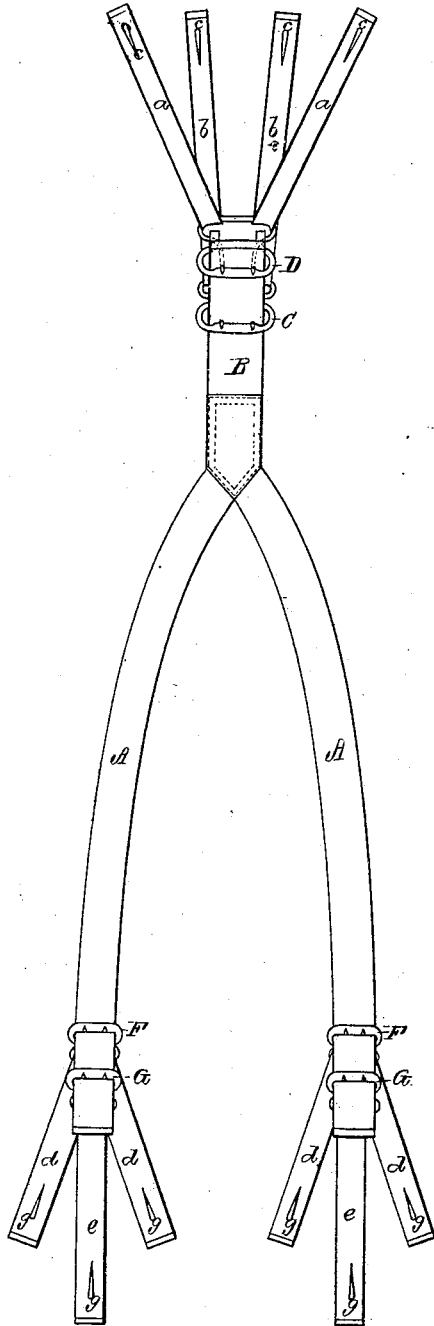


A. R. WARREN.  
Suspenders.

No. 167,961.

Patented Sept. 21, 1875.

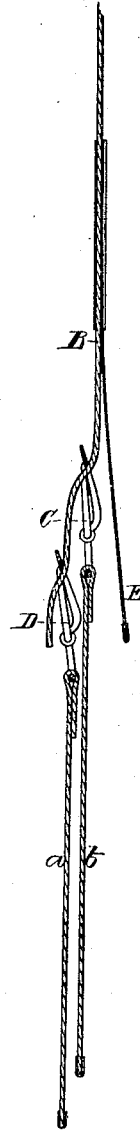
Fig. 1.



Witnesses.

S. W. Piper  
L. N. Hall

Fig. 2.



Aaron R. Warren.

by his attorney

R. H. Kelly

# UNITED STATES PATENT OFFICE.

AARON R. WARREN, OF LAWRENCE, MASSACHUSETTS.

## IMPROVEMENT IN SUSPENDERS.

Specification forming part of Letters Patent No. 167,961, dated September 21, 1875; application filed June 15, 1875.

*To all whom it may concern:*

Be it known that I, AARON R. WARREN, of Lawrence, of the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Suspenders; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a view of suspenders, with my improvement. Fig. 2 is a vertical section taken through the dorsal straps.

My invention relates to suspenders provided not only with straps for supporting the trousers of a person, but with others for supporting his drawers.

In carrying out my invention, I provide the drawers-buttoning straps with buckles, and buckle them directly upon the dorsal and shoulder straps, as the pantaloon-straps are backed to such dorsal and shoulder straps.

In the drawings, A A denote the shoulder-straps, connected to and diverging from a dorsal strap, B, which is run through two buckles, C D, each of which I provide with a pair of short straps, to extend from it in manner as represented, such short straps being marked *a a* and *b b*, and each, near its outer end, having a button-hole, *c*, made in it. Furthermore, I extend from the upper part of the dorsal strap down in rear of the buckles C D an auxiliary dorsal strap, E, which, arranged with the buckles in manner as shown, serves to prevent them from wearing or soiling the shirt of a person while using the suspenders.

In case it should be preferred to buckle to one of the dorsal straps one of the dorsal buckles, and to the other dorsal strap the other dorsal buckle, such a disposition of the buckles may be adopted, instead of pulling them on one dorsal strap only.

To each of the shoulder-straps A A I apply two buckles, F G, one having projected from it two buttoning-straps, *d d*. From the other buckle a single buttoning-strap, *e*, is extended, each of said buttoning-straps being provided with a button-hole, *g*, near its lower end.

From the above it will be seen that each pair of the trousers front-buttoning straps

may be adjusted, or have its buckle moved up or down on the shoulder-strap without, at the same time, drawing upward the next contiguous drawers-strap, so as to require any readjustment of it. In fact, the drawers-straps and the trousers-straps are adjustable independently of each other. Furthermore, it will be seen that in my suspenders the back-buttoning trousers-straps are adjustable relatively to the dorsal strap.

In the suspenders shown in the United States Patent No. 122,915, the back-buttoning trousers-straps are not adjustable relatively to the shoulder-straps, the back drawers-straps being adjustable in length.

In my suspenders, the back trousers-straps are adjustable, and their buckle can be set up or down on the dorsal strap without affecting the adjustment or draft on the back drawers-straps.

With the suspenders shown in the said patent, when an attempt is made to set up or let down either pair of front buttoning-straps, a corresponding movement of the drawers-strap necessarily follows, such requiring a readjustment of such drawers-strap.

I do not claim suspenders provided with drawers-supporting straps in addition to their trousers-supporting straps; nor do I claim each pair of trousers-supporting straps, and the next contiguous drawers-strap, connected with a single buckle to buckle upon a shoulder-strap, all as shown in the said patent.

I claim—

1. Suspenders composed of the dorsal and shoulder straps A A B, the two buckles to each of them, and the trousers and drawers buttoning straps of said buckles, all arranged and combined substantially as specified.

2. In combination with the subject-matter of the above, the auxiliary dorsal strap E, arranged as and for either of the purposes set forth.

AARON R. WARREN.

Witnesses:

R. H. EDDY,  
J. R. SNOW.