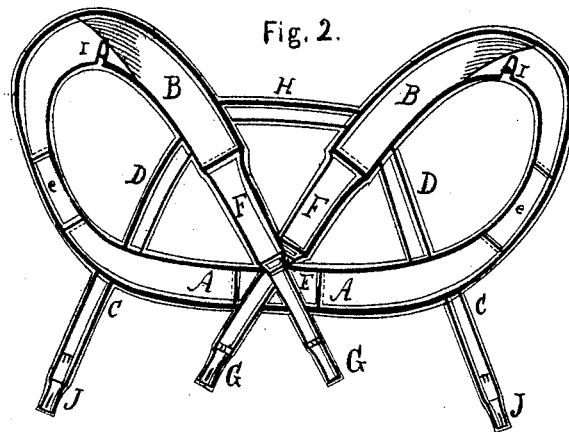
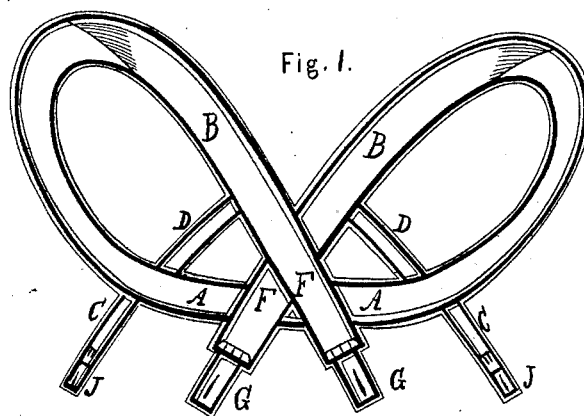


H.F. Briggs.
Shoulder Brace.

N^o 6364.

Patented April 17. 1849.



UNITED STATES PATENT OFFICE.

HENRY F. BRIGGS, OF POUGHKEEPSIE, NEW YORK.

SHOULDER-BRACE.

Specification of Letters Patent No. 6,364, dated April 17, 1849.

To all whom it may concern:

Be it known that I, HENRY F. BRIGGS, of Poughkeepsie, in the county of Dutchess and State of New York, have made certain Improvements in the Mode of Constructing a Suspender Combining a Spinal and Shoulder Brace; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists in having a strap wholly or in part elastic, to pass horizontally across the back, near the lower angle of each scapula which terminates at either end under the arms by being connected with the shoulder straps B B (see drawing No. 2,) by means of an elastic band *c.* 2d. By having another elastic strap C C, attached on either side to the lower edge of said back strap A A, anterior to the scapula; the free extremity of each having a loop J by which it is attached to, and supports the clothing in front.

The shoulder and back straps are secured together by means of short bands of elastic D and H, each shoulder strap being terminated posteriorly by loops G G which by being attached to the clothing support it from behind. By this arrangement a double action is given to the brace viz, C C holding A A, firmly against the back below the scapula which supports the back either sitting or standing and F F at the same time pulling from the point of each shoulder to the opposite hip, still pressing A A more firmly to the back, the draft of F F being backward and downward the combined effect is to increase the antero-posterior and lateral diameter of the chest; and to bring the head and neck in such a position as to correspond, in their axes, with the line of direction, of the spinal column. Its physiological effects, are to give greater freedom of action to the heart and lungs, and increased tone to all the respiratory and dorsal muscles.

The weight required to render the brace effective in accomplishing these important results, is obtained from the pantaloons of the male and skirts of the female; the points of attachment being only four, one a little forward and one a little back of the hip on either side, by which the clothes are evenly sustained, and given the most easy and graceful fit, and the brace made convenient for the wearer as an article of dress.

The action of the brace is in harmony with the muscles of the body, for whatever be the

inclination of the body or motions of the shoulders, it tends to assist the muscles in restoring an upright and natural position. The point of greatest pressure is over and about the acromion process which pressure being backward, the action of the trapezins and other muscles is thus aided and the respiratory muscles are better able to raise the ribs and assist difficult respiration. It aids the latissimus dorsi and trapezins muscles in restoring the body to an erect position when it inclines to either side, and affords assistance to the splenius, complexus, dorsal, and other muscles of the back in retaining the vertebral column in a natural erect position.

I have contemplated the use of these principles separately or combined as will best accomplish the object of those who use the brace, see drawings No. 1, No. 2.

No. 1 is designed mainly as a suspender and skirt supporter for general use. Its tendency is however to correct and prevent stooping habits, promote an upright position and graceful movements of the body and limbs. It is recommended for its ease, convenience, simplicity, and durability.

No. 2, represents a suspender combining a spinal and shoulder brace complete in all its parts.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

See drawing No. 1, A B F are one piece of elastic webbing, or other suitable material which passes across the back, at or near the lower angles of the scapulæ; thence under the arms over the shoulders, and near the ends cross on the back, and are attached to the clothing like F F No. 2. For further description see No. 2.

No. 2. Back strap A A and shoulder straps B B I construct of satin jean, or other suitable material. From the outer edge of that part of the shoulder straps B B which comes on the top or point of the shoulders, I cut out a gore nearly half across said straps B B—bring the outer edges of said straps together, and insert a piece of elastic I I to give freedom of action to the shoulders, and upward motions of the arms and prevent disagreeable tightness under the arms and also to cause said caps the better to fit the shoulders and retain their place.

E e e are pieces of elastic webbing or other suitable material that will give the required elasticity making a part of back strap A, A,

and thus arranged in order to increase the ease and power of the brace.

F F are pieces of elastic webbing or other suitable material that will give the required elasticity; they cross each other and are attached at one end to B B, and at the other, to the clothing a little back of the hips by means of loops, G G.

C C are elastic straps fastened to A A so that the principal draft shall be on the back strap A A. In connection with e e and I they serve to render the brace easy under the arms. D D are slightly elastic and connect A and B so that H having an active spring may act upon the shoulders, to draw them back and expand the chest. C J and D serve to keep the shoulder caps at I on the point of the shoulder and regulate the action of H in most cases without a buckle.

20 The brace for ladies differs from that for gentlemen as follows, viz: Instead of buttonholes J J G G, buttons are used, to which

the skirts are attached by means of loops. The power of the brace can be increased or diminished at pleasure by means of the 25 buckles, which also regulate the fit of the clothing.

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

The back strap A, A, attached to the 30 shoulder straps B, B, so as to form a continuous band to the posterior loops G, G, to which the dress of the wearer is suspended, behind, and the connection thereto, of the posterior piece H, of the lateral pieces D, D, 35 and of the anterior pieces C, C, which terminate at the loops J, J, the specific action of the whole being that of a suspender combining a spinal and shoulder brace complete in all its parts, as herein set forth.

HENRY F. BRIGGS.

Witnesses:

L. M. NORTHROP,
JOHN D. HOGAN.