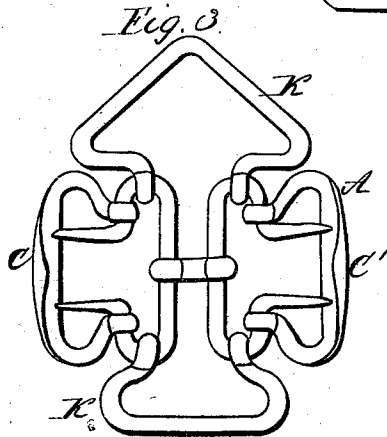
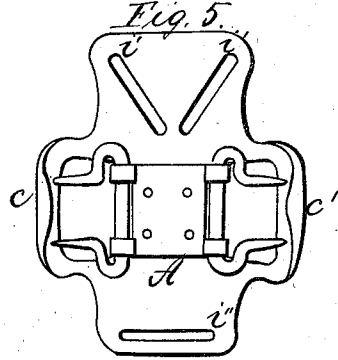
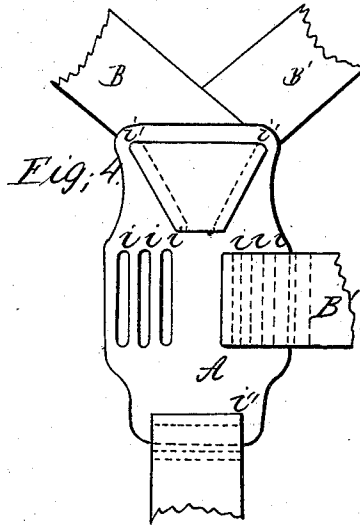
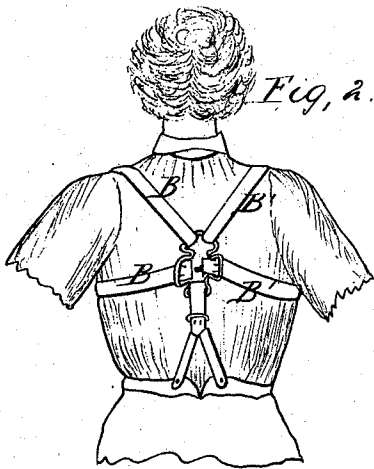


H. B. Leach.

Bruce Suspender.

Nº 89,872.

Patented May 11, 1869.



Witnesses,

R. R. Moffatt

J. M. McPuckee

Inventor,

H. B. Leach

United States Patent Office.

H. B. LEACH, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO E. C. PENFIELD, OF THE SAME PLACE.

Letters Patent No. 89,872, dated May 11, 1869. Antedated Apr 27, 1869.

IMPROVED COMBINED SUSPENDER AND SHOULDER-BRACE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, H. B. LEACH, of Philadelphia, in the county of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Combined Suspender and Shoulder-Brace; and I do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 2 represents a pair of "suspenders and shoulder-braces," made with my improvement;

Figure 3 is a detached view, representing a modified construction of the same, when made from wire; and

Figures 4 and 5 represent modifications of the buckle-plate.

This invention consists in a novel buckle-plate, or frame, for arranging and combining the several straps composing the "shoulder-brace suspender," whereby the parts are rendered more perfectly adjustable, more desirable, and cheaper than are the present methods.

In the drawing, I show my invention applied to a suspender-brace, as also modifications of the same detached therefrom.

The buckle-plate is of peculiar formation, and yet very simple. It is made as represented in figs. 4 and 5, from a thin plate of metal, struck out by a die for that purpose.

The metallic plate A, fig. 4, has slits, or openings *i*, *i*, and *i*, which form a slide-buckle, for the purpose of receiving the straps, which are generally made of elastic webbing.

The slide-buckle, or openings *i* and *i*, are so situ-

ated that the shoulder-straps B and B', at their connection with the plate, form a right angle to each other, or nearly so, and are one piece.

At the sides of the plate A are buckles C and C', as seen in fig. 5, (or their equivalents, as shown in fig. 4, viz, the slits *i i i*), by means of which any desired position may be given to the shoulders, by shortening or lengthening out, at pleasure, the straps B and B'. Said straps form the shoulder-brace, as also the suspender, through the agency of the small straps *d* and *d'*, fig. 1.

Fig. 3 represents a modification of my invention, no metallic plate being used, but, instead of it, I employ pieces, or loops K K', constructed out of wire, and shaped substantially as shown, and attached to the buckles *c c'*, as represented.

The buckles themselves may be connected by a link, *l*. This gives great additional strength to the whole, to resist the pull of the straps upon the buckles. I prefer it thus made, as it presents less surface of metal.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The combined shoulder-brace and suspender, having a metallic buckle-plate, A, as represented in figs. 4 and 5 of the accompanying drawings, constructed substantially as and for the purpose herein described.

2. The combination of the bent wire loops *k k'* with the buckles *c c'*, substantially as shown and described.

H. B. LEACH.

Witnesses:

HENRY CORDS,
J. G. TORBERT.