(No Model.)

## C. D. SPENCE.

## SUPPLEMENTARY WAISTBAND.

No. 360,826.

Patented Apr. 5, 1887.

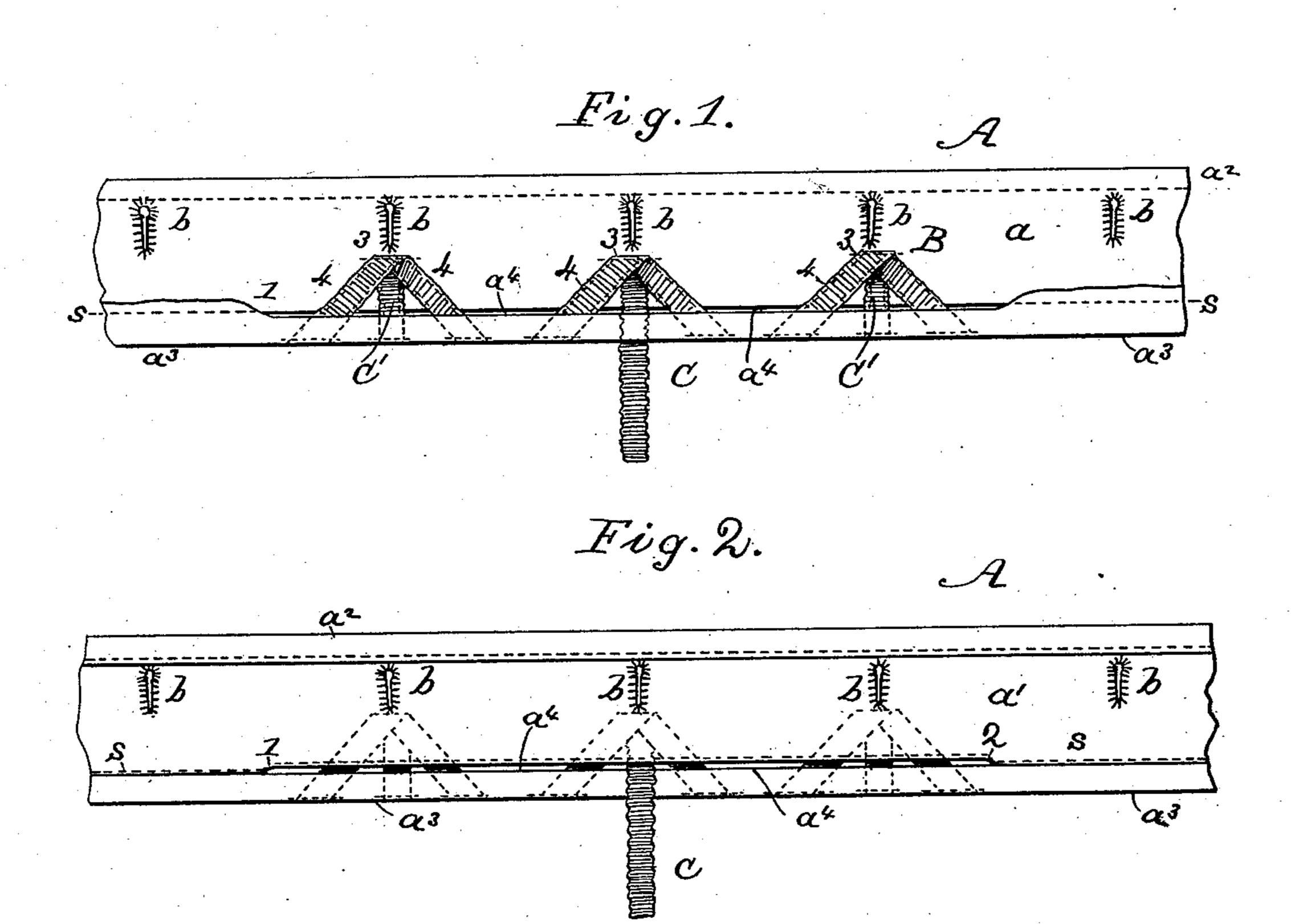
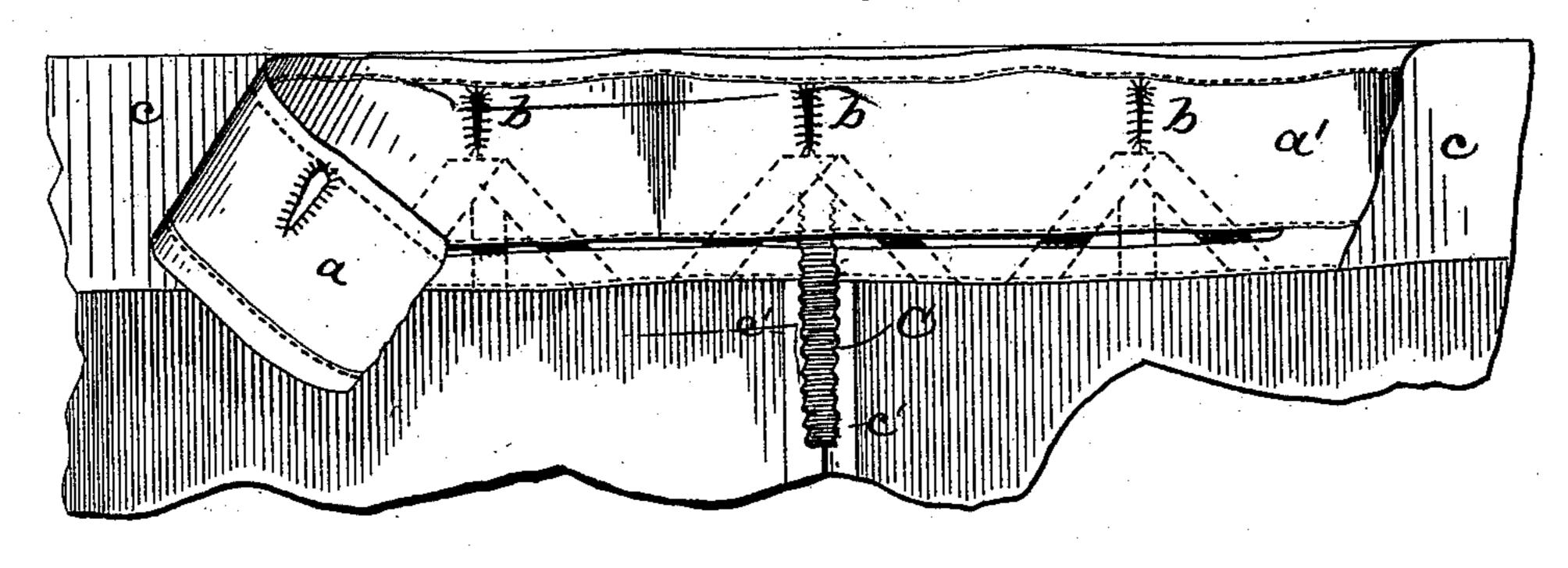


Fig. 3.



Witnesses
Tho! Houghton.
Cambo Hacobson

Charles D. Shence By his attorneys

## United States Patent Office.

CHARLES D. SPENCE, OF BROOKLYN, NEW YORK, ASSIGNOR TO SMITH, GRAY & CO., OF SAME PLACE.

## SUPPLEMENTARY WAISTBAND.

SPECIFICATION forming part of Letters Patent No. 360,826, dated April 5, 1887.

Application filed February 4, 1887. Serial No. 226,505. (No model.)

To all whom it may concern:

Be it known that I, Charles D. Spence, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Waistband Attachments, of which the following is a specification.

My invention relates to waistbands for attachment to pantaloons with which no susto penders are used, and where such garment is buttoned direct onto a jacket, shirt-waist, or the like, the object of my invention being to secure elasticity at the particular points where the connections of such garments are subjected to the greatest strain, all as hereinafter fully described, illustrated in the drawings, and specifically pointed out in the claims.

Referring to the accompanying drawings, in which like letters of reference point out similar parts on each figure, Figure 1 is a rear view of my improved waistband. Fig. 2 is a front view thereof. Fig. 3 represents the upper portion of a pair of pants illustrating the manner of attaching the waistband thereto.

A is the waistband preferably composed of two layers of fabric, a a', the rear strip being folded and returned over at the top to form the hem a². A supplementary folded piece of fabric, a³, is attached lengthwise to the lower of edge of the band A by stitches s; but a portion of said fabric a³ is left unconnected, forming an opening, a⁴, at about between the points indicated by numerals 12. The whole band and its attachments is connected to the waist of the garment by stitching the strip a³ thereto lengthwise, said waist being usually faced with muslin or the like. (See Fig. 3, c.)

The band A is provided with button-holes b, common to such articles. Under each of a series, preferably three, of these button-holes, I fasten a strip of elastic webbing, which strips are each turned over upon themselves in a miter fold to assume the form of an inverted V, thus A. I herein denominate these folded strips of webbing as "stretchers," indicated in the drawings at B, the apex or turned over portion of which, 3, is in practice fastened directly under and adjacent to a respective button-hole, b. The arms 4 of each stretcher extend downwardly and outwardly in opposite

oblique lines, the lower ends of said arms, after passing over the open space  $a^4$ , being firmly connected to the narrow strip  $a^3$ .

I will observe that in devices of the character described the greater strain will always 55 be centrally of the back of the band.

In stooping, it is this point of the connected garments that will be subjected to the most tension, which tension or pull is next exerted upon points at either side of the center, and 60 this not in a direct perpendicular direction. Therefore I have found by experience that the arrangement of elastic webbing in opposite oblique lines is of great advantage over the plan adopted in analogous devices, where parallel strips of elastic webbing have been employed adjusted in straight lines.

It will be obvious that my improvement provides means for direct extension lengthwise of the body of the wearer of the connected 70 garments from whatever point or direction the pull or strain may be exerted.

To limit the extension of the central stretcher, upon which is the main strain, I attach thereto within, over, or under the turned- 75 over apex3 an inelastic limiting-tape, C, which extends downward therefrom in a straight line, and, passing over the opening  $a^4$  and under the strip  $a^3$ , is fastened to the back seam, c', of the pantaloons. This limiting-tape is of 80 sufficient length to admit of the extension of the stretcher a predetermined degree and no more, for which purpose said tape is of greater length than the distance between its points of connection to the central stretcher and the in- 85 seam of the garment, as before described. When no tension is applied to the band, said tape will lie in loose transverse folds or undulations, which will be drawn out when the stretcher is subjected to strain, which strain 90 can be continuously maintained until said limiting-tape C has been drawn out to its full length. When the device is relieved from tension, the resiliency of the stretcher will cause said limiting-tape to assume its normal 95 undulatory condition, as will be readily understood. For some purposes, besides the central limiting-tape, C, I propose to employ additional inelastic limiting-tapes, C' C', for stretchers B, on either side of the central one, in which case 100 360,826

the upper ends of said tapes will be fastened at the upper part of said side stretchers, will extend downwardly therefrom, and, after passing across the opening a<sup>4</sup>, will be fastened at their lower ends to the fabric a<sup>3</sup>. For all practical purposes I deem the single tape C sufficient; but it is fully within the scope of my invention to employ side limiting tapes, C'C', as described. When, however, three limiting to tapes are employed, the central one must be the longer one, for, as before set forth, the greater strain will always be exerted at the center of the band, and there should be means for more play or power of extension at that point than at the sides.

In the drawings I have shown but three button-holes with described stretchers and attachments, and consider this number sufficient; but it is obvious more may be employed with-20 out departing from my invention, the main object being to impart elastic properties to the rear center of the band. Besides the button-holes provided with the described devices for the purposes set forth the band is supplied 25 with other ordinary button-holes arranged at either side of those that are controlled by the stretchers B. These ordinary button holes (especially those next adjacent to those provided with the stretchers) prevent the stretch-30 ers from being drawn too far laterally, and perform the function of limiting lateral extension and confining said extension to the central group of button-holes in the direction from which strain comes from time to time, as before

In Letters Patent No. 294,686, issued to me, I have shown separate elastic strips extending obliquely across the full width of a waistband, the upper ends of such strips being fastened to at the upper edge of the band and above the button-holes; but such construction and arrangement of strips is not now claimed, my present improvement being for elastic webbing folded to form inverted-V-shaped stretchers, one of which being fastened directly under in alignment with and adjacent to a respective button-hole and to the combinations thereof.

Certain features have been herein shown 50 and described, but not made the subject of claim, inasmuch as I have made claim therefor in an application filed December 23, 1886,

Serial No. 222,350, and therein set for thas "the combination, with a pair of pantaloons, of a supplementary waistband provided with button-holes and having stretchers B of the character described arranged at the rear center of said waistband, said stretchers having downwardly-extending inelastic limiting-tapes C C' C' fastened at their lower ends, as described." 60

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

1. A supplementary waistband provided under one or more of its rear button-holes 65 with elastic stretchers B, folded to form an inverted V, the central stretcher having depending from its apex an inelastic limiting-tape, C, adapted to be fastened at its lower end to the back inseam of a pair of pantaloons, 70 as and for the purpose intended, substantially as described.

2. In a supplementary waistband, the combination of the inverted V - shaped elastic stretchers B, with limiting tapes C C C, the 75 middle one being longer than the one on its either side, substantially as described.

3. A supplementary waistband for pantaloons, consisting of a main strip having at its lower edge a narrow strip, a, attached thereto 80 its full length on either side of a longitudinal opening, a, in combination with inverted V-shaped stretchers B, the mitered apices 3 of which are fastened directly under and adjacent to button-holes b, and extending down-85 wardly in oblique lines from said miters 3 across the opening a, the ends of each oblique strip being connected to the strip a, as and for the purpose intended, substantially as described.

4. In a supplementary waistband, the limiting-tapes C'C', each fastened at its upper end to the apex of an inverted - V - shaped stretcher B and at its lower end to the narrow strip a³, and a middle limiting-tape, C, fastened 95 at its upper end to the apex of a like stretcher and having its lower end free and unattached, all in combination with the inverted-V-shaped elastic stretchers B, as and for the purpose intended, substantially as described.

CHAS. D. SPENCE.

Witnesses:

SAML. H. JACOBSON, ANSON S. TAYLOR.