

J. U. ADAMS.

BODY BRACE.

APPLICATION FILED MAY 20, 1909.

Patented Jan. 4, 1910.

945,359.

Fig. 1.

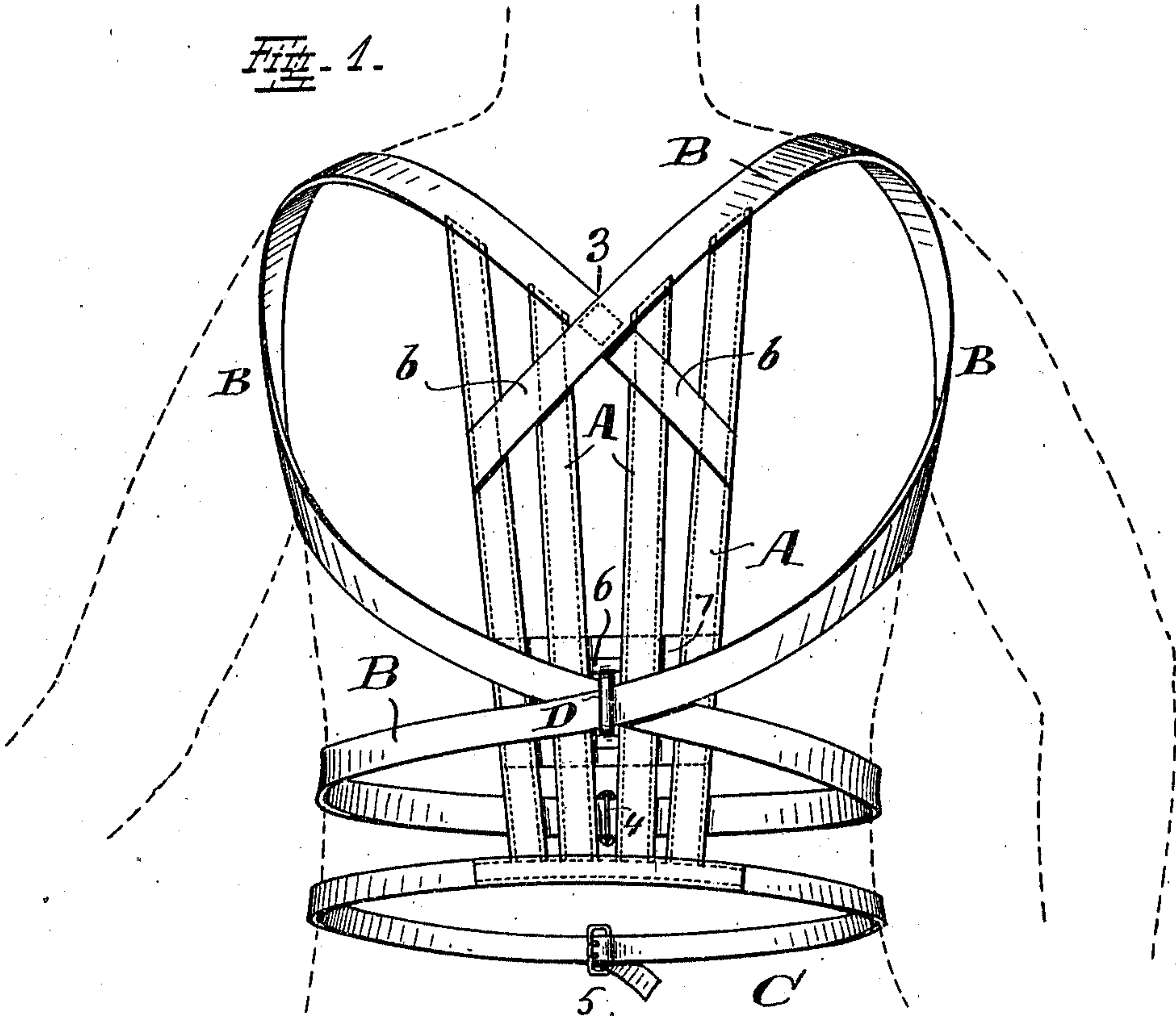
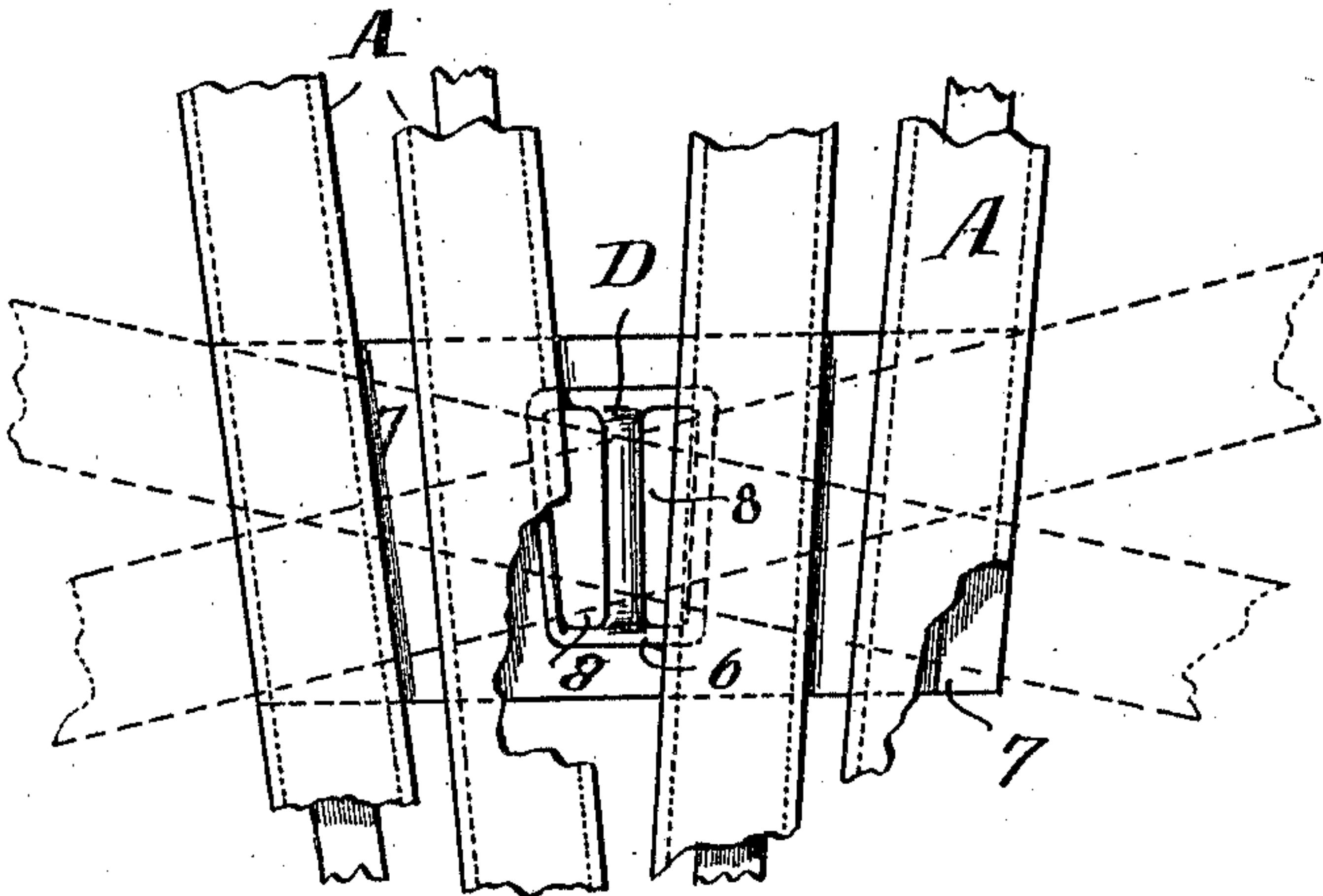


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOEL U. ADAMS, OF CINCINNATI, OHIO.

BODY-BRACE.

945,359.

Specification of Letters Patent.

Patented Jan. 4, 1910.

Application filed May 20, 1909. Serial No. 497,275.

To all whom it may concern:

Be it known that I, JOEL U. ADAMS, a citizen of the United States, and residing at Cincinnati, Hamilton county, State of Ohio, have invented certain new and useful Improvements in Body-Braces; and I do declare the following to be a clear, full, and exact description thereof, attention being called to the accompanying drawing, with the reference characters marked thereon, which forms also a part of this specification.

This invention relates to an appliance to be used for orthopedical and therapeutical purposes, to cure or improve certain defects in shape or carriage of the upper part of the body, and to induce also young persons, and particularly children, to assume and maintain the upper part of the body in proper position.

The invention consists of an appliance constructed and made up as hereinafter described and pointed out in the claims and as illustrated in the accompanying drawing, in which:—

Figure 1, shows the appliance as it appears when in position on a person, part of a human figure being indicated in dotted outlines. Fig. 2, shows a portion of the rear-part of the appliance enlarged.

The function of the appliance is to direct pressure against the thorax from the back and from the front. At the back, a number of stays A are used for the purpose which are made up in the customary way, consisting usually of fabric-incased elastic bands. At the front, straps B B, are used which serve also to hold the back-part of the appliance in position, they being secured to the upper end of the same. Their ends come together there at an angle as shown at 3, the ends of the stays being cut off slantingly. The upper end of the back-part receives thereby a V-shaped cut-out whereby the straps are held below the shoulders and prevented from crowding up on the neck. The straps are extended downwardly, beyond the point where they come together at 3, and continued each in the same direction after they have crossed each other, and across the back part to the edge thereof, as shown at b b, each of these extended parts being stitched to the stays whereby these latter are firmly held in position and prevented from spreading. These straps B B, from the point of their connection at 3, and attachment to the stays as described, extend forwardly over

the shoulders, down in front over the clavicle and back under the arm-pits to the rear where they come together in the center of the back. This latter position is fixed by a laterally open clip D through which these straps loosely pass so as to be slidable in opposite directions. From there they pass around the body and again to the front where their ends become accessible for convenient manipulation by the wearer, for the purpose of adjusting the appliance. One of these ends is provided with a suitable connecting fitting like a buckle 4 for instance, whereby, after the straps have been drawn tight to adjust the appliance to desired pressure, their ends are connected to each other. It will also be noted that no matter how tight these straps are drawn around the body, their tendency to slip up under the arm-pits is counteracted by clip D, which holds them down, thereby preventing cutting and binding which would interfere with free movement of the arms. Clip D consists substantially of a vertically arranged bar carried above a base-plate 6, of which it forms a part, with a space between the two through which straps B B, crossed thereat, pass loosely in opposite directions. Base-plate 6 is attached in a fixed position with reference to the stay, it being held between them and a gusset or patch 7 of fabric, attached so as to extend transversely across all the stays to each of which it is connected. Base-plate 6 has perforations which may be in form of slots 8 so that, when said base-plate is placed between the edges of the stays and patch 7, stitches may be passed through them and through said slots whereby the clip is held firmly in position as best shown in Fig. 2. Patch 7 serves also to hold the stays in proper position at the lower part of the appliance and keeps them properly spaced thereat. The stays, if desired, may be extended downwardly beyond this patch, in which case their free ends may be connected to each other by a binding which may be extended to reach around to the front in form of an abdominal strap C, which at one of its free ends is provided with a fastening fitting 5.

Having described my invention, I claim as new:

1. In a body-brace, the combination of a number of elastic back stays symmetrically spaced on both sides of the center of the appliance, straps connected to the upper ends

of these stays to hold them properly spaced thereat and adapted to pass from the rear forwardly, one over one shoulder and the other over the other shoulder, thence back under the arm-pits to the rear and in opposite directions, after having crossed each other at the back, to the front again, a fastening device to connect their free ends to each other and means to hold these stays properly spaced below their upper ends.

2. In a body-brace, the combination of a number of back-stays, a gusset transversely attached across them between their ends and on the side worn next to the body, a loop, a base-plate of which it forms a part and which is secured between said gusset and the stays where they overlie the gusset, straps loosely crossing each other slidably in the loop and secured to the upper ends of the stays holding them properly spaced thereat and a fastening-device to connect their free ends to each other after they have been passed over the shoulders and around the body.

3. In a body-brace, the combination of two straps permanently connected to cross each other, each extending forwardly over the shoulders and downwardly over the back where they terminate, back-stays supported by these straps in equal numbers on both sides of the point where they cross each other and of graduated length on each side, said straps being connected to the ends of these stays and also between their ends by having the ends of the stays on one side con-

nected to one strap above the point where it is crossed by the other strap, and between their ends by this latter strap, whereby the stays are held properly spaced, a fitting through which these straps loosely pass after crossing each other again and a fastening device whereby their free ends are secured to each other after having been passed around the body.

4. In a body-brace, the combination of two straps arranged to cross each other at two points, one below the other, each strap being extended at both of these points, means whereby they are permanently connected to each other at the upper point of their crossing, a loop through which they loosely pass at the lower point of their crossing, a fastening device whereby their free ends may be detachably secured to each other, after having been passed through this loop, stays secured to these straps and held spaced by them at the upper point of their crossing, the straps being connected to the ends of these stays above this point, while their free ends are attached to these stays between their ends, and means to hold these stays also spaced below these points of attachment.

In testimony whereof, I hereunto affix my signature in the presence of two witnesses.

JOEL U. ADAMS.

Witnesses:

C. SPENGEL,
T. LE BEAU.

It is hereby certified that in Letters Patent No. 945,359, granted January 4, 1910, upon the application of Joel U. Adams, of Cincinnati, Ohio, for an improvement in "Body-Braces," an error appears in the printed specification requiring correction, as follows: Page 1, line 86, the word "stay" should read *stays*; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 8th day of February, A. D., 1910.

[SEAL.]

E. B. MOORE,

Commissioner of Patents.