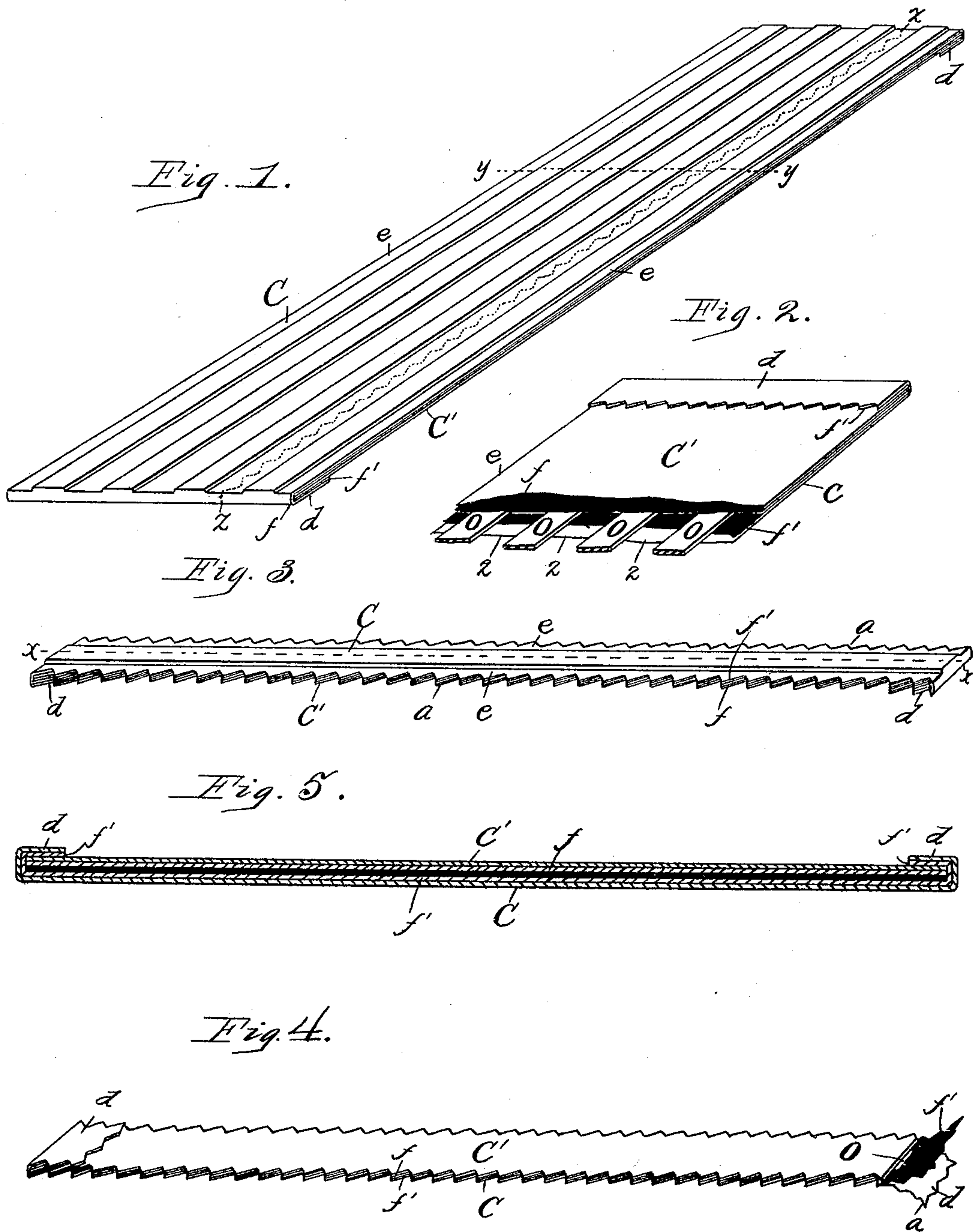


(No Model.)

E. C. BOWLING.
STAY FOR GARMENTS.

No. 372,593.

Patented Nov. 1, 1887.



Attest.
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att'y

UNITED STATES PATENT OFFICE.

ENOCH C. BOWLING, OF YPSILANTI, MICHIGAN, ASSIGNOR OF ONE-HALF TO
HENRY P. GLOVER, OF SAME PLACE.

STAY FOR GARMENTS.

SPECIFICATION forming part of Letters Patent No. 372,593, dated November 1, 1887.

Application filed June 6, 1887. Serial No. 240,387. (No model.)

To all whom it may concern:

Be it known that I, ENOCH C. BOWLING, a citizen of the United States, residing at Ypsilanti, in the county of Washtenaw and State of Michigan, have invented certain new and useful Improvements in Dress-Stays; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to an improvement in dress-stays composed of a stiffener or flexible steel blade having a gutta percha tissue, rubber, or like impervious flexible covering and an outer textile-fabric covering forming a textile-fabric stitching-edge on two sides of the stay only.

The special feature of this invention consists in the construction of parts, as hereinafter set forth, and pointed out particularly in the claim, and is designed as an improvement on Letters Patent issued to me on May 10, 1887, No. 362,568.

In my former patent the stay is provided with a stitching-edge along its sides and ends. In my present device I dispense with the stitching or textile-fabric projection at the ends of the stay and protect the ends of the blade or stiffener by folding one of the covering fabrics and gutta-percha-tissue sheets over the ends of the stiffening-blade and cement or confine the turned-over portions to the back covering textile fabric, to prevent the ends of the steel or stiffening blade from cutting through the garment of the wearer.

In the accompanying drawings, forming a part of this specification, Figure 1 shows a sheet of manufactured goods prior to the pinking or separation, in which the dotted line Z shows the line of separation. Fig. 2 is a back view of same in cross section, taken on the dotted line *yy* of Fig. 1. Fig. 3 is an isometrical view showing the complete stay. Fig. 4 is a view of same, showing the back face with one of the ends unsealed. Fig. 5 is a vertical longitudinal section of Fig. 3 inverted, being taken on the dotted line *xx* of Fig. 3.

The stay consists of a steel or flexible blade, O, having on each of its flat faces a sheet of textile fabric, C C', or muslin with interposed or intermediate strips of gutta-percha tissue *ff*.

The covering fabrics C C' and sheets of gutta percha tissue are cut or made wider than the blade O, and project beyond the edges of the blade O, so as to form the textile-fabric or stitching edges *ee*, the stay being secured to the open seam of a garment by stitching through the edges *ee*.

In practice I use for the back covering, C', common muslin, the length of which and the sheet of gutta-percha tissue (lying between it and the blade) are of an equal length. The ends of the back fabric, C', and gutta-percha tissue *f* terminate at the ends of the blade O, as shown in Fig. 5 and at the right of Fig. 4.

I employ for the front covering, C, textile fabric of a better grade, which I form longer than the blade O, so as to project beyond each end of the blade. (See Figs. 4 and 5.)

The strip of gutta-percha tissue *f'* is of the same length as the front covering. The projecting ends *d* of the front covering, C, and the like projecting ends of the gutta-percha-tissue strip *f'*, I fold over the ends of the blade O onto the back covering fabric, C, as clearly shown in Fig. 5, in which the white line *f'* indicates the gutta-percha tissue.

The parts are firmly sealed together after folding by passing over the fabric a heated iron—such as a sad-iron—and when making the stay in sheet form, as shown in Figs. 1 and 2, the parts may be united by passing the sheet through heated corrugated rollers. The application of heat causes the gutta-percha tissue to melt or soften, thus passing into the interstices of the textile fabrics. When the parts are cooled, they form a united body. The gutta-percha tissue prevents moisture from reaching the steel blade O and firmly binds the edges of the fabrics together, and, like rubber, allows the bending of the stay, as the coating is flexible.

The sheet, S, of stays shown in Figs. 1 and 2 is made as follows: I place on the upper face of the fabric C, as shown in Fig. 2, the sheet of gutta-percha tissue *f'*; then place the series of blades O on said gutta-percha-tissue sheet at some distance from each other, as shown in

Fig. 2, forming the space 2. I then place over the blades O the sheet of gutta-percha tissue *f*, the length of said sheet being the same as that of the blades O. I then place thereon the textile-fabric covering *C'*, having the same length; then pass a heated iron over the face of the fabric *C'*, cementing the parts together. I then fold the projecting ends *d d* of the fabric *C* and gutta-percha tissue *f'* over the ends of the blades O onto the covering *C'*; then pass a heated iron over the folded ends *d*, cementing them together, as shown in Fig. 2; then pass a pinking-wheel along the dotted line *Z*, midway between the blades O, cutting through the fabrics, thus producing the stay shown in Fig. 3, in which *a* represents the pinked edges, and *e* the stitching-edges.

The object of folding the ends *d* over the ends of the blade O is to properly cover the ends of the blade, so as to prevent them from puncturing or cutting through the garment to which they are to be attached, and the object of the stitching-edge is to provide means for sewing them onto the garment, as before set forth.

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

The herein-described stay, comprising the stiffening-blade O, having the sheets of gutta-percha tissue *f f'* lying upon each side thereof and projecting beyond the edges of said blade, the sheets of textile fabric *C C'*, having a like projection and adhering thereto, whereby a stitching-edge, *e*, is provided on each side of the stay, with the projecting ends *d* of one of the textile-fabric coverings and the adjoining like projecting ends of the gutta-percha sheet *f'* folded over the ends of the blade O adhering to the covering fabric *C'*, as and for the purposes specified.

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

ENOCH C. BOWLING.

Witnesses:

B. F. WHEELER,
C. W. RUSSELL.