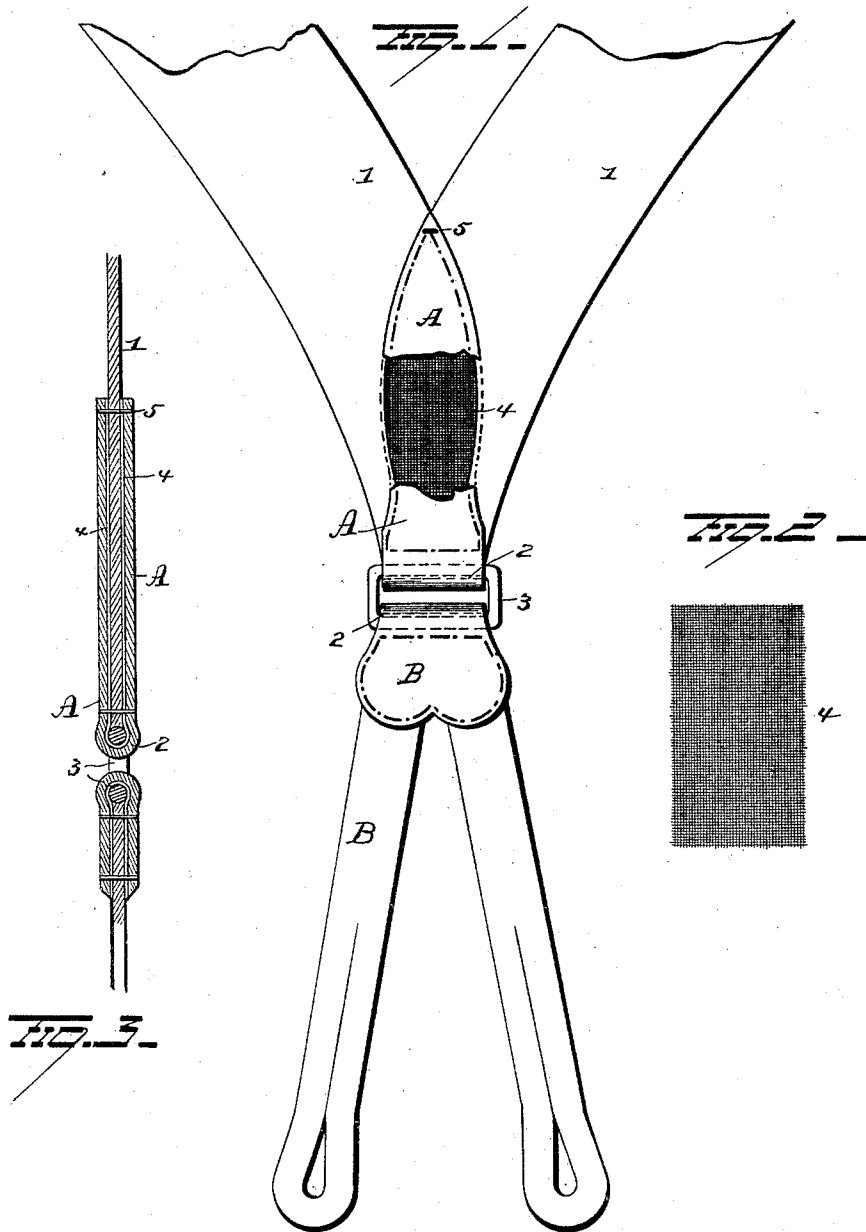


(No Model.)

C. R. HARRIS.
SUSPENDERS.

No. 467,410.

Patented Jan. 19, 1892.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES R. HARRIS, OF WILLIAMSPORT, PENNSYLVANIA.

SUSPENDERS.

SPECIFICATION forming part of Letters Patent No. 467,410, dated January 19, 1892.

Application filed April 17, 1891. Serial No. 389,296. (No model.)

To all whom it may concern:

Be it known that I, CHARLES R. HARRIS, of Williamsport, in the county of Lycoming and State of Pennsylvania, have invented certain
5 new and useful Improvements in Suspenders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the
10 same.

My invention relates to an improvement in suspenders, the object being to reinforce the parts where the strain and wear require extra strength, thereby increasing the durability
15 and efficiency of the device.

With this end in view my invention consists in a reinforcing-layer of thin metal, preferably thin sheet metal, woven wire, or
20 wire-cloth, employed as a lining for the back and heart of suspenders or adapted to be interposed between layers of leather or similar material forming these connecting-straps.

It further consists in a back and heart provided with a metallic lining, in combination
25 with a ring for connecting these parts.

In the accompanying drawings, Figure 1 is a view of a portion of suspenders, showing a layer of one of the connecting-straps ripped partly from the shoulder-straps to show the
30 position of the metal lining. Fig. 2 is a detached view of a piece of wire-cloth, and Fig. 3 is a longitudinal sectional view.

A represents the ordinary back of suspenders, it being preferably made of leather folded over upon itself to receive the meeting
35 ends of the shoulder-straps 1 1, and also to form a loop 2, in which to receive the connecting-ring 3. A lining 4 of metal is cut about the same shape as this connecting-
40 strap, but preferably a trifle smaller, so that it will be completely concealed by the strap when folded. This lining may be of very thin metal, of woven wire, or of wire-cloth, as woven wire and thread, as shown, and when
45 applied it is placed on the side of the strap which is to be inside, and it is then folded inside. The strap, with its lining, is then stitched in the accustomed manner around its edges or otherwise, as preferred, with

thread or wire, as the case may be, or the
50 fastening may be effected in any other approved way, and, in addition to this, a small staple 5 may be inserted at the end of the strap in such manner as to fasten the parts
55 securely together at this point, thus preventing the shoulder-straps from being accidentally pulled apart and disconnected at this point. Incidentally this metallic lining gives
60 strength throughout the length of the connecting-strap, but in addition to this and primarily it takes the wear and strain from the strap and forms a lasting bearing for the connecting-ring. In this resides the essential
65 feature of my invention. In the stoutest suspenders made heretofore the greatest weakness has been at this point, on account of its being a center of the strain and at the same
70 time comparatively restricted in size, and consequently long before the other parts have worn out the suspenders have broken here, and efforts to avoid this have been more or less
futile. By my present invention this point is rendered the strongest and least liable to
75 give out. The heart B, which joins the trousers-straps, is similarly lined, and other parts in which the connecting-rings are held may also be lined in this same manner and
stitched with thread or wire to the part interposed between the folds.

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

1. In suspenders, the combination, with shoulder-straps and button-straps, of a back and heart folded around the ends of the
85 shoulder and button straps, respectively, a connecting ring or loop, and a thin metal lining interposed between the ring or loop and the back and heart and held in place by the
90 stitches which pass through the several parts, said lining adapted to sustain the strain brought upon the suspenders at this point and forming bearings for the ring or loop, substantially as set forth.

2. In suspenders, the combination, with
95 shoulder-straps and button-straps, of a thin metal or woven-wire lining joining the converging ends of these straps and back and

heart, forming a facing over the lining, the
lining adapted to sustain the strain brought
upon the suspenders at this point, and the
several parts, including the straps, lining, and
5 facing, all held together by stitches passing
through them from one side of the suspenders
to the other, substantially as set forth.

In testimony whereof I have signed this
specification in the presence of two subscrib-
ing witnesses.

CHARLES R. HARRIS.

Witnesses:

V. E. HODGES,
G. F. DOWNING.