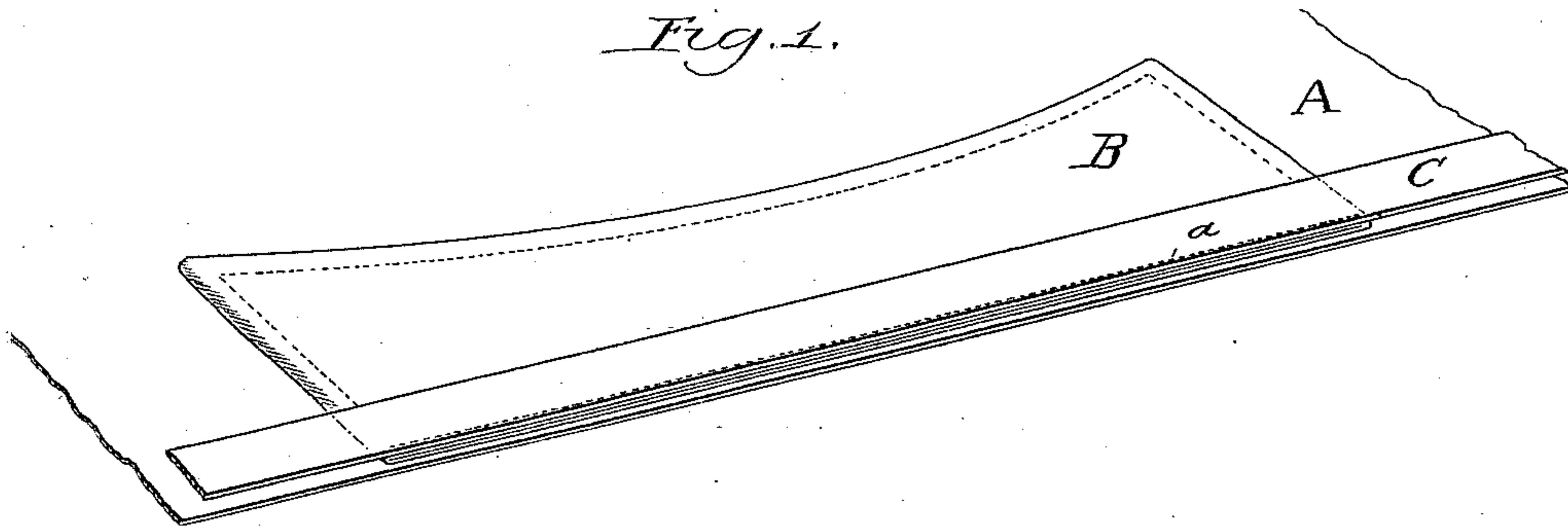
(No Model.)

S. MARCUS.  
WOOLEN SHIRT.

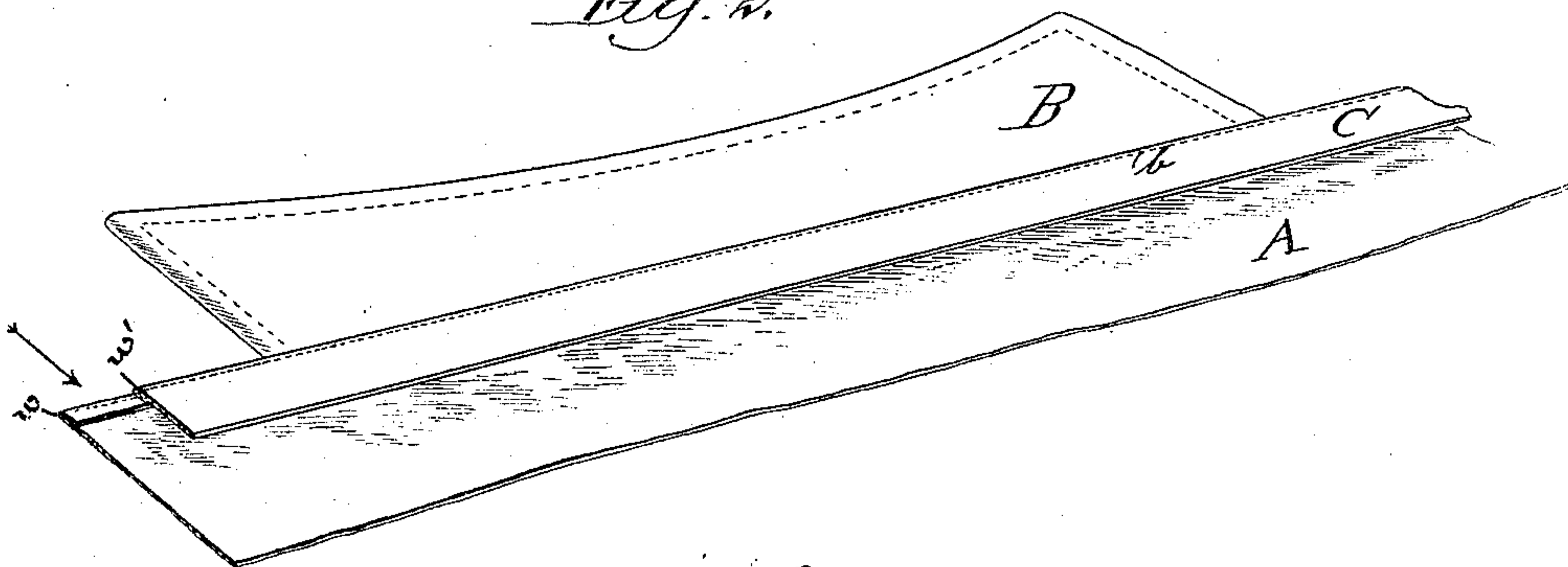
No. 410,984.

Patented Sept. 10, 1889.

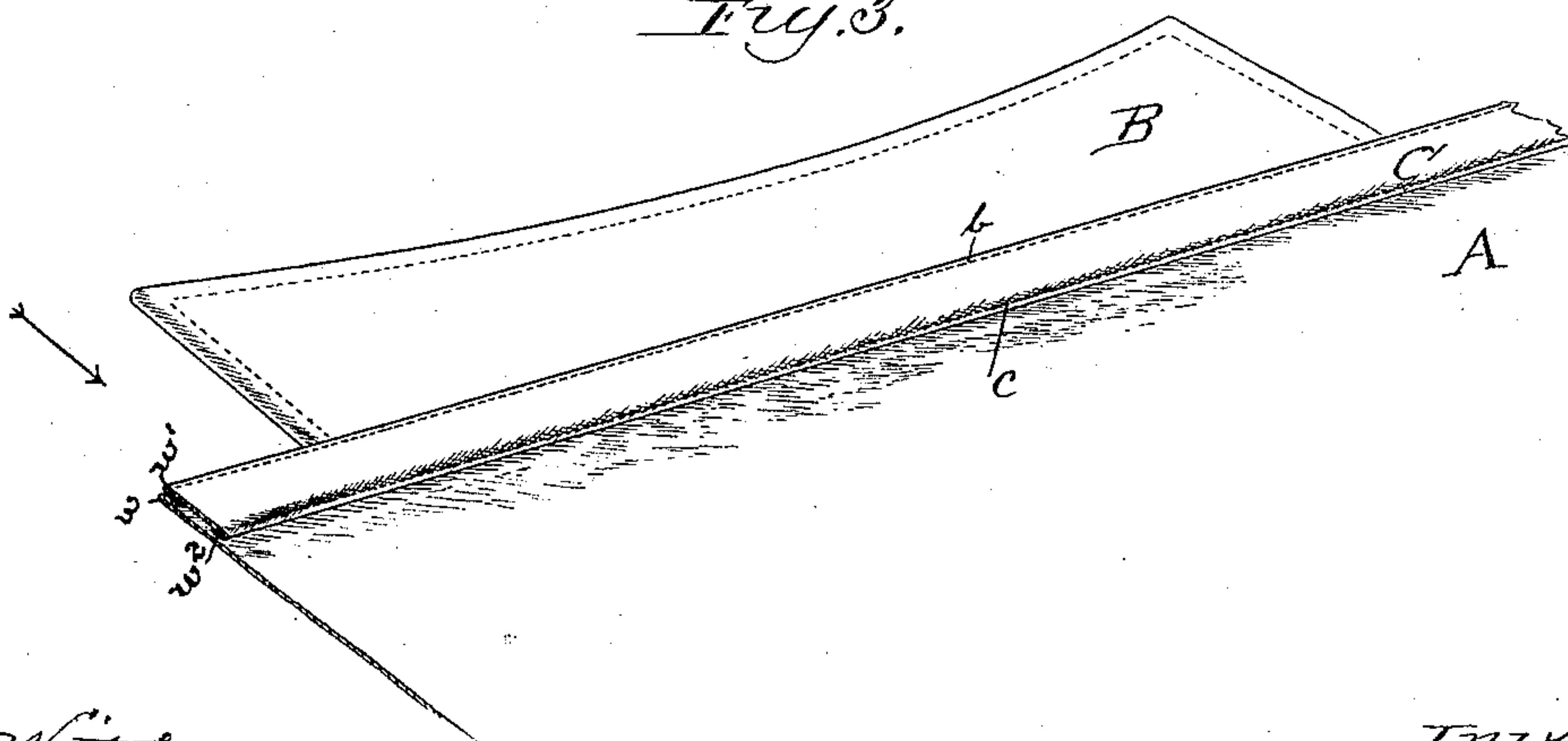
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses  
*H. Rosier*  
*Ch. Lubbock*

Inventor  
*Solms Marcus*  
By *Wm H Lotz*  
Atty.



# UNITED STATES PATENT OFFICE.

SOLMS MARCUS, OF CHICAGO, ILLINOIS, ASSIGNOR TO HENRY N. HART, OF  
SAME PLACE.

## WOOLEN SHIRT.

SPECIFICATION forming part of Letters Patent No. 410,984, dated September 10, 1889.

Application filed March 8, 1889. Serial No. 302,557. (No model.)

*To all whom it may concern:*

Be it known that I, SOLMS MARCUS, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Flannel and Woollen Fabric Shirts, of which the following is a specification, reference being had therein to the accompanying drawings.

10 My invention relates to improvements in shirts, and has for its object the provision of means whereby the neckband of a shirt shall always be maintained of uniform dimension.

My improvement has special reference to 15 shirts made of woollen fabric that will shrink when laundered. It is well known that such material will shrink, especially when immersed in hot water, and that a shirt after washing will have its neckband consequently 20 considerably reduced. The result will be that a collar normally of proper size for the wearer cannot, after shrinkage during washing, be buttoned around the neck. To overcome this defect is the purpose of my invention.

25 My invention is hereinafter fully described, illustrated in the drawings, and specifically pointed out in the claim.

In the accompanying drawings, wherein like letters of reference point out similar 30 parts on each figure, Figure 1 represents a collar and portion of the body of a shirt, illustrating the first step in practicing my invention. Fig. 2 is another view showing the shirt-body and the fortifying-strip turned 35 downwardly in a direction opposite to that illustrated in Fig. 1. Fig. 3 is a similar view showing the fortifying-strip sewed in place, as in the finished article.

In the drawings, A is the shirt-body; B, the 40 collar, both being made of woollen material that will shrink when laundered.

C is a fortifying-strip of inelastic textile fabric of sufficient length to encircle the neck of the wearer. Said strip on the finished article extends outwardly on either side beyond the length of the collar, as seen in Fig. 3, said extension receiving the usual fasten- 45 ing device common in such garments, the free end of the said strip being, however, firmly connected at its upper and lower edges to the 50 body A, as plainly seen in said figure.

In carrying out my invention, which is only applicable to shirts having a body and an attached collar made of some flannel or woollen fabric, the collar B is laid in place, flat upon 55 the upper portion of the body A; the lower edge of the collar being brought in exact alignment with the upper edge of the body. Over these two layers of woollen fabric I then place a fortifying inelastic strip C and connect the three laminæ at their free edges by 60 a common row of stitching *a*, as plainly shown in Fig. 1. It will be observed that the row of stitching extends through the three overlying fabrics the full length of the collar. Next 65 the body A is folded downwardly, away from the collar B, and the strip C is also folded down in the same direction, thereby forming hems or welts *w w'*, the portion of the strip C and body A extending beyond the length 70 of the collar being respectively turned over and under to form a double or twofold continuation of the welts of four thicknesses, as plainly seen in Figs. 2 and 3, where indicated by arrows, while the full length of the lower 75 edge of the collar, being interposed between the welts, provides five thicknesses of material, three of woollen and two of unyielding fabric. The welts *w* and *w'*, composed by 80 overturns of the body and strip, and respectively in alignment, overlying at opposite sides the lower edge of the collar, are all unitedly connected by means of a through-and-through line of stitching *b*. Said stitching, after passing 85 beyond the length of the collar, is continued outwardly to join the extending portions of the strip and body. (See Figs. 2 and 3.) The strip C is at its lower edge turned under, and said turned edge is for its full length 90 firmly secured to the body A by a continuous row of stitching *c*, thus composing a welt *w*<sup>2</sup> at the lower edge of the strip.

The welts at the opposite edges of the strip enable the employment of thin material for said strip, as it is obvious that should there 95 be any tendency for said material to contract it will be arrested by the welts rigidly maintained in position upon the conjoined collar and body by the continuous rows of through-and-through stitches, as set forth. 100

I do not claim a woollen shirt having an inelastic neckband; but,

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

5 The combination, in a shirt composed of woolen fabric, provided with an inelastic fortifying neck-strip overlying the collar its full length, the upper edge of the shirt-body being overturned to form a welt  $w$ , the upper edge of said strip being overturned to form welt  $w'$ , the  
10 collar B, having its lower edge interposed between the said welts, firmly held in position by a continuous line of stitching  $b$ , extending

through said welts and collar, and a welt  $w^2$ , composed of a return at the lower edge of the strip C, said welt  $w^2$  being connected to the  
15 body A by a continuous row of stitching  $c$ , substantially as described.

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

SOLMS MARCUS.

Witnesses:

WM. H. LOTZ,  
OTTO LUBKERT.