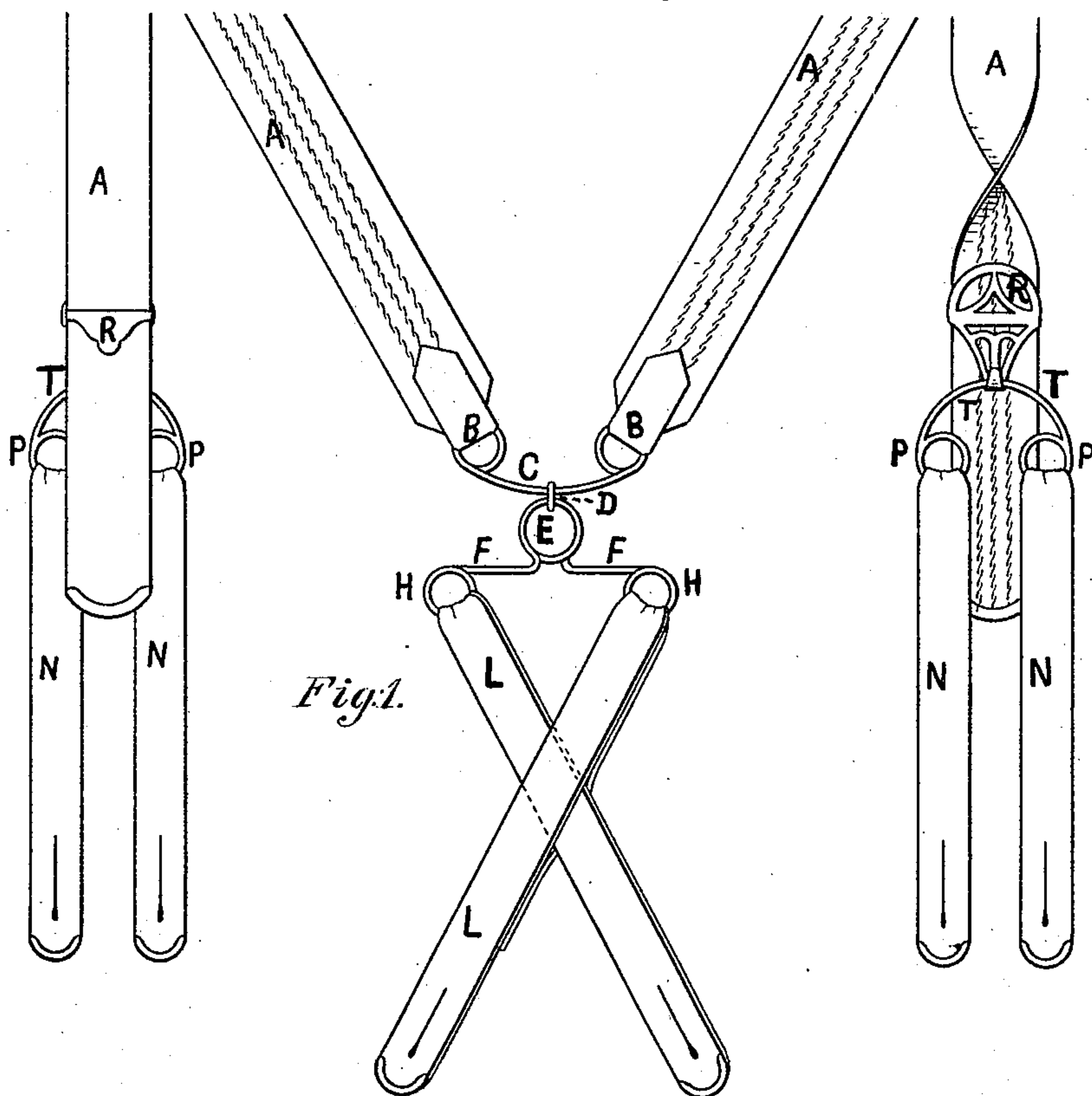


(No Model.)

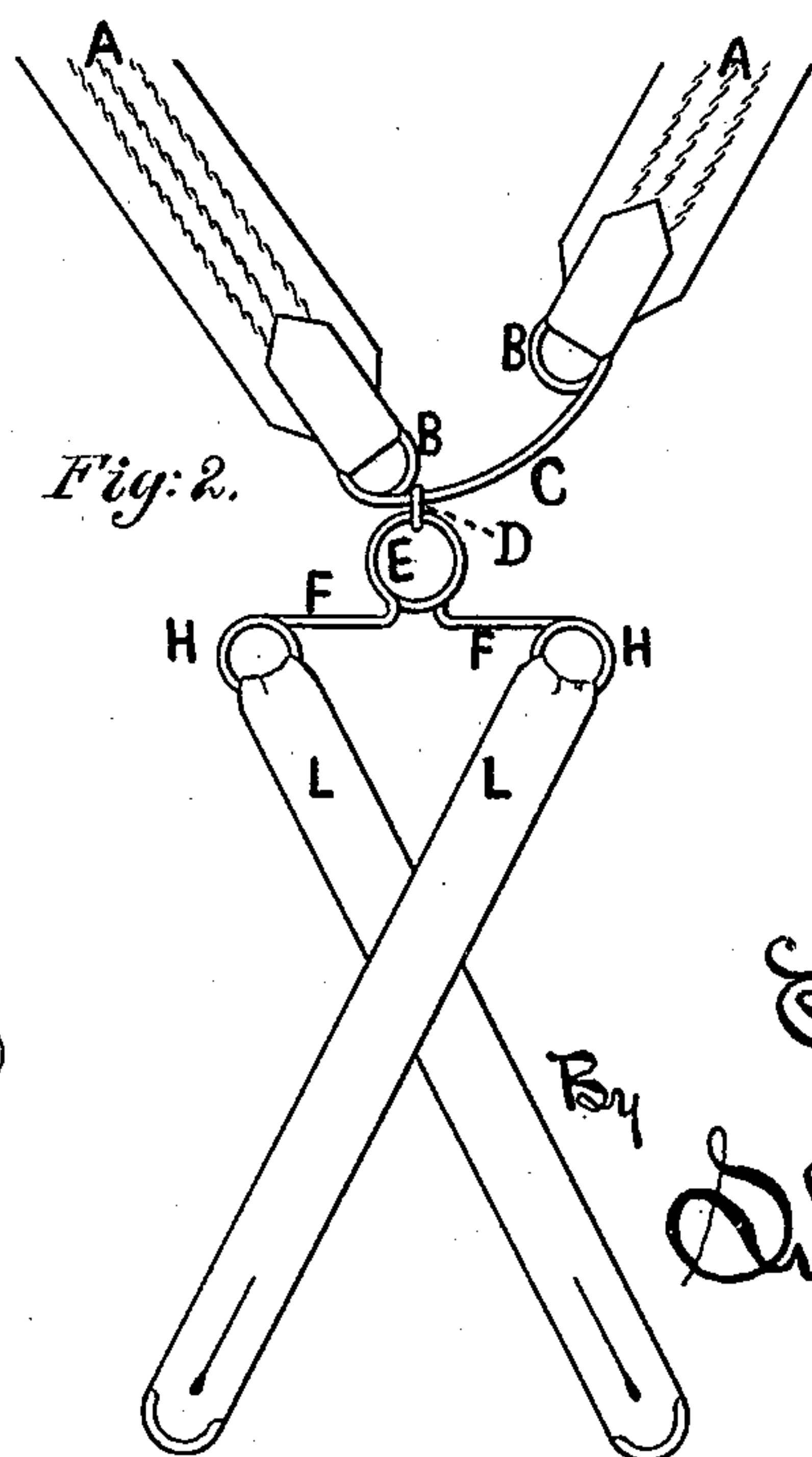
E. A. ROBBINS.  
SUSPENDERS.

No. 247,112.

Patented Sept. 13, 1881.



*Fig. 1.*



*Fig. 2.*

*Witnesses;*

*E. C. Perkins*

*W. R. Marble*

*Inventor;*

*Edwin A. Robbins*

*By Sylvanus Walker*  
*Morney*

# UNITED STATES PATENT OFFICE.

EDWIN A. ROBBINS, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO WILLIAM  
D. ROBERTSON, OF SAME PLACE.

## SUSPENDERS.

SPECIFICATION forming part of Letters Patent No. 247,112, dated September 13, 1881.

Application filed February 9, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, EDWIN A. ROBBINS, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and  
5 useful Improvements in Suspenders, of which the following is a specification.

The object of my invention is to provide a cheap, simple, durable, and convenient self-adjusting suspender, which shall more readily  
10 yield and adapt itself to the many changes of position of the body of the wearer without causing undue strain upon any portion thereof; and it consists in the construction, combination, and arrangement of the back attaching cross-straps, connected at their upper  
15 ends to arms extending in opposite directions from a central coiled spring, to which is connected a ring or eye, through which an evener or bar is adapted to slide longitudinally, said  
20 evener or bar being connected at each end with each rear end of the shoulder-straps, as herein-after more fully described and set forth.

Figure 1 represents a view of a pair of suspenders constructed according to my invention. Fig. 2 represents a view of the back portion of the same, illustrating the position of the evener when in use, one shoulder being elevated, or the shoulders being in an angular position.

30 A represents the webbing forming the suspender shoulder-straps, being non-elastic, and having connected to their rear ends narrower strips of any suitable material, which strips are passed through the rings, eyes, or loops B, formed upon each end of the metallic curved  
35 bar or evener C, which is free to slide or move longitudinally through the ring, loop, or eye D, which is supported upon the spiral or coiled wire spring E, the ends of which extend in opposite directions and form lever-arms F, the  
40 outer or extreme ends of which are bent, formed, or provided with rings, eyes, or loops H, adapted to receive the ends of the narrow straps L, which cross each other at about their mid-length, or one may be passed through a loop  
45 formed in the other, as shown in Fig. 1, or in such manner as may be desired, the lower ends being provided with button-holes, so as to permit of their connection with the waistband of  
50 the garment, as heretofore, the said straps L being likewise non-elastic. The elasticity or elongation required by the stooping position of

the wearer is provided for in the coiled spring E, acted upon through the medium of the connecting lever-arms F, which support the  
55 rear suspender-straps, L, as shown, and permit their upper ends to move or be drawn inwardly.

Now, in order to provide for any unequal movement of the waistbands of the pantaloons  
60 in front or at the pockets therein when the front attaching-straps, N, are secured to the buttons, as heretofore, or in general use, I fasten the upper ends of the said button-straps to eyes, rings, or loops P, formed at each end of  
65 the curved evener T, which may be connected with or detached from the catch or buckle hook R, secured and made adjustable upon the front ends of the shoulder-straps as now in use, this evener T operating similar to the one in  
70 the rear or at the back portion of the suspenders, but with less movement, the straps N not being crossed, but simply extended on an angle to the buttons, as before, and made of non-elastic material, whereby the suspenders are  
75 rendered more durable and agreeable in their operation to the body of the wearer.

I am well aware that suspenders have been heretofore provided with spiral springs attached in a variety of ways to non-elastic webbing or shoulder-straps. Therefore I disclaim  
80 such.

I am aware that heretofore the front ends of suspenders have been provided with various devices adapted to slide through the buckle-  
85 hook similar in construction to the device herein shown and described. Therefore I do not claim such as being my invention.

Having thus described my invention, what I claim is—

90 The combination, in a pair of suspenders provided with back attaching cross-straps, L, and coiled spring E, having arms F, to which the said cross-straps are attached, of the evener or bar B, having each end connected separately  
95 with each shoulder-strap, whereby said evener B is adapted to slide longitudinally, substantially as described, as and for the purposes set forth.

EDWIN A. ROBBINS.

Witnesses:

SYLVENUS WALKER,  
JOHN GOODALE.