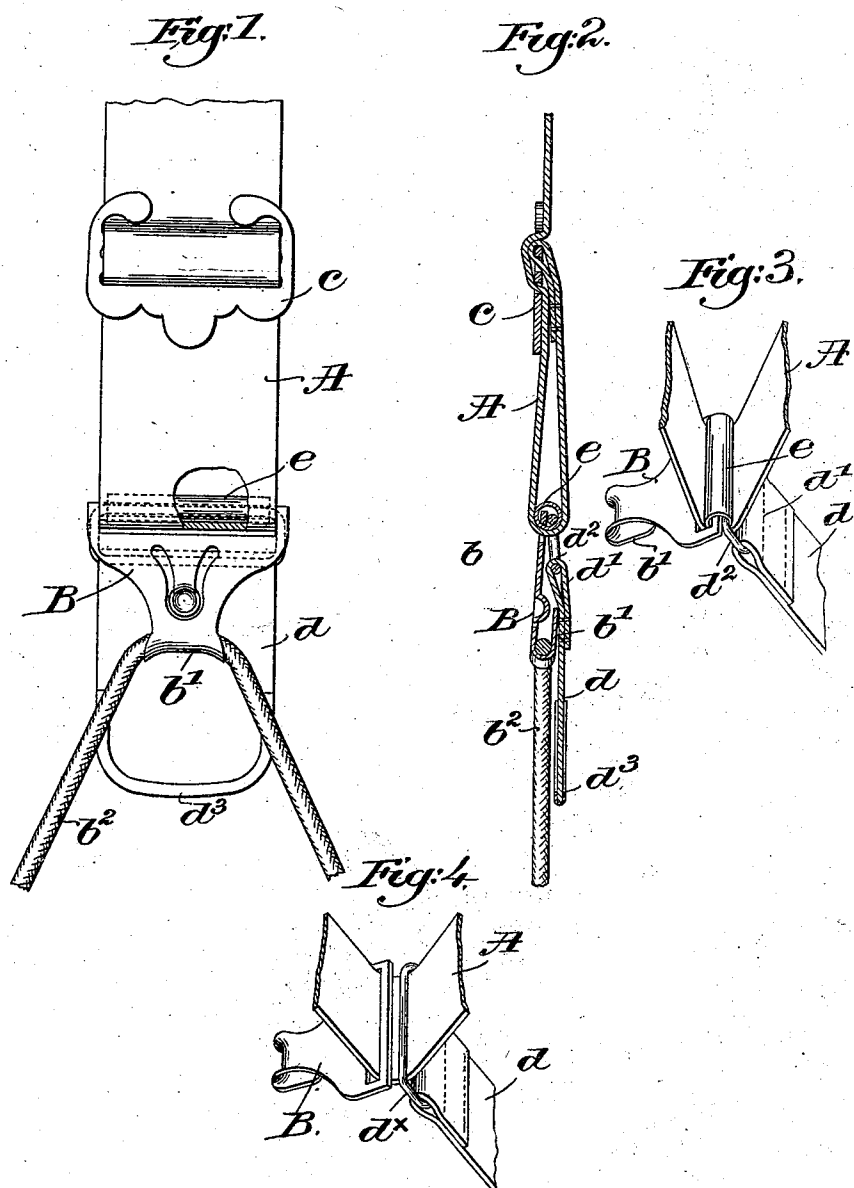


(No Model.)

A. M. ZIEGLER.
SUSPENDERS.

No. 551,916.

Patented Dec. 24, 1895.



Witnesses:

W. H. Harmon

Thomas Drummond

Inventor:

Alfred M. Ziegler

by Crosby & Gregory, attys.

UNITED STATES PATENT OFFICE.

ALFRED M. ZIEGLER, OF BOSTON, MASSACHUSETTS.

SUSPENDERS.

SPECIFICATION forming part of Letters Patent No. 551,916, dated December 24, 1895.

Application filed November 26, 1894. Serial No. 529,976. (No specimens.)

To all whom it may concern:

Be it known that I, ALFRED M. ZIEGLER, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Suspenders, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to suspenders of the class wherein the shoulder webs or straps are passed through openings or slots in the cast-offs or connections to which the button cords or straps are joined, said straps being looped back on themselves, adjustment being effected by lengthening or shortening the loops. In suspenders of this class, as in most classes, the cast-offs or connections for the button cords or straps are provided with hooks to receive the said cords or straps or loops thereon, and it has heretofore been the usual custom to place these hooks at the outer sides of the cast-offs or the plates forming the bodies of the same, leaving the insides smooth to prevent injury to the underclothing of the wearer. The hook at the outside of the buckle or cast-off, however, tends to tear the lining of the vest, yet it is impracticable to apply any covering or tab at the outside of a buckle, because such an arrangement would render the buckle or cast-off inaccessible for manipulation. Because of this, the hooks or other projecting parts of the buckles or cast-offs have, so far as I am aware, universally been left exposed and free to wear or tear the vest-linings. I have therefore sought to devise suspenders wherein not only the clothing beneath the buckles or cast-offs but also the vest-linings should be protected from wear by the exposed or projecting parts of the buckles or cast-offs. One side of the buckle or cast-off can always be made smooth and free from projections, and this has usually been the back side, but in accordance with my present invention I reverse the buckle and place the smooth hitherto back side at the front, so that the hooks or other projecting parts of the buckles shall be at the inside next the underclothing of the wearer, and to protect said underclothing from wear and tear by reason of these projecting parts of the buckles I provide a depending tab or protector which extends between the buckle or cast-off and the

underclothing to shield the latter. By this construction the clothing at both sides the buckle or cast-off is protected, yet the buckle or cast-off stands in front of the depending tab or protector, and is therefore easily accessible for manipulation, as hitherto.

In the drawings, Figure 1 in face view shows a sufficient portion of a pair of suspenders to enable my invention to be understood; Fig. 2, a vertical section of the same on the dotted line *xx*; Fig. 3, a perspective detail illustrating the preferred manner of attaching the protecting-pieces, and Fig. 4 a perspective view illustrating a modification to be described.

Referring to the drawings, A represents one of the ends of the shoulder webs or straps of a pair of suspenders of common construction, said end being passed through a slot or opening *b* in a usual connection shown as one form of cast-off B, looped back and again adjustably attached to or upon itself by means of a suitable buckle or catch *c*.

The cast-off B, as herein shown, has a smooth outer face, meaning by "smooth" free from projections, and it has an inturned hook *b'*, in which is laid the button cord or strap *b*².

To protect the underclothing of the wearer from the action of the projecting hook *b'* I have provided each cast-off with a protecting-piece *d* or "protector," as I shall hereinafter denominate it, the same, as shown, being attached in suitable manner, as by a loop *d'*, to a suitable link *d*², herein shown as passed through a ferrule *e*, which also incloses the top bar of the cast-off, the shoulder strap or web being looped about the ferrule, as shown in Fig. 2. This protector is preferably of material similar in kind and color to that of the shoulder-strap, and may be bound or trimmed in suitable manner, as indicated at *d*³, to present an attractive appearance.

It will be seen that in accordance with my invention the usual cast-off is turned back side out, so that its smooth hitherto back side now presents a smooth front side, which cannot injure the linings of the vest. By thus reversing the position of the cast-off I am enabled to cover or conceal the inturned hook by the protector *d* without rendering the cast-off inaccessible, thus protecting the clothing at both sides the cast-off.

In Figs. 1 and 3 the protector is attached

to the cast-off, but in Fig. 4 I have shown the protector as attached to a link d^x passed through and hung from the shoulder-strap loop.

5 My invention is not limited in its application to any particular construction of shoulder or button straps or their attachments, the only essential feature being that the smooth side of the buckle of the hook or cast-off shall be
10 turned out, in order that the projecting parts at the opposite side may be protected or shielded by a tab or protector, which shall not cover or conceal the hook or cast-off and render the same inaccessible for use.

15 I claim—

1. The combination, with a suspender shoulder strap having its end looped, means for varying said loop for adjustment, and a button cord or strap, of a connection or cast-off
20 connected to said loop, having a smooth outer surface and having an intumed projection open at its free end to which the button strap or loop may be removably attached, and a protector hung at the back of the said connection
25 or cast-off and to depend over said projection thereupon, whereby the projections at the inner side of the connection or cast-off are protected to save the wearer's under-clothing without concealing and rendering inaccessi-

ble the said connection or cast-off, and also 30 an outer surface is provided without projections thereby to save the wearer's outer clothing, substantially as described.

2. The combination with a suspender shoulder strap, means for varying its adjustment, 35 and a button cord or strap, of a connection or cast-off connected to said strap and having a smooth outer surface, said cast-off being provided with an inwardly and upwardly turned projection open at its free end and partially 40 closed against the adjacent portion of the cast-off, to which the button-strap may be removably attached, and a protector hung at the back of said connection or cast-off to depend over and below said projection thereupon, 45 whereby a smooth front and rear surface are provided to protect the wearer's clothing without interfering with the ready removal of said strap from said projection, substantially as described. 50

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses:

ALFRED M. ZIEGLER.

Witnesses:

FREDERICK L. EMERY,
EDWARD F. ALLEN.