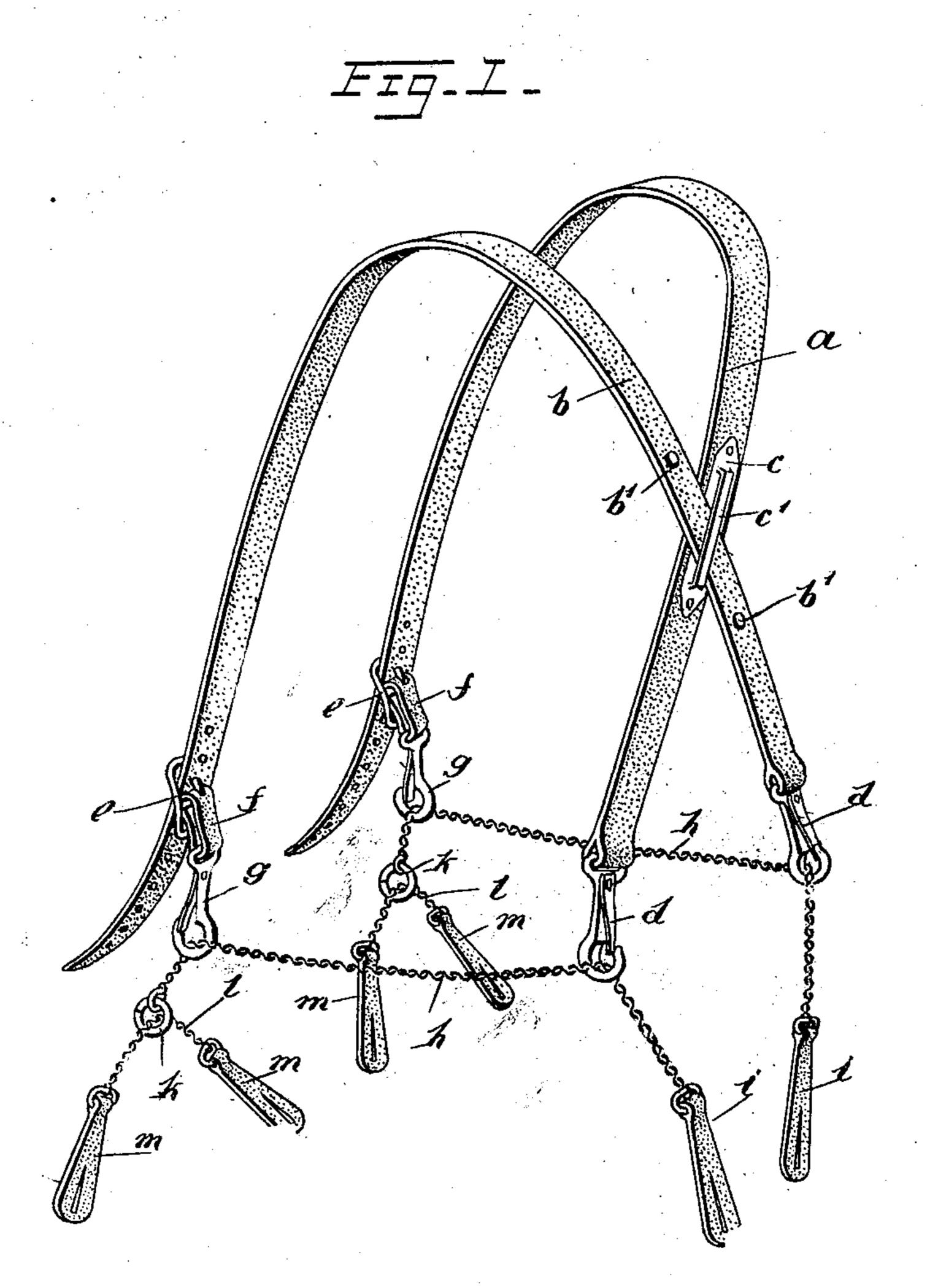
Patented Jan. 17, 1899.

### E. DENIS. SUSPENDERS.

(Application filed Mar. 25, 1898.)

'(No Model.)

2 Sheets—Sheet 1.



WITNESSES: IdWalker Jaac may

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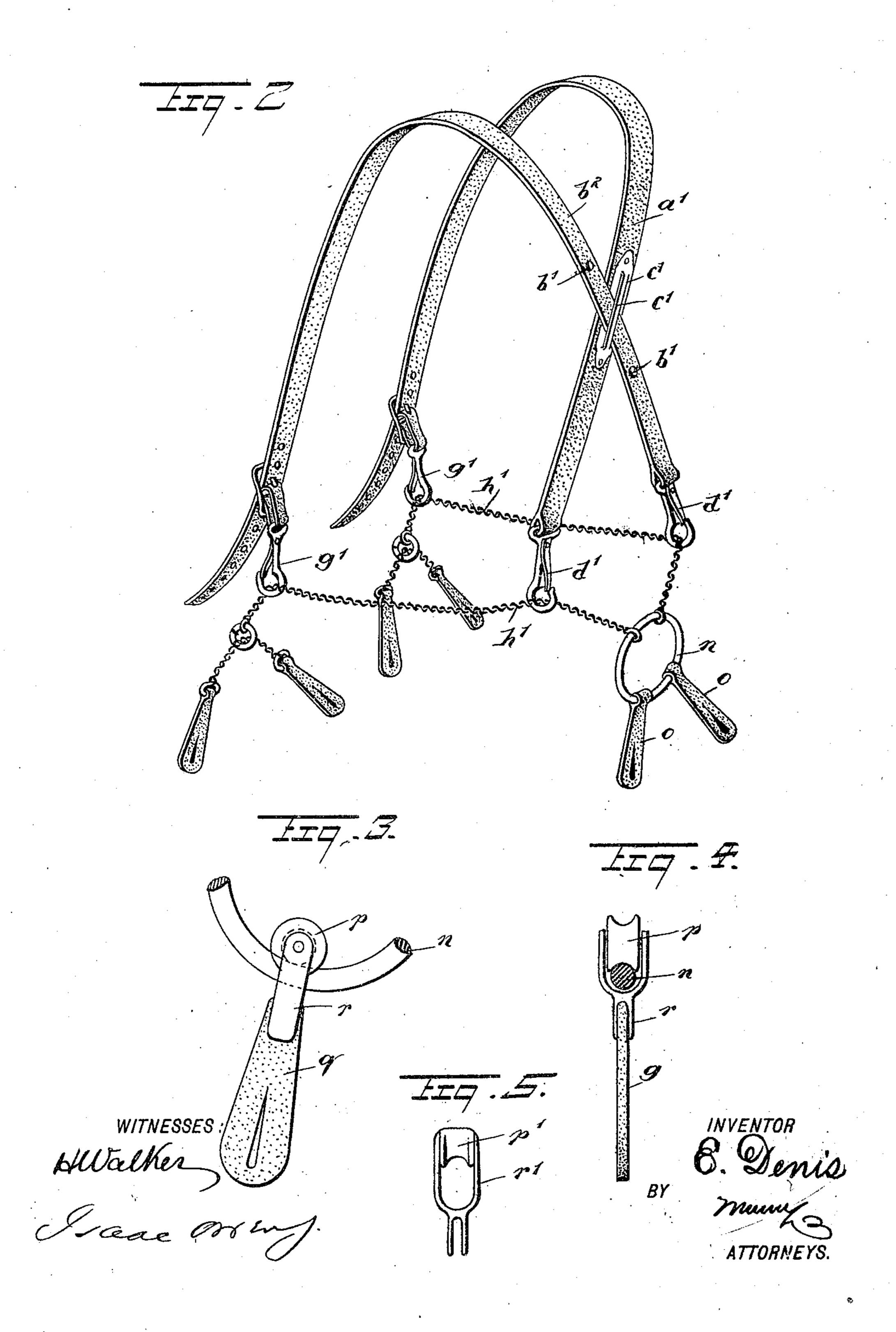
ATTORNEYS

## E. DENIS. SUSPENDERS.

(Application filed Mar. 25, 1898.)

(No Model.)

2 Sheets—Sheet 2.



# UNITED STATES PATENT OFFICE.

## EDWARD DENIS, OF GREEN BAY, WISCONSIN.

SPECIFICATION forming part of Letters Patent No. 617,926, dated January 17, 1899. Application filed March 25, 1898. Serial No. 675, 159. (No model.)

To all whom it may concern:

Beitknown that I, EDWARD DENIS, of Green Bay, in the county of Brown and State of Wisconsin, have invented a new and useful Im-5 provement in Suspenders, of which the following is a full, clear, and exact description.

This invention relates to suspenders having shoulder-straps provided at their ends with snap-hooks or equivalent devices which 10 carry two chains or wires arranged, respectively, at the sides of the person using the suspenders, said chains or wires being adapted to have their ends connected with the trousers.

This specification is the disclosure of one form of my invention, while the claims define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, 20 in which similar characters of reference indi-

cate corresponding parts in all the figures. Figure 1 is a perspective view of the preferred form of my invention. Fig. 2 is a perspective view of a modification. Fig. 3 is a 25 fragmentary view of a button-tab applicable to the modified construction. Fig. 4 is an edge view of said button-tab, and Fig. 5 is a view of a further modification of the buttontab.

The suspenders are formed of two shoulderstraps a and b, the former of which is provided with a metallic plate c, riveted or otherwise secured thereto and arranged longitudinally thereon. Produced on the plate c is a 35 strip c', which stands out from the plate, so that the strap b may be passed between the plate and strip and be slidably held thereby. To limit the movement of the strap b on the plate c, the strap is provided with two but-40 tons b', which are arranged one on each side of the plate and which engage the plate and strip as the strap b moves, so as to prevent the strap moving excessively. Each rearend of the straps a and b is provided with a snap-45 hook d, attached directly to the straps. Each front end of the straps a and b is perforated to permit the adjustable connection therewith of buckles e, to which in turn loops fare connected. These loops f respectively carry

50 snap-hooks g, similar to the snap-hooks d. Located at each side of the suspenders is a

one of the snap-hooks d and one of the snaphooks g, so that when the suspenders are in use the chains will be located, respectively, 55 at the sides of the person. The rear end of each chain h is provided with a button-tab i, which is adapted to be connected with the rear buttons of the trousers. Each front end of the straps a b is provided with a metallic 60 ring k, through which short lengths of chain l are respectively rove. The chains l each carry at each end a button-tab m, each of which is adapted to engage with the side buttons of the trousers.

The straps a and b may be formed of leather or of any woven fabric. All of the metal fixtures of the invention are to be constructed of non-corrosive material, so that they will not be influenced by the perspiration of the 70 person. The chains h may be of any metallic substance and may, if desired, be substituted by wires or wire cordage. The suspenders are applied as ordinarily and have the advantage of permitting great freedom of 75 movement of the person, as well as serving to hold the trousers with grace and security. The provision of the metallic plate c, with its strip c', permits the strap b to slide on the strap a with great freedom and avoids the 80 slidable connection of two leather or fabric members, which when they become wet with perspiration will not permit freedom of movement. The suspenders may be cast off from the trousers either by disconnecting the but- 85 ton-tabs i and m or by disconnecting the chains h from the snap-hooks d and g.

The modified construction shown in Figs. 2, 3, and 4 has shoulder-straps a' and  $b^2$ , similar to the straps a and b shown in Fig. 1, and 90 provided with snap-hooks g' and d' and with the plate c and buttons b', also similar to those hereinbefore described. Two chains h' are rove through the snap-hooks d' and g'and are provided at their front ends with 95 button-tabs similar to the front button-tabs shown in Fig. 1. The rear ends of the chains h' are attached to a large metal ring n, which carries in turn the rear button-tabs o. If desired, the button-tabs may be constructed as 100 shown in Fig. 2.

Figs. 3 and 4 show a further modification in which a roller or sheave p is mounted in a chain h. These chains are each rove through I frame r, to which the button-tab q is in turn

attached. This construction allows the tab free movement on the ring n. Fig. 5 shows a still further modification. In this form the frame r' carries a rigid block p', which forms 5 a shoe sliding on the ring n. The buttontab (not shown in Fig. 5) is attached to the frame r'.

Suspenders thus constructed are very simple and durable and are easy for the person. to They may be used with the same advantage

as the ordinary web-suspenders.

Various changes may be made in the form, proportions, and minor details of the invention without departing from the spirit and scope 15 thereof. Hence I consider myself entitled to all such variations as come within the scope of my claims.

Having thus described my invention, I claim as new and desire to secure by Letters

20 Patent—

1. Suspenders having shoulder - straps, means for slidably connecting the straps at their rear portions, a snap-hook secured to each end of each strap, chains located one at 25 each side and respectively rove through a front and back snap-hook, a button-tab at the rear end of each chain, a ring at the front end of each chain, a short chain rove through each ring, and a button-tab attached to each 30 end of each short chain.

2. Suspenders having shoulder-straps, a snap-hook connected with each end of each strap, chains located respectively on each side of the suspenders, each chain being rove 35 through a front snap-hook and through a rear

snap-hook, a button-tab attached to the rear end of each chain, a ring attached to the front end of each chain, a short chain rove through each ring, and a button-tab attached to each end of each short chain.

3. Suspenders having shoulder-straps, a snap-hook attached to each end of each strap, chains located on each side of the suspenders, each chain being rove through one rear snap-hook and through one front snap-hook, 45 and a short chain carried to move freely on the front end of each of the first - named chains.

4. Suspenders having shoulder-straps, a plate secured to one of the shoulder-straps, 50 the plate having a strip raised therefrom so that the other shoulder-strap may freely slide between the plate and strip, and buttons attached to said other shoulder-strap and lo-

cated one on each side of the plate. 5. Suspenders having shoulder-straps slidably connected with each other at their rear portions, chains located respectively on each side of the suspenders, means at the ends of the shoulder-straps for slidably carrying 60 chains, a short chain slidably carried at the front end of each of the first-named chains, a button-tab attached to the rear end of each of the first-named chains, and a button-tab attached to each end of each short chain. 65

EDWARD DENIS.

Witnesses:

B. M. BERENDSEN,

P. NYS.