

(No Model.)

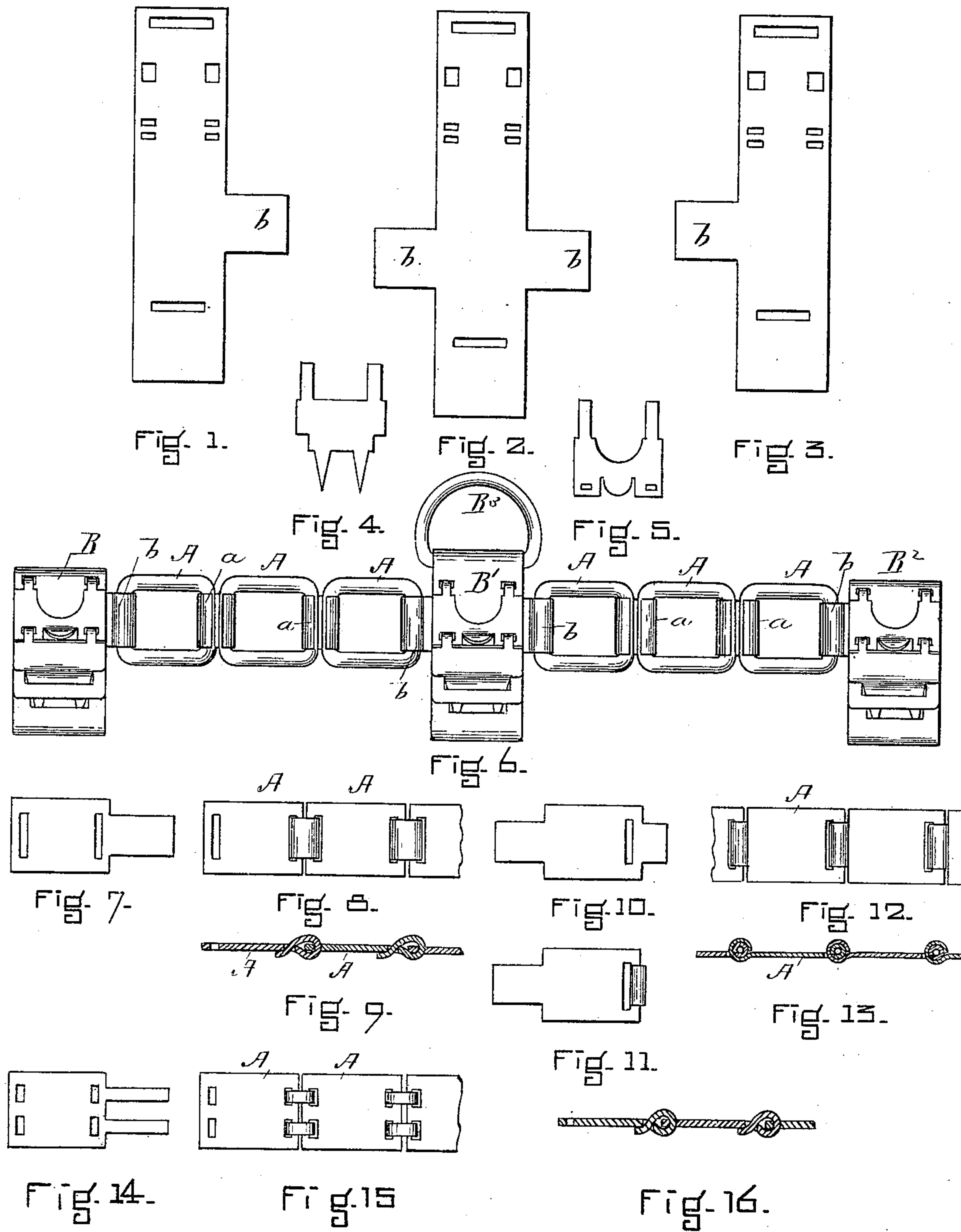
2 Sheets—Sheet 1.

T. O. POTTER.

SUSPENDERS.

No. 353,811.

Patented Dec. 7, 1886.



WITNESSES.

Fred. B. Dolan
J. M. Dolan

INVENTOR.

Thos. O. Potter
by his attys
Charles & Raymond

(No Model.)

2 Sheets—Sheet 2.

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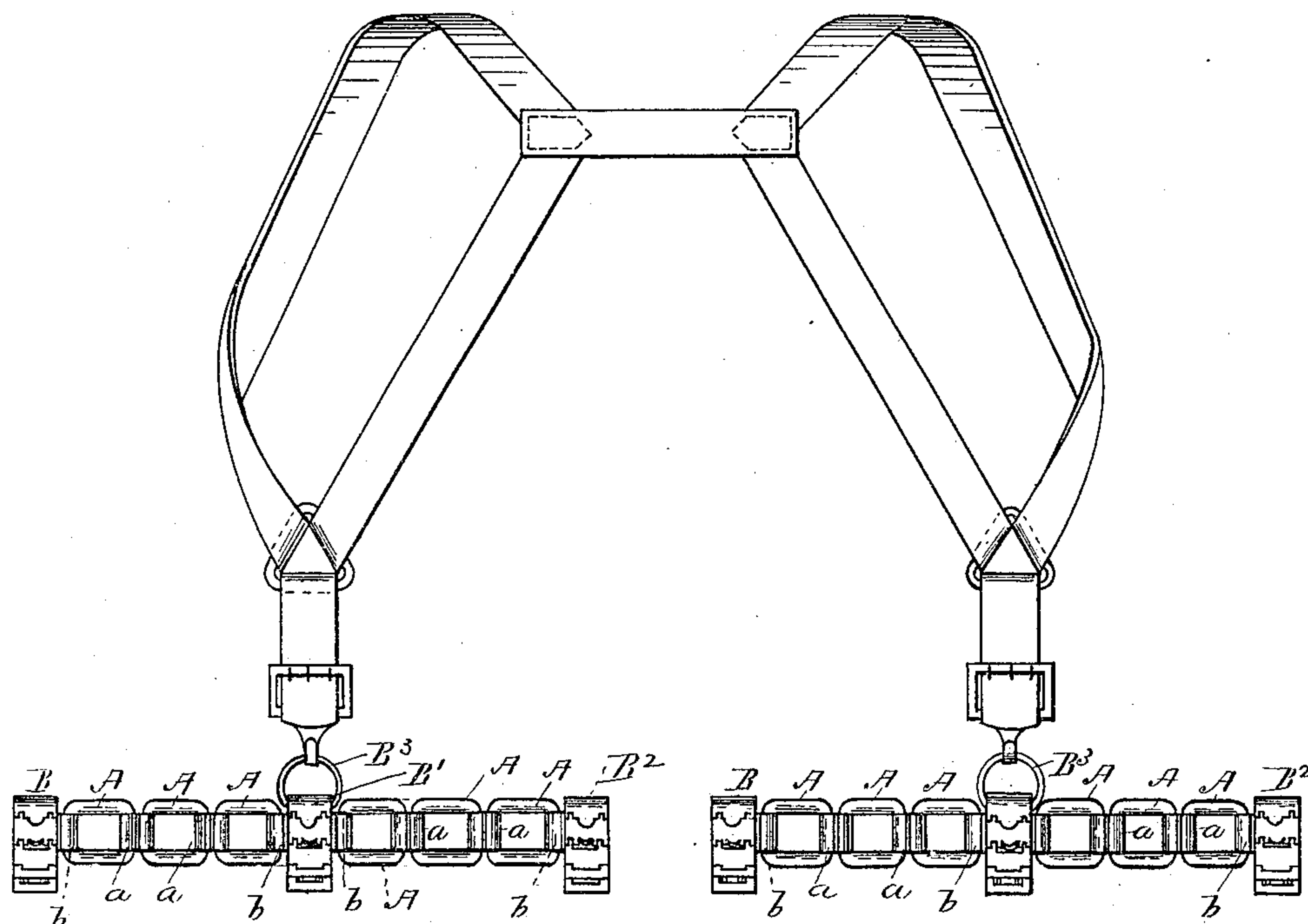


Fig. 17.

WITNESSES.

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UNITED STATES PATENT OFFICE.

THOMAS O. POTTER, OF BOSTON, MASSACHUSETTS.

SUSPENDERS.

SPECIFICATION forming part of Letters Patent No. 353,811, dated December 7, 1886.

Application filed June 28, 1886. Serial No. 206,383. (No model.)

To all whom it may concern:

Be it known that I, THOMAS O. POTTER, of Boston, in the county of Suffolk and State of Massachusetts, a citizen of the United States, have invented a new and useful Improvement in Suspenders, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

The invention is an improvement upon those described in my Patents Nos. 322,480 and 322,478, which show and describe suspenders having waistband-supporting rods or bars constructed to have a horizontal adjustment or movement to vary the degree or extent of their curve, and to cause them to readily conform to the curvature of the body of the wearer.

My present invention relates to the construction of a universal waistband-bar for the same duties as those of the patents referred to, but which may be made of different degrees of curvature, without sharp angles, and of a greater variety of lengths than where long links are used, and which is of cheap construction, and to the combination of this waistband-bar, flexible in a horizontal plane but rigid in a vertical plane, with its suspension ring and with its clasps. It is made of comparatively short but deep links attached to each other, and carrying or supporting the waistband attaching devices, and carried by the ring or device by which the suspender ends or hooks are attached thereto. The links may be made of wire, or they may be made of flat metal or any other suitable material.

Referring to the drawings, Figure 1 is a view in plan of a blank from which the end attaching device is made. Fig. 2 is a view in plan of a blank for the central attaching device. Fig. 3 is a view of a blank having its attaching-ear extending from the side opposite to that shown in Fig. 1. Fig. 4 is a plan of the blank from which the jaw is made. Fig. 5 is a plan of the blank from which the link is made. Fig. 6 is a view in elevation of the complete device as organized for attachment to one section or side of a waistband, and to receive the hook or other suspending device of shoulder straps or braces or other supporting or suspending straps. Fig. 7 is a view in plan of a form of flat metal link. Fig. 8 represents an eleva-

tion of a section of the waistband-support made from the form of link shown in Fig. 7. Fig. 9 is a section of the links represented in Fig. 8. Fig. 10 shows in plan another form of flat metal link. Fig. 11 is a view of the same, one end being turned or curved to form a pivot-bar. Fig. 12 is a view of the links secured together. Fig. 13 is a sectional view to further illustrate the invention. Figs. 14, 15, and 16 illustrate a form of flat blank which is similar to that shown in Fig. 7, with the exception that it has two ears instead of one. Fig. 17 is a view in elevation of the suspenders and of two waistband-supports of the character above described.

In the drawings, A represents the links, B B' B² the attaching devices or appliances for taking hold of or grasping the waistband of the pantaloons. These, preferably, are like those shown and described in an application of even date herewith, and need not further be described here. I would remark, however, that I do not confine myself, so far as the features of this invention are concerned, to this especial form of grasping device or appliance. Where the links are made of wire, as shown in Fig. 6, I prefer to connect them with each other by clasps or sleeves *a*, although any other suitable connection may be used. Where they are made of flat metal they may be constructed as represented in Figs. 7 to 9, inclusive—that is, each link may have an ear shutting upon or around a bar formed upon the next adjacent blank.

In Figs. 7, 8, and 9 I have shown a form of flat blank having two slots and a long ear adapted to pass through the slot of the next blank and the slot at its base or end, substantially as shown in Figs. 8 and 9; or the flat metal blanks may be connected with each other, as represented in Figs. 10 to 13, inclusive, where the link is represented as having one long ear, one short ear, and a slot. The short ear is adapted to be curved or bent to form a pivot, as represented in Fig. 11, and the long ear to enter the slot of the next link in order, and to be turned about the pivot, as represented in Figs. 12 and 13.

In Fig. 14 I show a flat blank which is similar to that shown in Fig. 7, the only difference being that it has two ears and corresponding holes therefor, instead of one ear and the long

slots or ears of Fig. 7. I would say that I do not confine myself, however, to this especial form or method of connecting the flat blanks, as there are many ways in which the links may
5 be joined with each other, so as to permit free horizontal adjustment or movement to vary the curve of the bar or support horizontally, while practically rigid vertically.

I have represented the waistband-grasping
10 devices as provided with ears *b*, by which they are secured to the links, the end grasping devices having one ear each to lay hold of the end of each link at each end of the bar or support, and the central grasping device having
15 two ears to engage the bars of the links on each side thereof, as represented in Fig. 6. The central grasping device also holds the ring B^3 , which receives the suspender hook or end.

Any other form of shoulder or other straps
20 or braces may be employed.

It will be seen that the waistband attaching or grasping device B' is secured between two sections of the support, and that it is so connected with them that it in substance forms one
25 of the links of the chain, and serves all the functions of a link in that it provides the support with a horizontal movement or flexure; also, that the end waistband attaching or grasping devices, $B B^2$, are each connected with the
30 ends of the links of the support, and that they have horizontal movements in relation to the support, and no vertical movements.

I have shown in another application of even date herewith, Serial No. 206,385, grasping de-
35 vices the same in construction as those herein specified, and I do not herein claim said grasping devices.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. A waistband-support for suspenders, braces, and the like, composed of a series of comparatively short links flexible horizontally and substantially rigid vertically, in combination with devices for attaching of garment-
45 bands to the same, and with a strap attachment, B^3 , substantially as described.

2. The combination of shoulder-straps, two separate or independent supports detachably connected with the lower ends of said straps, 50 each of which supports comprises the short wide links *A*, united together by long vertical pivotal connections, whereby they have horizontal but no vertical flexure, the waistband attaching or grasping device B' , and the end
55 waistband attaching or grasping devices, $B B^2$, the said devices being secured to the sides of said links, all substantially as and for the purposes described.

3. The combination, in a waistband-support 60 for suspenders or braces, of the links *A*, the waistband attaching or grasping device B' , attached to the links by vertical pivotal connections, and the waistband grasping or attaching devices $B B^2$, secured to the end links of
65 the support, to be horizontally movable in relation thereto, substantially as described.

THOMAS O. POTTER.

Witnesses:

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F. F. RAYMOND, 2d.