

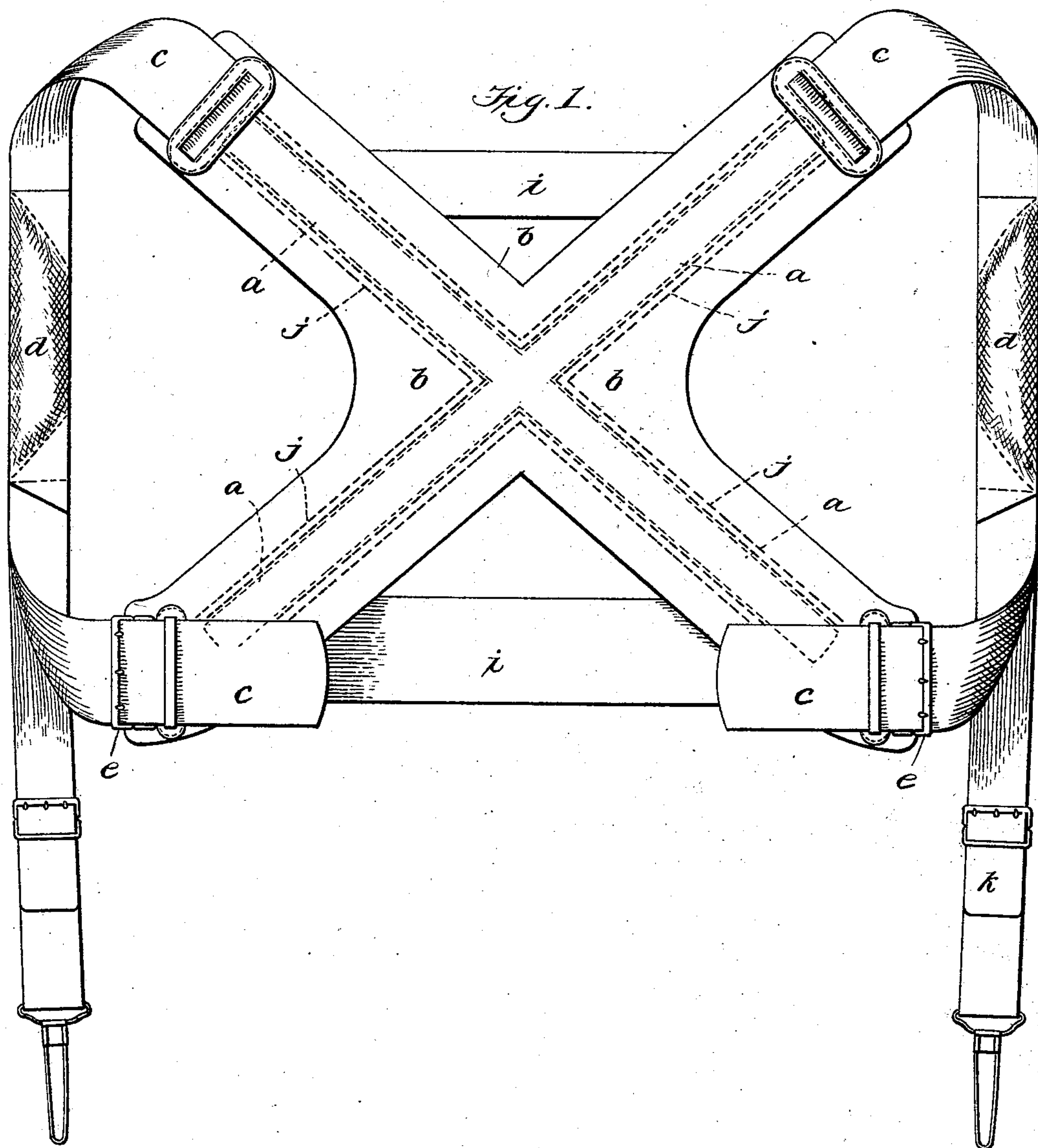
(No Model.)

2 Sheets—Sheet 1.

W. M. GAMBLE.
SHOULDER BRACE.

No. 531,372.

Patented Dec. 25, 1894.



Witnesses
Edwin L. Bradford
S. M. Gorsett

Inventor
W. M. Gamble
By Chester A. Weed
Asso. Attorney

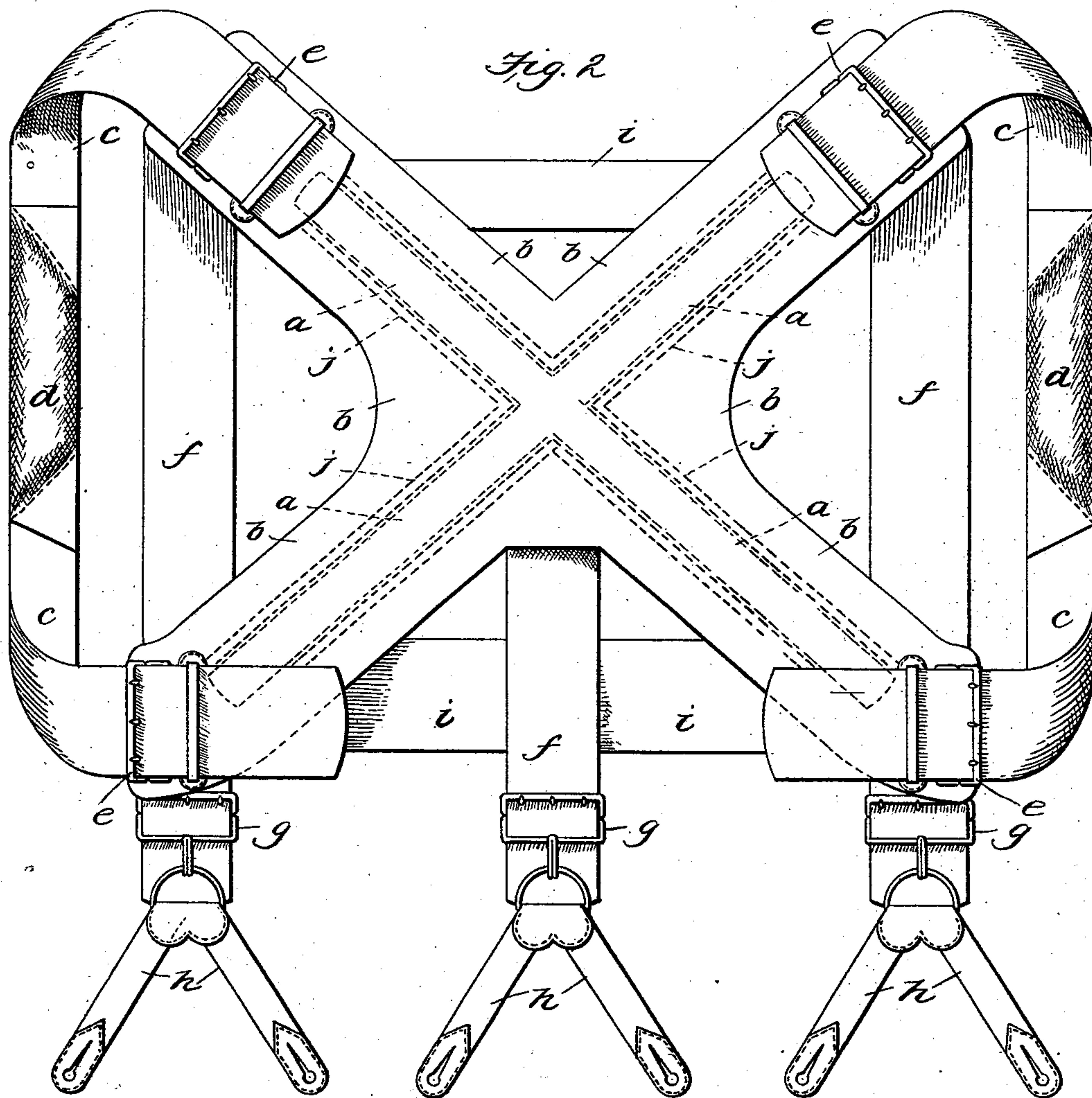
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UNITED STATES PATENT OFFICE.

WILL M. GAMBLE, OF NEW WHATCOM, WASHINGTON.

SHOULDER-BRACE.

SPECIFICATION forming part of Letters Patent No. 531,372, dated December 25, 1894.

Application filed December 3, 1891. Serial No. 414,196. (No model.)

To all whom it may concern:

Be it known that I, WILL M. GAMBLE, a citizen of the United States of America, residing at New Whatcom, county of Whatcom, State of Washington, have invented certain new and useful Improvements in Shoulder-Braces and Suspenders, of which the following is a specification, reference being had to the accompanying drawings, which form a part thereof.

This invention relates to improvements in shoulder braces and suspenders for the human body, comprising elastic straps and metallic or other suitable stiffeners or springs running in pockets and acting in conjunction with each other to keep the shoulders in an erect position.

The object of my invention is to provide a shoulder brace adapted to be easily adjusted on the body and worn with comfort, and when so adjusted to keep the shoulders in an erect position by increasing the spring pressure on the shoulder blades and thus prevent what is known as "round shoulders," and also to provide means to attach the clothes of the wearer to said shoulder brace.

Figure 1 of the accompanying drawings represents a rear elevation of my improved shoulder brace and suspenders, having attached thereto side supports or suspenders for the underclothing. Fig. 2, also represents a rear elevation of the same, showing the suspenders attached thereto.

Similar letters of reference indicate corresponding parts in the different figures.

The invention comprises two stiffeners or springs, (preferably of metal) *a a*, diagonally crossing each other at or near the centers thereof, and at such an angle that the upper ends thereof reach about midway between the back of the neck and the back points of the shoulders. These springs may be either in separate pieces or in one piece of any desired thickness, width and length, but preferably about one thirty-second of an inch thick, half an inch wide, and about ten inches long for a thirty-six-inch bust, and in the above proportions for other sizes. The springs may also be either straight or curved to fit the outlines of the body, but preferably curved. The stiffeners or springs *a a*, are completely

inclosed in the pockets or cover *b* of cloth or other suitable material, comprising a central portion where the springs or stiffeners cross each other, and pockets projecting from the central portion of said cover into which the ends of the springs or stiffeners project, said springs or stiffeners being held therein by suitable stitching or other fastening, as shown in the drawings by the dotted lines *j*. To the upper and lower parts of the pockets or cover *b* are attached by stitching or other suitable means an elastic or other suitable strap *i*, in order that the ends of the springs may be drawn back into position if strained outwardly by movements of the body, and also to add to the force transmitted by the springs *a* through the elastic straps *c* to the front part of the shoulders. These elastic straps may be dispensed with if desired. To the ends of the pockets or cover *b* slightly beyond the ends of the springs *a* are attached by means of buckles *e*, or other suitable means, adjustable straps *c* of elastic or other material. The buckles at the upper portion of the shoulder brace may be omitted and the straps attached directly to the cover by stitching or other means, thus making the straps adjustable at the lower portions only. These straps pass over the shoulders and under the arms of the wearer, for the purpose of holding the shoulder brace in position. Pads *d* of leather or other suitable material are attached to the adjustable straps *c* at suitable places thereon, so that they will bear against the front part of the shoulders and prevent said straps *c* from cutting.

The straps *c* may consist entirely of a padded portion attached to the ends of the cover *b*, or they may have elastic ends to said padded portion, or the pads may be dispensed with entirely if desired and the entire strap made elastic.

At suitable places on the cover or straps *c*, preferably on the strap *c* near the lower ends thereof, are attached, by any convenient means, clothing supports or suspenders *k* provided with suitable fastening devices to fasten to and support the underclothing of the wearer, if so desired. I prefer, however, for men's braces, to attach by stitching or other means, to the cover or pockets *b* or the straps

c at any suitable place thereon, straps or suspenders *f* of elastic or other suitable material. These straps or suspenders I provide with buckles *g* and double ends *h* of elastic
5 or other material.

The back strap or suspender *f* is attached to the cover *b* just below the intersection of the springs, and tends to hold said springs *a* close to the body of the wearer, and thus
10 adds to the strain upon the front part of the shoulders through the adjustable strap *c*.

I am aware that prior to my invention, combined shoulder braces and suspenders have been made and do not therefore claim such
15 a combination broadly.

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

1. A shoulder brace composed of a central
20 portion, pockets projecting therefrom, stiffeners crossing each other in said central portion, the ends of said stiffeners projecting into said pockets, and adjustable shoulder straps extending over the shoulders and connecting the ends of the upper and lower pockets for holding the brace in position on the
25 body of the wearer, substantially as described.

2. A shoulder brace composed of a central

portion, four pockets extending therefrom 30 in diagonally opposite directions, stiffeners crossing each other in said central portion, the ends of said stiffeners projecting into said pockets, adjustable shoulder straps extending over the shoulders and connecting 35 the ends of the upper and lower pockets for holding the brace in position on the body of the wearer, and adjustable clothing supports attached to said shoulder straps near the lower ends thereof, substantially as described. 40

3. A shoulder brace composed of a central portion, four pockets projecting therefrom, stiffeners crossing each other in said central portion, the ends of said stiffeners projecting into said pockets, adjustable shoulder straps 45 provided with fastening devices extending over the shoulders and connecting the ends of the upper and lower pockets for holding the brace in position on the body of the wearer, pads on said straps, an elastic strap connecting the ends of said projecting pockets and means attached to said brace for supporting the clothing of the wearer, substantially as described. 50

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Witnesses:

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