

J. C. HODGES.
SUSPENDERS.
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983,900.

Patented Feb. 14, 1911.

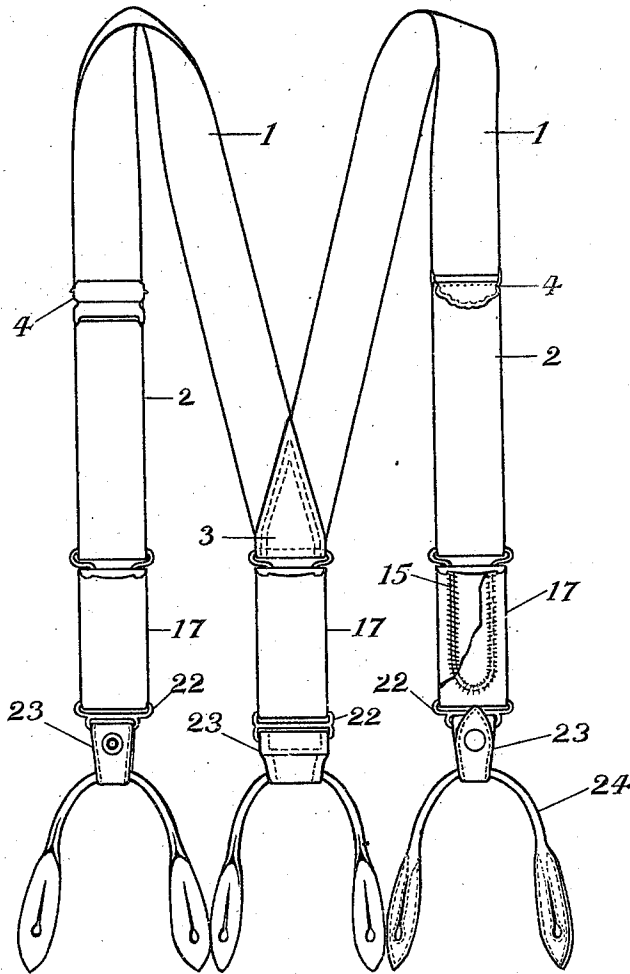


FIG. 1.

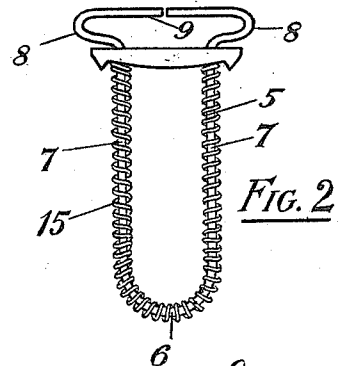


FIG. 2.

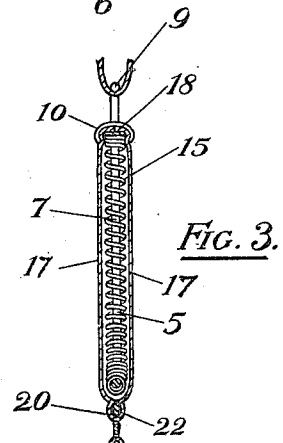


FIG. 3.

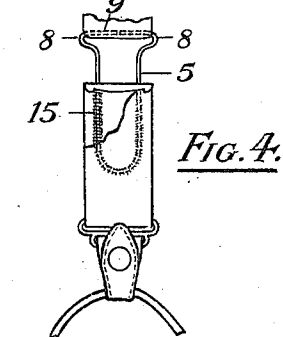


FIG. 4.

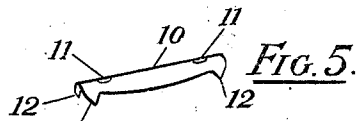


FIG. 5.

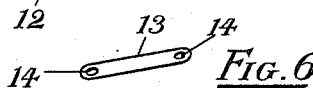


FIG. 6.

WITNESSES

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JAMES C. HODGES, OF ATTLEBORO, MASSACHUSETTS.

SUSPENDERS.

983,900.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JAMES C. HODGES, a citizen of the United States, residing at Attleboro, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Suspenders, of which the following is a specification.

My invention relates to that class of suspenders, shoulder braces, and similar articles which provide metallic springs for imparting an elastic or yielding property to the structure.

The essential objects of my invention are to attain the ends common to this type of suspender, and more particularly to completely house the spring, to more perfectly distribute the strain upon the springs, to facilitate the movement of the springs upon the guides, to afford an elastic means adaptable for use in suspenders of various types, and attain these objects in a simple, slightly and inexpensive structure.

To the above ends essentially my invention consists in the novel construction, arrangement, and combination of parts hereinafter set forth, and made the subject matter of the appended claim.

In the accompanying drawings which form a part of this specification, Figure 1 is a front elevation of a pair of suspenders embodying my invention, showing the left shoulder strap reversed, and a portion of the right broken away, Fig. 2, a side elevation of a spring member and connected parts in normal position, Fig. 3, a central vertical section of the same, and the inclosing casing, Fig. 4, a side elevation of the lower part of a shoulder strap partially broken away to show the spring parts under distension, and Figs. 5 and 6, detail views of the bearing and guide plate respectively.

Like characters of reference indicate like parts throughout the views.

In the drawings 1 represents the shoulder straps; 2, the strap loops; 3, the junction piece loop; and 4 the buckles of an ordinary pair of suspenders.

Connected with each of the loops 2 and 3 are certain auxiliary parts which are substantially similar in all respects, so that a detailed description of one only will be herein given. A connecting member or frame 5 formed from bent wire has a U shaped body comprising the curved part 6 and rods or arms 7. The latter at their

upper ends are bent to form the lateral extensions 8 completed by a horizontal bar 9. Slidably mounted upon the frame is a plate 10 having openings 11 to admit the arms 60 7. This plate is transversely curved and has at its corners marginal prongs 12. A second plate 13 is also slidably mounted upon the frame below the first mentioned plate, and has perforations 14 to receive the arms 65 7. The plate 13 rests upon and is upwardly pressed by the ends of a spiral spring 15 coiled upon the body of the frame. The frame and spring is inclosed by a webbing fabric casing 17 whose top, formed by a 70 seam 18, rests upon the plate 13, and is covered by the plate 10 which is engaged with the casing walls 19, by the inturned prongs 12 of the plate. The lower or looped end 20 of the casing 17 passes through a 75 slotted plate 22 which engages the supporting strap 23 of suspension strap 24. The particular construction of the suspension straps and their particular method of connection with the casings 17 are not material. 80 The bar 9 of the frame 5 traverses the loop 2 or 3 of the shoulder strap.

It will be observed that the frame 5 moves upwardly in a perfect vertical plane as these parts are distended, and against the tension 85 of the spring 15, that the guide plate 13 prevents the cramping of the spring which might otherwise be occasioned by the top of the casing; and that the casing prevents accidental contact of the inclosed parts with 90 the body.

What I claim is,—

A tension device for suspenders, comprising a frame having a substantially U-shaped body portion with outward lateral 95 extensions at the upper end and a horizontal bar beyond said extensions, a spiral spring upon the said U-shaped portion, and a plate slidably mounted on the parallel portions of the frame and engaging said spring to 100 compress the same, a second plate inclosing the first and having marginal prongs at its corners, and a flexible casing inclosing the U-shaped portion of said frame with said prongs engaged therein. 105

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

JAMES C. HODGES.

Witnesses:

HORATIO E. BELLOWES,
WALTER LOUIS FROST.