

No. 633,434.

Patented Sept. 19, 1899.

C. H. DOUGHTY.
SUSPENDERS.

(Application filed June 8, 1899.)

(No Model.)

Fig. 1

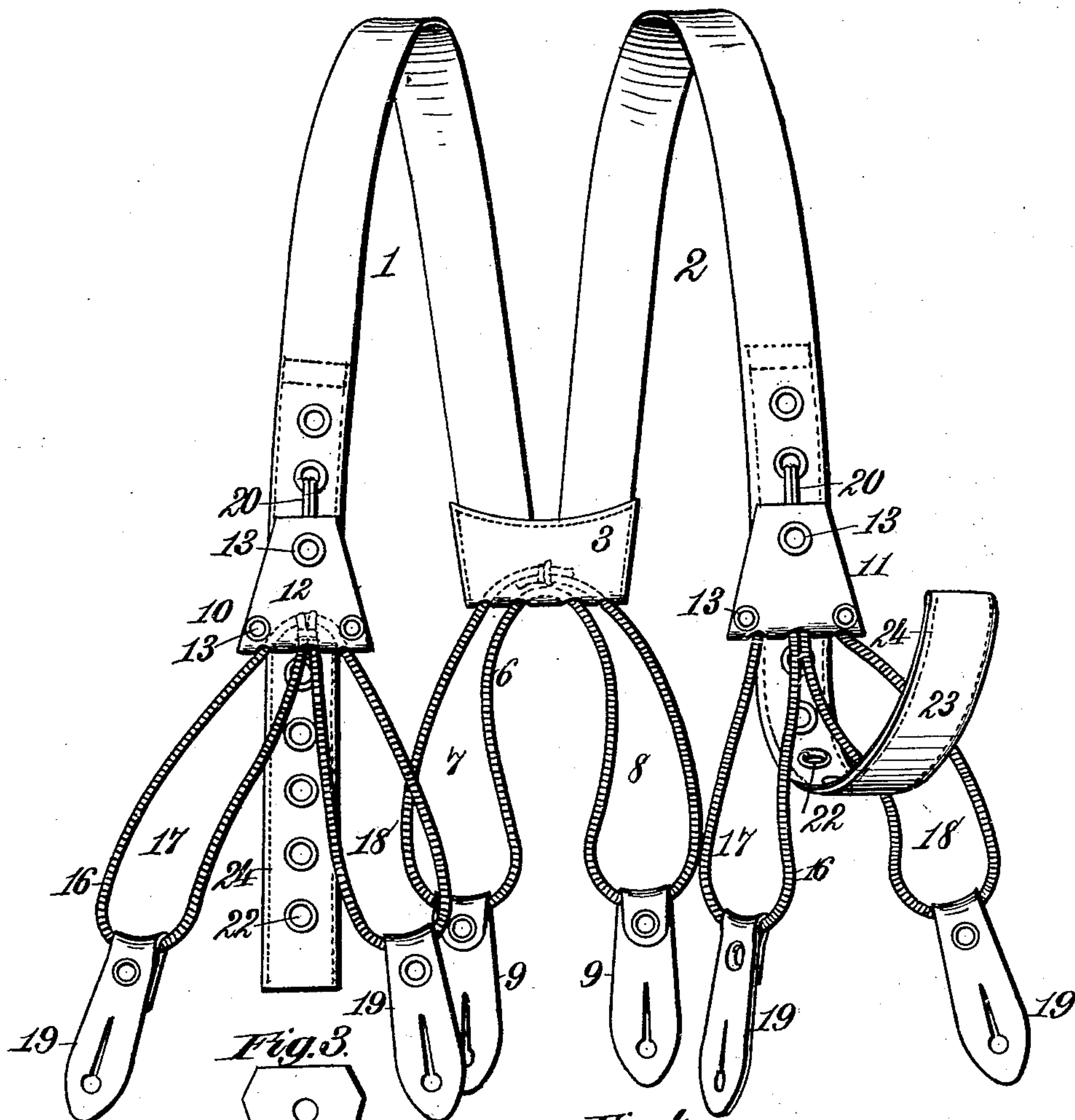


Fig. 3

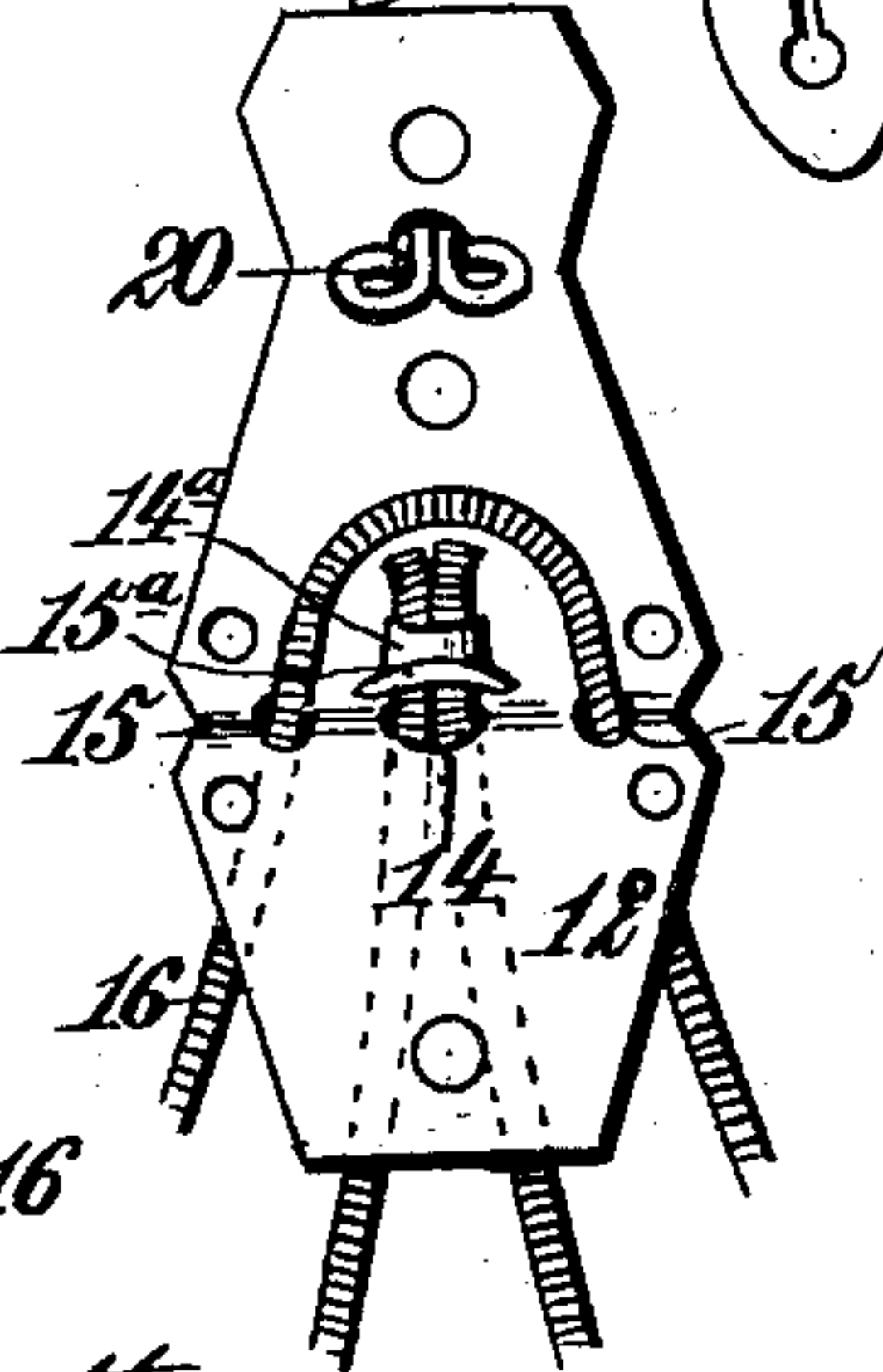


Fig. 2

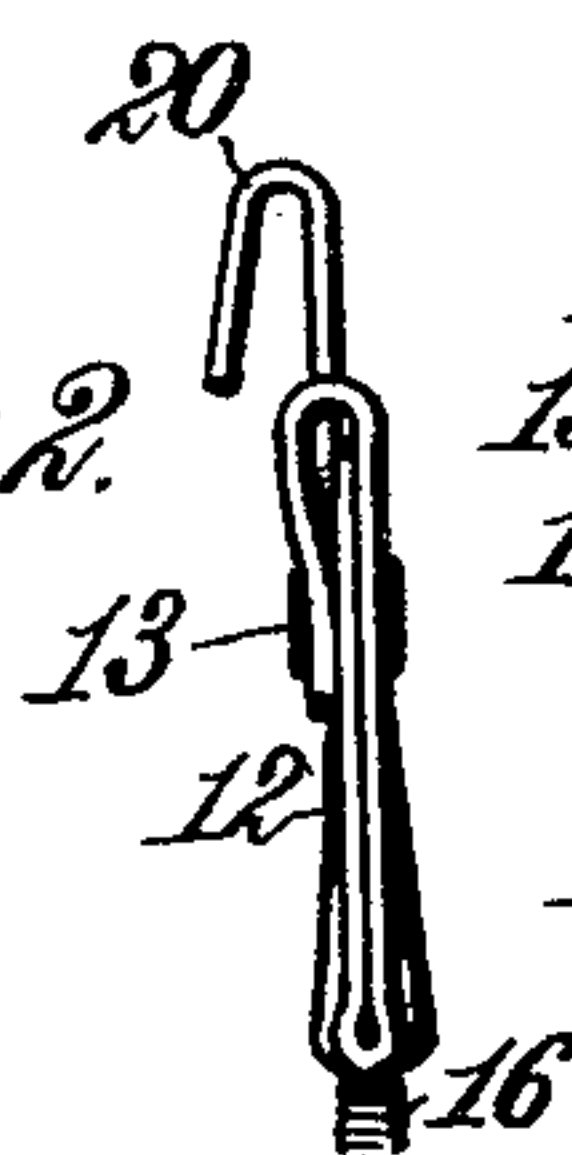


Fig. 4

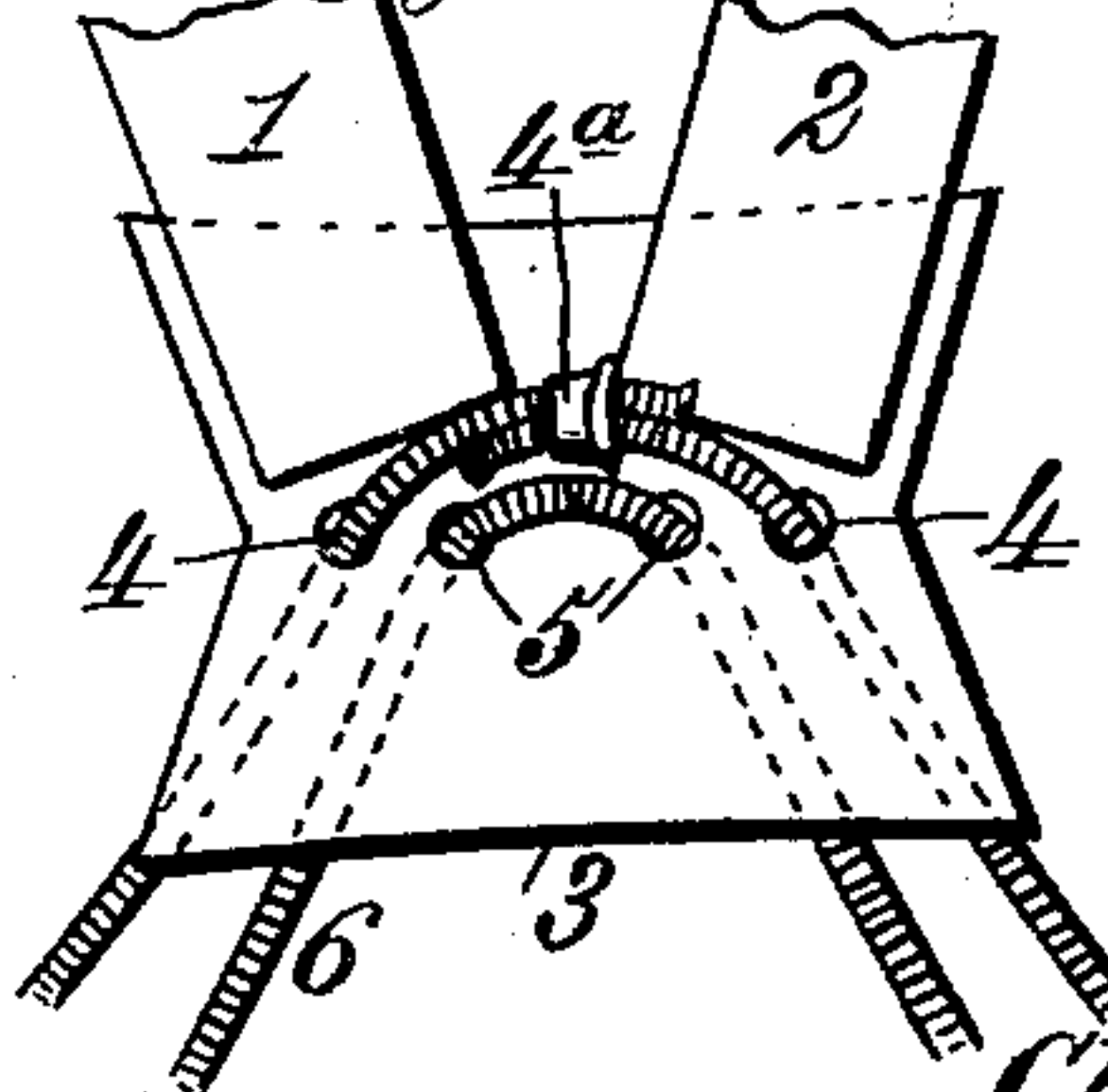
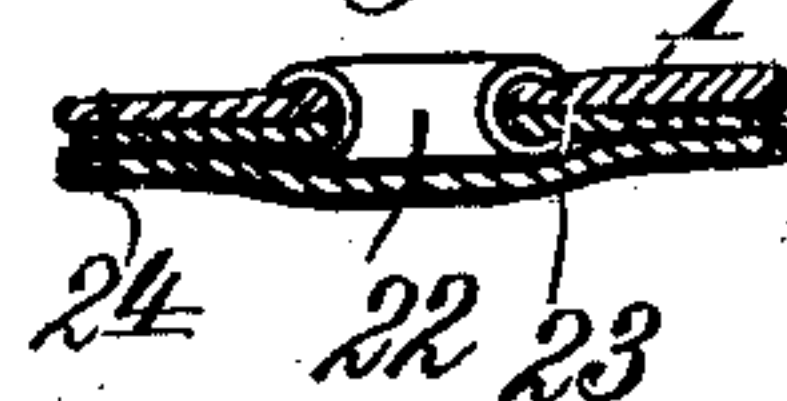


Fig. 5



Witnesses:
Robert E. Smith
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Att'y.

UNITED STATES PATENT OFFICE.

CHARLES H. DOUGHTY, OF DANVILLE, VIRGINIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF ONE-HALF TO WILLIAM D. OVERBEY, OF SAME PLACE.

SUSPENDERS.

SPECIFICATION forming part of Letters Patent No. 633,434, dated September 19, 1899.

Application filed June 8, 1899. Serial No. 719,812. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. DOUGHTY, a citizen of the United States, residing at Danville, in the county of Pittsylvania and State of Virginia, have invented new and useful Improvements in Suspenders, of which the following is a specification.

My invention relates to improvements in suspenders.

Objects of my invention are to provide an improved construction of the end member for detachable connection with the ends of the suspender-strap and of the back strap, to improve the construction of the ends of the bands to which the end members are adjustably connected, and as a general object to provide suspenders which shall be simple in construction and cheap to manufacture, which shall be light in weight and offer the minimum resistance to the movements of the body, and which shall present no metallic buckles or other fastening devices to engage and tear or soil the clothing of the wearer.

I have described my invention hereinafter in detail, making reference to the accompanying drawings, in which—

Figure 1 is an elevation of a pair of suspenders constructed according to my invention. Fig. 2 is an edge view of one of the tabs or supports for the front strap. Fig. 3 is a view of the same opened out. Fig. 4 is a similar view of the tab or support for the back strap, and Fig. 5 is a sectional view through the band of the suspender on the line of one of the eyelets.

Referring now to the drawings, the reference-numerals 1 2 indicate, respectively, the two bands of the suspenders, which bands are non-elastic and are united at one end to opposite ends of a transverse tab or support 3. Said tab or support is made of leather or other strong pliable non-metallic material bent or doubled upon itself and having the ends of the bands 1 2 inserted therein and held by stitching. Before the support 3 is doubled and stitched, as described, it is provided along the line on which it is to be doubled, or, in other words, the median line, with four holes located about equal distances apart, the outermost holes being indicated by the numerals 4 and the inner holes by the nu-

merals 5. These holes are for the purpose of securing the back strap 6 within the support. To this end the ends of the cord of which the back strap is made are passed from within outward through the holes 5 and then turned outward and backward and passed through the holes 4, and said ends are then lapped and secured together by a suitable rivet 4^a.

It will be seen that by arranging the back-strap cord in the manner just described I provide two loops 7 8, each of which carries a buttonhole-tab 9, preferably made of leather and movable on the cord. The back-strap cord is free to move through the holes 5, and consequently the loops 7 and 8 may be lengthened or shortened, as governed by the movements of the wearer, and the back strap thereby accommodates itself to various positions of the body. The back strap is preferably made of an elastic cord; but it may be made of inelastic material.

The numerals 10 11 indicate, respectively, the end members of the suspenders. Each of these members comprises a tab or support 12, made of leather doubled upon itself and secured by rivets 13. Before doubling the leather, however, it is provided along the line upon which it is to be doubled with three holes, the center hole being indicated by the numeral 14 and the outer holes by the numerals 15. The ends of the elastic cord of the front strap 16 are then passed from within outward through the holes 15 and its ends brought together and passed through the hole 14 beneath the cord and secured in the tab or support 12 by passing said ends through an eyelet 14^a, having a flange 15^a, and then flattening said eyelet, whereby the two ends will be held firmly together, and the flange 15^a will project outward at the sides of the eyelet, as shown in Fig. 3, and form a shoulder to prevent the ends from being pulled through the hole 14. This arrangement of the front strap provides two loops 17 18, each of which carries a buttonhole-tab 19. The front strap is free to move through the holes 15, so that the loops may thus adjust themselves in size to suit the position of the wearer, as in the case of the back strap. In the upper part of each tab 12 is secured a hook 20. This is done by making one side of the tab longer than the

other and providing it with a hole through which the shank of the hook extends, the butt of the hook being inserted between the two parts of the tab, and then doubling the projecting end of the tab over and securing all together by a rivet 13, as clearly shown in Fig. 1.

In forming the ends of the bands 1 2 for receiving the end members I first cement a stay or reinforcing-strip 21 of fabric along a portion of the rear side of each band at a suitable distance from its end, and in this reinforced part of the band I secure at equal distances from each other a series of eyelets 22. The end of the band is then doubled backward to extend behind the row of eyelets 22, this part of the band being indicated by 23, and secured to the reinforced part by means of stitching along the edges and at the top, as indicated at 24. This doubled end of the strap thus forms a guard behind the eyelets, so that when the hook 20 is inserted in any one of them it cannot come in contact with the person or clothing of the wearer. The hook 20 may be readily inserted in any one of the eyelets 22, according to the adjustment desired, and may be readily removed therefrom.

It will be seen that in my construction there is no frictional engagement between a metal part and the fabric of the suspenders—that is, the bands and straps—whereby the fabric is more readily worn out or cut by reason of such engagement, and hence the life of my suspenders is prolonged. The action of the suspenders is easy, and they readily adapt themselves to different positions of the wearer. Having no heavy metal parts about them, they may be made very light in weight, and thus may be worn with great comfort, especially in warm weather.

Having thus fully described my invention, what I claim is—

1. In suspenders, an end member comprising a support or tab made of flexible material doubled upon itself and suitably secured together, and in its doubled edge having a series of holes, a cord passed through two of said holes and freely movable therein and having its ends secured between the doubled part of said tab or support, thereby affording two loops, and a buttonhole-tab carried by each of said loops, substantially as described.

2. In suspenders, an end member compris-

ing a support or tab made of flexible material doubled upon itself and suitably secured together and in its doubled edge having three holes, means carried by said tab for detachable connection with the band of the suspender, a cord passed from within outward through the outermost holes and having its ends brought together and passed into and secured in the central hole, thereby affording two loops, and a buttonhole-tab carried by each loop, substantially as described.

3. In suspenders, an end member comprising a support or tab made of flexible material doubled upon itself to form a bottom edge and in said edge having a series of holes, a cord adjustably secured in said tab through said holes in a manner to form a front strap having two loops, a buttonhole-tab carried by each of said loops, said tab at its upper end having one side longer than the other and doubled over said other side, a hook having its butt inclosed between the folded parts of the tab, and a rivet passed through said tab, and folded-over portion and securing them firmly together, substantially as described.

4. In suspenders, in combination with end members each of which has a hook, of bands, each of which comprises a strip of fabric having a series of eyelets secured therein to receive the hook, the strip beyond said eyelets being doubled backward upon itself so that it shall lie behind said eyelets to form a guard-strip and the edges of said doubled portion being secured together, substantially as described.

5. In suspenders, in combination with end members each of which has a hook, of bands, each of which comprises a strip of fabric having a reinforcing-strip secured along a portion of its rear side, a series of eyelets secured in said reinforced part of the band to receive the hook, the strip beyond said eyelets and reinforced part being doubled backward upon itself so that it shall lie behind said eyelets to form a guard-strip and the edges of said doubled portion being secured together, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHARLES H. DOUGHTY.

Witnesses:

BRUCE S. ELLIOTT,
J. GRANVILLE MEYERS, Jr.