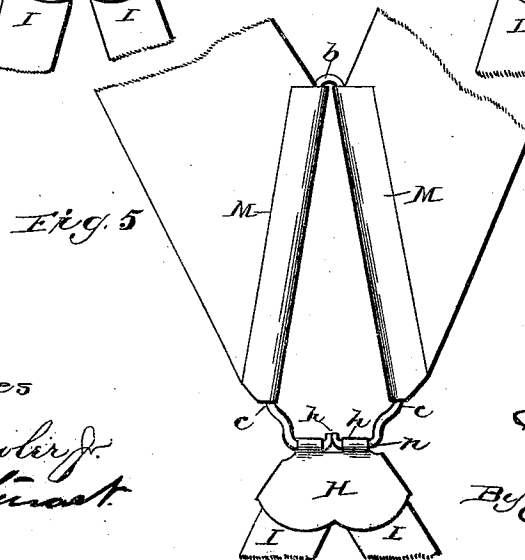
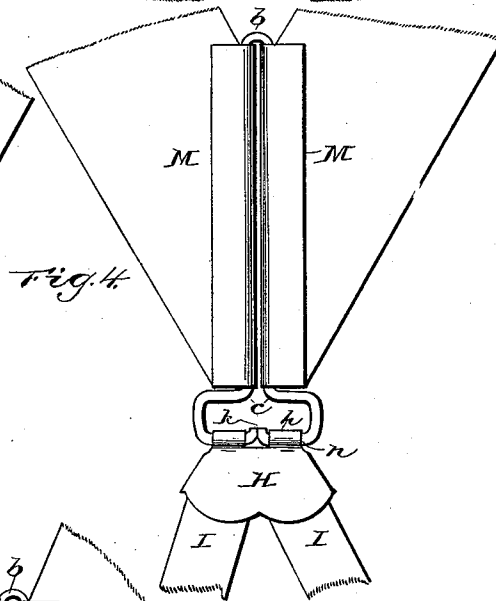
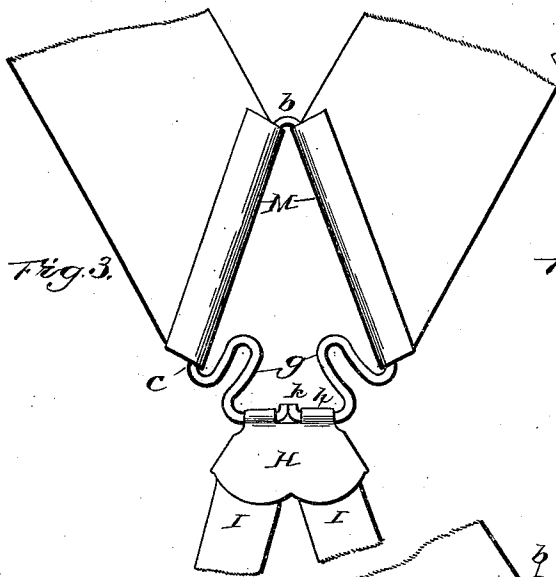
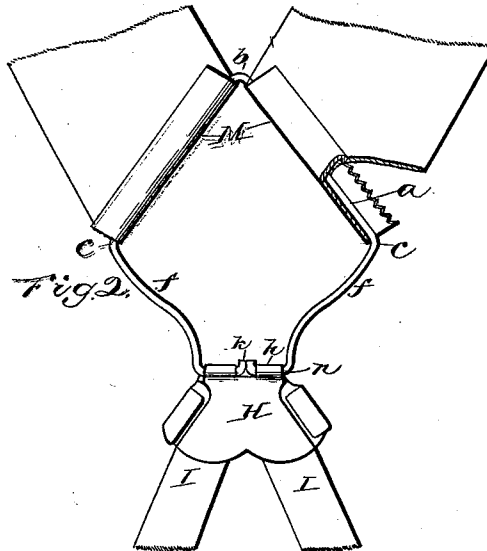
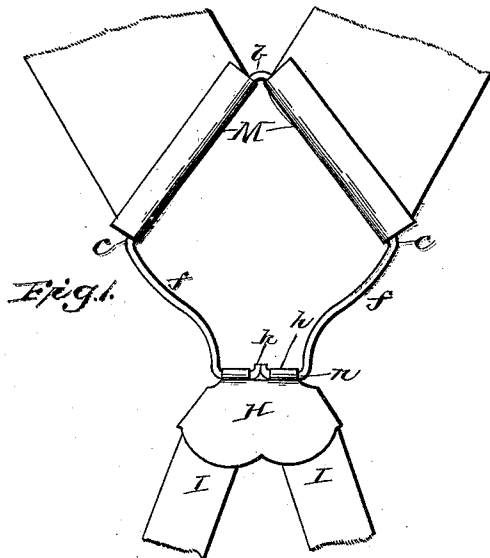


(No Model.)

G. E. ADAMS.
SUSPENDERS.

No. 521,071.

Patented June 5, 1894.



Witnesses

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GEORGE E. ADAMS, OF NEW BRITAIN, CONNECTICUT.

SUSPENDERS.

SPECIFICATION forming part of Letters Patent No. 521,071, dated June 5, 1894.

Application filed October 9, 1893. Serial No. 487,630. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. ADAMS, of New Britain, in the county of Hartford and State of Connecticut, 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 same, reference being had to the accompanying
10 drawings, forming a part of this specification, and to the letters of reference marked thereon.

This invention has for its object, particularly, to provide an improved union for the rear ends of the straps and rear suspender
15 ends, which shall be cheap, strong, flexible, perfectly ventilated, simple in construction, and not liable to break or to wear the web at all, in use, thereby greatly lengthening the life of the articles, as well as making them
20 more comfortable to the wearer.

Referring to the accompanying drawings: Figures 1 and 2 are front and rear elevations of the preferred form of device, the shoulder
25 straps and some portions of the metal, being broken away. Figs. 3, 4, and 5 are elevations showing different shapes of wire frame.

Similar letters of reference indicate similar parts in all the figures.

In carrying out this invention practically, a wire frame is provided having two substantially straight relatively long bearing surfaces as at *a*, united at the top and preferably formed by bending the wire at the center point *b*, and extending the straight portions down and outwardly, the degree of divergence being optional, however, and may
30 be anything from the substantially parallel lines of Fig. 4 to the extremely diverging lines of Figs. 1 and 2. At the lower ends of the straight bearing portions *a*, shoulders *c* are formed, preferably, by bending the ends of the wire inward, said ends being then
35 curved in any appropriate and desired manner, for instance, as shown in Figs. 1 and 2 where simple reverse curved portions *f* are formed, or as shown in Fig. 3 where gooseneck curves *g* are formed to give a greater degree of elasticity than would otherwise be secured. As the wires approach, they are again
40 straightened and formed into straight horizontal bearing portions *n*, for the reception of the central cylindrical portion *h*, of the clasp *H*, connected to the upper part of the

suspender ends *I* in the usual manner. At the center of the cylindrical portion *h* of the clasp *H*, a portion is cut out and the ends of
55 the wire frame are given an upward bend at *k*, in this cut out portion, thus forming a cheap and effective connection for the ends of the wire frame. The long substantially straight bearing portions *a* are intended for the reception of sheet metal clasps *M*, one on each side, and each adapted to be formally attached to one of the shoulder straps.

I prefer to employ simple sheet metal clasps, bent along their longitudinal centers
65 around the wire, and having toothed edges, in between which the ends of the straps are clasped and held as shown clearly in Fig. 2.

In practice, the wire frame may be bent up into shape, and then the clasps, all of which
70 are bent at the center to form bearings, are slipped on, and fastened to the web in the usual manner.

When constructed as described, it will be seen that there are no heavy metal parts to
75 make the device cumbersome or hot and uncomfortable, but on the contrary the ventilation of the device is perfect and the movements of the wearer are compensated for by the hinging of the clasps on the wire frame
80 both at the bottom and at each side. No part of the web or fabric is exposed to wear from the movements of the parts of the suspenders upon each other, and hence the life of the suspenders is greatly lengthened.

Having thus described my invention, what I claim as new is—

In suspenders, the combination with the shoulder straps and suspender ends, of the union between the same formed by the wire
90 bent to form the long straight bearings at the sides, the ends of the wire being bent horizontally toward each other and upset at the bottom, the long sheet metal clasps passing around the side bearings and embracing the
95 shoulder straps, and the clip passing around the ends of the wire to secure them together and embracing the suspender ends; substantially as described.

GEORGE E. ADAMS.

Witnesses:

ALEX. S. STEUART,
THOMAS DURANT.