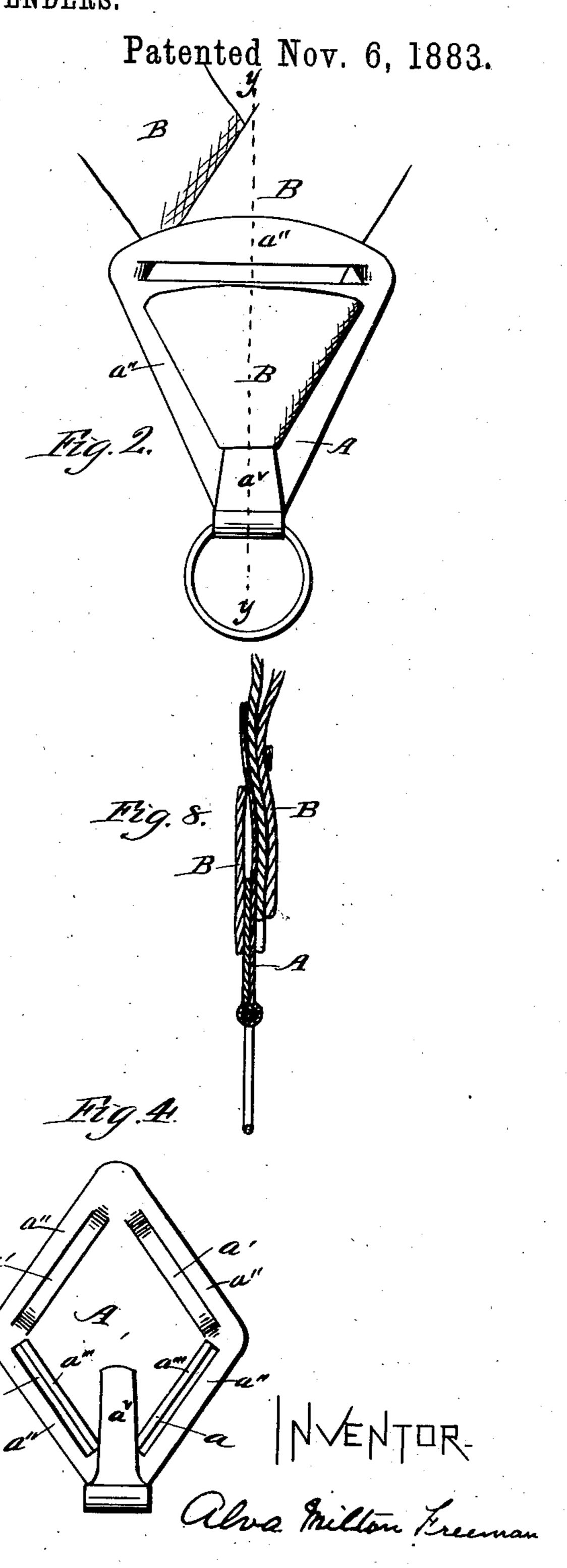
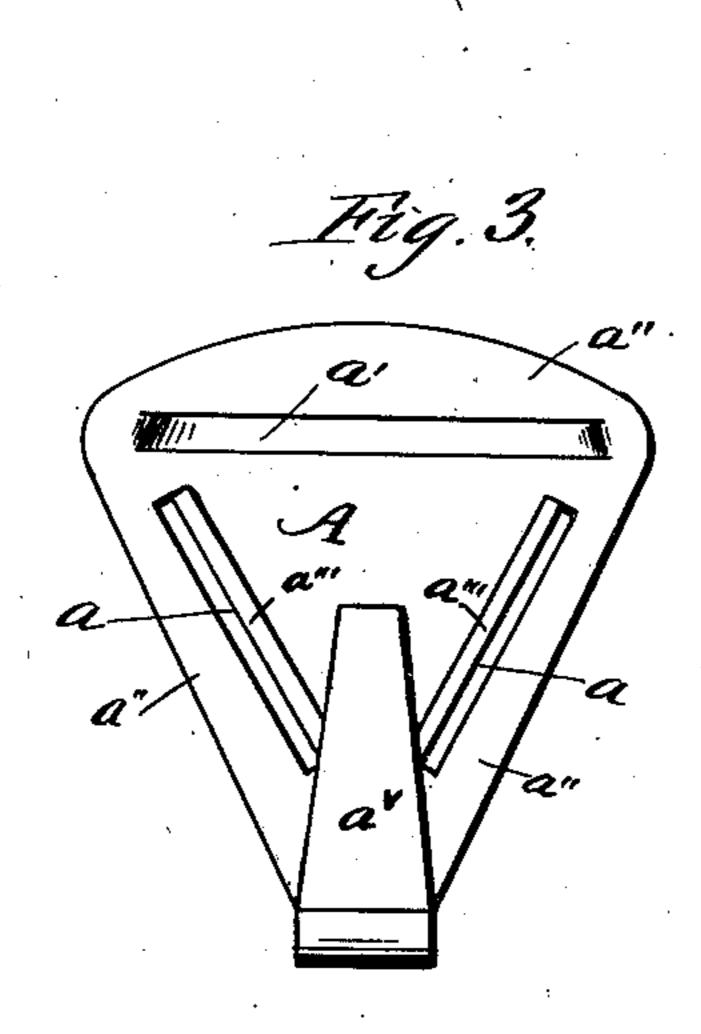
## A. M. FREEMAN.

SUSPENDERS.

No. 287,818.





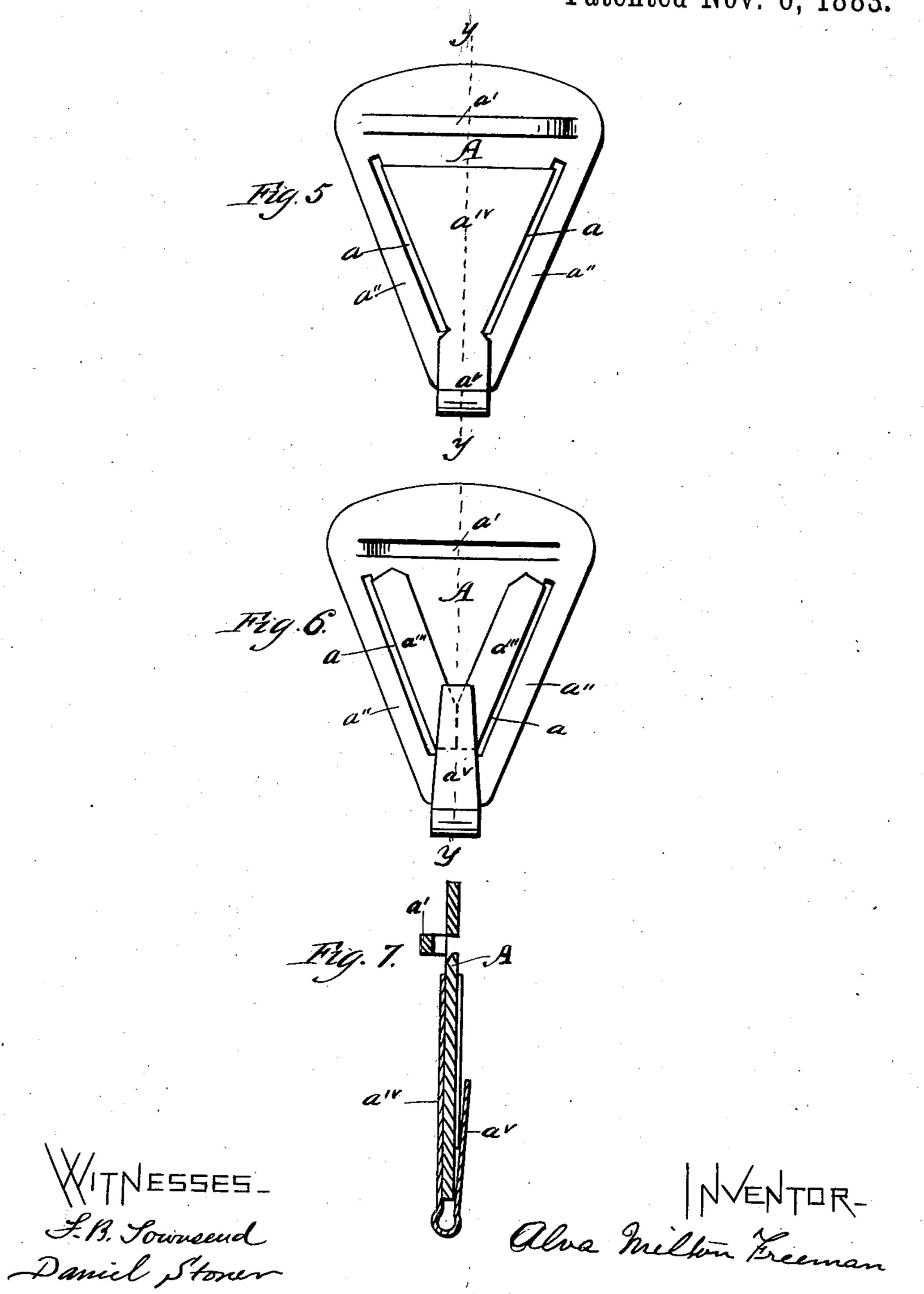
J.B. Loronseud. Deniel Storm

### A. M. FREEMAN.

SUSPENDERS.

No. 287,818.

Patented Nov. 6, 1883.



# United States Patent Office.

ALVA M. FREEMAN, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO JOHN B. OVERMEYER, OF SAME PLACE.

#### SUSPENDERS.

SPECIFICATION forming part of Letters Patent No. 287,818, dated November 6, 1883. Application filed August 8, 1881. (Model.)

To all whom it may concern:

Be it known that I, ALVA MILTON FREE-MAN, of Chicago, in Cook county, of the State of Illinois, have invented a new and useful 5 Improvement in Suspenders, of which the following is a specification, reference being had to the annexed drawings and the letters and figures marked thereon, forming a part of the specification, which will enable others ordina-10 rily skilled in the art thereto appertaining to make and use the same.

My invention pertains to suspenders of which the shoulder-straps are integrally connected at their rear termination, and are attached to, 15 folded, and held in position upon a triangularly or a diamond-shaped piece or device, connecting at its lower extremity with the rear auxiliary straps communicating with the garment or pantaloons; and my invention consists 20 in the peculiar construction of the said triangularly or diamond shaped piece or device, and its combination with the integral shoulder and auxiliary straps.

In the drawings Figure 1 represents the com-25 bination of the triangularly-shaped piece or device, and the shoulder and auxiliary straps showing in plan the side thereof on which the shoulder-straps cross each other. Fig. 2 represents the opposite side of Fig. 1 without the 30 auxiliary straps. Fig. 8 represents a vertical section of Fig. 2 on line yy. Fig. 3 represents the triangularly-shaped piece or device, showing in plan the side thereof represented in Fig. 2. Fig. 4 is a similar view to Fig. 3 of a 35 diamond-shaped connecting-plate. Fig. 5 represents the said triangularly-shaped piece or device in flexible material, and provided with a rigid support or stay, showing in plan the side thereof represented in Fig. 1. Fig. 6 rep-4c resents the opposite side of Fig. 5, and Fig. 7 represents a vertical section of Figs. 5 and 6 on line y y.

In mysaid improved suspenders, as is shown in the drawings, the piece, device, or frame 45 A, which may be made of any suitable metal or leather or other inflexible or flexible material, or a combination of any suitable flexible or inflexible substances is preferably made in

shown in Figs. 1, 2, 3, 5, and 6, or in the shape 50

of a diamond, as in Fig. 4.

If the frame is made of metal, or partly so, it may be cast; but it is preferably made of rolled sheets or thin plates, in which case it is fashioned by cutting or stamping, and if made 55 of a flexible material it is in a similar manner fashioned by cutting or stamping. The said plate or frame A is provided with two opposite upwardly-diverging slots, a, and if made in the shape of a triangle or sector of a circle, it 60 is provided above the slots a with a transverse loop, a', which is preferably curved upwardly. If of a diamond shape, it is provided with two upwardly-converging loops, a'a'. The slots aand loop or loops a' are in either of the de- 65 scribed forms of the device or frame respectively situated near the outer edge, forming fenders a'' a'' a'' outside of said slots and loop or loops. If the frame is made of sheet or plate metal, the slots are formed by cutting or 70 incising the plate at the outer side, and at each end of each slot and bending inwardly on the inner side line of each slot, the flaps a''', and folding the latter upon the body of the frame, and if the latter is made of leather or 75 other flexible material, it is provided with a sheet or plate metal support or stay,  $a^{iv}$ , which is secured to the frame by inserting the side flap, a', through the slot, and bending the former around and upon the body of the frame, 80 as shown in Figs. 5 and 6 of the drawings.

The loop or loops in either of the described forms of the frames, if the latter be not cast metal, may be in any suitable manner attached to the frame; but preferably it is made by 85 cutting or incising the frame on two opposite lines, forming a strip or band, a', which is bent upward at the opposite ends of the incisions. The slots a and loop or loops a' are for the purpose of receiving and holding in posi- 90 tion upon the frame the suspender-web forming the shoulder-straps B B, which web is inserted through the said slots at a point equal distance from the ends of said web, and is arranged horizontally across one side of the 95 frame, and obliquely across the other side, the web crossing itself and being inserted into the shape of a triangle or sector of a circle, as I the loop or loops, as shown in Figs. 1, 2, and

S in the drawings. By the bent and folded! flaps a''' the inner side edge of the slot is made round for the purpose of preventing the web from being cut. The fenders are for the pur-5 pose of protecting the side edges of the web, and the stay-plate air is for the purpose of preventing buckling in the flexible frame. The said frame A is also provided at its lower extremity with a hook,  $a^{v}$ , which is integrally 10 made of a prolonged strip or tongue, which is bent upward in the form of a hook for the purpose of forming connection with the auxiliary straps C, connecting with the garment or pantaloons, which may be effected by any 15 suitable intermediate device. The vertical prolonged end of the hook is inserted between the body of the frame and the horizontal fold of the web for the purpose of strengthening the hook, by means of which thin sheets of metal 20 may be used for the frame and the stay-plate.

I am aware that triangularly-shaped suspender-frames around which the suspender-web, forming the shoulder-straps, is integrally folded in a similar manner, have heretofore been in use. Therefore I do not claim in itself the triangular-shaped frame, and the horizontal and oblique fold of the web thereon; but

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

1. A suspender brace-plate, A, having the 30 angular slots as described, and a hook integral therewith, the hook being provided with a prolonged end adapted to be embraced by the crossed webbing when passed through the angular slots, all substantially as set forth.

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2. The combination of the crossed straps B B, the plate A, having the angular slots and integral hook with prolonged end, adapted to be embraced by the webbing, and the cast-off straps C C, attached to a similar plate, and 40 provided with suitable connecting means, all substantially as and for the purpose described.

3. The combination of the plate A, having the angular slots, integral hook with prolonged end, and the fenders as described, with the 45 webbing B, all substantially as described.

In witness whereof I have hereunto subscribed my name this 3d day of August, A. D. 1881.

### ALVA MILTON FREEMAN.

In presence of—
DANIEL STONER,
JAMES B. MUIR.