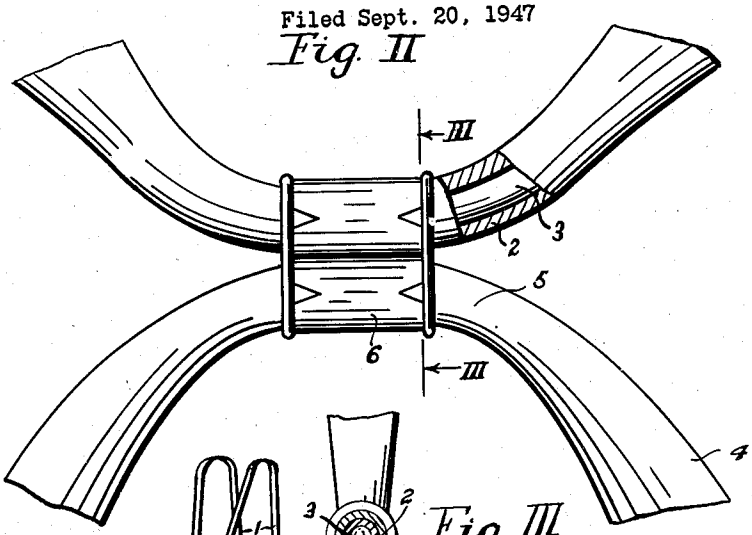
Sept. 5, 1950 H. J. BAYON 2,521,326

SUSPENDER

Filed Sept. 20, 1947

Fig. II



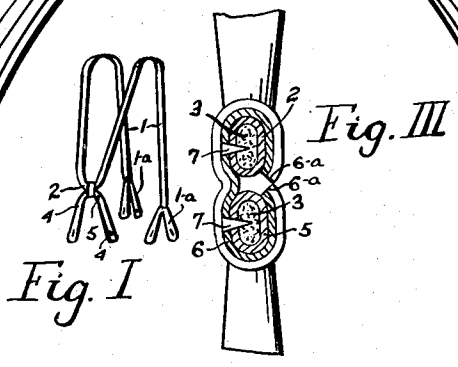


Fig. III

Fig. I

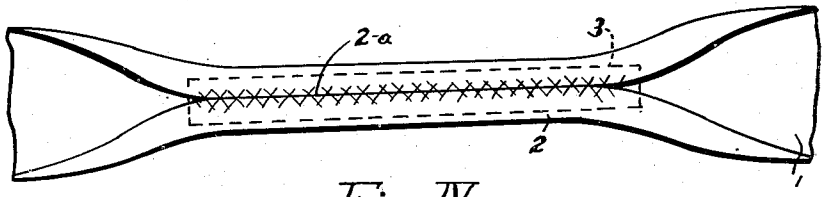


Fig. IV

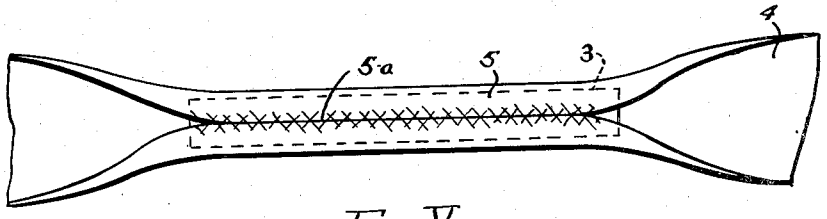


Fig. V

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SUSPENDER

Henri Joseph Bayon, Angers, France

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Section 1, Public Law 690, August 8, 1946
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6 Claims. (Cl. 2—332)

1

The present invention relates to suspenders or braces or the like and it relates more particularly to a new and improved construction which is simple and inexpensive to manufacture while, at the same time, being better fitting and more comfortable than conventional constructions heretofore employed.

An object of the present invention is to provide a new and improved construction for suspenders or braces or the like. Another object of the present invention is to provide a simple, inexpensive and comfortable suspender construction.

Other objects and advantages of the present invention are apparent in the following detailed description, appended claims and accompanying drawings.

It is well known that conventional suspenders are made up of one or more straps passing over the shoulders of the wearer with a juncture point generally at the small of the back. From this juncture point, generally depend fastening elements having eyelets or clips adapted for detachable connection to the rear portion of the trousers. The formation of this juncture point and the attachment thereto of the depending rear fastening members has heretofore presented a rather difficult problem in manufacture, and, usually, the attaching device has been large, unsightly and uncomfortable to the wearer.

Thus, in one conventional construction heretofore employed, the shoulder straps of the suspenders are stitched to a leather connecting part to which the rear fastening members are also stitched. In another type of conventional construction, a single continuous strap passes over both shoulders and is looped through a metal slide, of relatively large size, through which the rear fastening member is also looped (its free ends providing two points of attachment to the rear portion of the trousers). This metallic slide type of connector has had serious disadvantages since it must necessarily be quite large and since it is free to move relative to the shoulder strap and the rear connecting elements and, consequently, is apt to shift to one side or the other of the small of the back so that it is capable of causing injury to the wearer when he leans back against some hard surface. Additionally, the conventional type of tab connector heretofore employed frequently fails to adjust itself to the proper position on the shoulder straps so that the distribution of forces is non-uniform, the support afforded for one side being greater than for the other side.

The present invention comprehends a new and

2

improved construction which will provide a strong and dependable connection intermediate the shoulder strap portions and the rear fastening portions of suspenders or braces or the like, which is simple and inexpensive to manufacture, which will not be bulky or unwieldy or uncomfortable, and which will not shift from its predetermined position at the center point of the shoulder strap portions.

Generally speaking, the present invention contemplates a new and improved connector member, which may be formed integrally of metal or the like and which is in the form of an open-ended loop having upper and lower bight-like portions (whereby the tube generally resembles the figure 8 in cross-section) and having inwardly-extending prongs adapted to penetrate the material of the shoulder strap portions and of the rear fastening portions so as to prevent the connector from moving relative thereto.

For the purpose of illustrating the invention, there is shown in the accompanying drawings one form thereof which is at present preferred, although it is to be understood that the various instrumentalities of which the invention consists can be variously arranged and organized and that the invention is not limited to the precise arrangements and organizations of the instrumentalities as herein shown and described.

Referring to the accompanying drawings in which like reference characters indicate like references throughout:

Figure I represents a perspective view of a pair of suspenders embodying the present invention.

Figure II represents a fragmentary view, on a greatly enlarged scale showing the rear connector member.

Figure III represents a vertical cross-sectional view generally along the line III—III of Figure II.

Figure IV represents a fragmentary elevational view showing the method of forming the shoulder strap portion into a tube for positioning within the upper part of the connector member.

Figure V represents a view generally similar to that of Figure IV but showing the method of forming the rear fastening member into a tube for positioning within the lower part of the connector member.

In one embodiment of the present invention shown generally in Figure I, I may provide a shoulder strap portion, which may be formed of elastic or inelastic ribbon or tape or the like and which is provided with conventional front fastening elements 1—a at its front ends and

which is adapted to pass over the shoulders of the wearer and to be formed into a loop generally at the small of the back.

The shoulder strap 1 is formed into a tube portion or roll 2, by stitching 2—*a*, as shown particularly in Figure IV; the tube or roll 2 lying generally at the bend zone or curve of the shoulder strap as shown in Figure I.

Within the tube or roll 2—*a* may be disposed a length 3 of hemp-cord or other suitable, somewhat flexible material capable of providing internal support or body to said loop 2. However, where the material of which the shoulder strap is formed is sufficiently heavy or form-retaining, the filler 3 of hemp-cord may be omitted.

A rear double tab or fastening member 4 is also provided. The tube 4 may be a cylindrical ribbon or, instead, may be a flat ribbon, in which case a roll 5 may be formed therein by stitching 5—*a* as shown particularly in Figure V. If desired, the filler 3 of hemp-cord or the like may be provided within the roll 5 in a manner similar to that discussed hereinabove in connection with the roll 2.

The shoulder strap 1 and the rear tab 4 are connected at the small of the back by a connector member or clasp 6 of metal or the like. The clasp 6, as shown particularly in Figures II and III, may be in the form of an open-ended loop having upper and lower bight-like portions and an intermediate somewhat-constricted portion whereby the connector member is a shape somewhat in the form of the figure 8 when viewed in cross-section as illustrated in Figure III.

The connector 6 is provided with a plurality of inwardly extending prongs 7 which may be triangular or tapered in shape so as to provide penetrating points. The prongs 7 may be struck out integrally from the metal of the clasp or connector 6 and, as shown in Figures II and III, a pair of prongs may be struck out from each of the upper and lower bight-like portions of the clasp or connector 6.

In assembling the novel construction of the present invention, the loops 2 and 5 are placed in juxtaposition whereupon the clasp or connector 6 is placed about them with its free edges 6—*a* in somewhat spread-apart relationship from that shown in Figure III.

The clasp or connector 6 is then clamped tightly about the loops 2 and 5 by means of any conventional clamping tool so as to bring the edges 6—*a* together and to drive the prongs through the wall of the loops 2 and 5 in the manner shown in Figure III.

It is apparent that this will retain the connector or clasp 6 in immovable relationship to the rolls 2 and 5 and, at the same time, will provide a dependable, yet comfortable, connection intermediate the shoulder strap 1 and the rear tab or fastening member 4.

It is also apparent that, when fillers 3 of hemp-cord or the like are employed, the prongs 7 penetrate into the fillers 3 and serve to retain them in position and to eliminate the possibility of lateral shifting thereof.

It is to be understood that the novel construction of the present invention is not limited to the specific type of construction shown in the drawings and that it can also be used with suspenders employing other types of ribbons, elastic or non-elastic, tubular or flat, without departing from the spirit of this invention.

The present invention may be embodied in other specific forms without departing from the spirit or essential attributes thereof, and it is therefore desired that the present embodiment be considered in all respects as illustrative and not restrictive, reference being had to the appended claims rather than to the foregoing description to indicate the scope of the invention.

Having thus described my invention, I claim as new and desire to protect by Letters Patent:

1. A suspender comprising a shoulder strap portion of flexible material adapted to pass generally along the small of the back in the form of a curve, a rear fastening member of flexible material having an oppositely directed curve therein, passing closely adjacent to the curve in said shoulder strap member, a generally tubular connector member of metal or the like enclosing the adjoining parts of said shoulder strap portion and said rear fastening member, and means immovably fixing said connector member to said shoulder strap portion and said rear fastening member, thereby to prevent lateral shifting of said connector member.

2. A suspender comprising a shoulder strap portion of flexible material adapted to pass generally along the small of the back in the form of a curve, a rear fastening member of flexible material having an oppositely directed curve therein, passing closely adjacent to the curve in said shoulder strap member, a generally tubular connector member of metal or the like enclosing the adjoining parts of said shoulder strap portion and said rear fastening member, said connector member having a plurality of integrally formed inwardly-protruding prongs constructed and arranged to engage with the material of said shoulder strap portion and said rear fastening member, thereby to prevent lateral shifting of said connector member.

3. A suspender comprising a shoulder strap portion of flexible material adapted to pass generally along the small of the back in the form of a curve, a rear fastening member of flexible material having an oppositely directed curve therein, passing closely adjacent to the curve in said shoulder strap member, a generally tubular connector member of metal or the like enclosing the adjoining parts of said shoulder strap portion and said rear fastening member, said connector member having a plurality of integrally formed inwardly-protruding prongs constructed and arranged to engage with the material of said shoulder strap portion and said rear fastening member, thereby to prevent lateral shifting of said connector member, said shoulder strap portion being formed of thin flat ribbon material fastened in the form of a generally enclosed roll at the curved portion thereof with the prongs penetrating said enclosed roll.

4. A suspender comprising a shoulder strap portion of flexible material adapted to pass generally along the small of the back in the form of a curve, said shoulder strap portion being formed of thin flat ribbon material fastened in the form of a generally enclosed roll at the curved portion thereof, a filler of material providing internal support disposed within said enclosed roll, a rear fastening member of flexible material having an oppositely directed curve therein passing closely adjacent to the curve in said shoulder strap portion, and a generally tubular connector member of metal or the like enclosing the adjoining parts of said shoulder strap portion and said rear fastening member, said connector member having a plurality of integrally-formed inwardly-protruding prongs constructed and ar-

ranged to penetrate said enclosed roll and to engage with said filler.

5. A suspender comprising a shoulder strap portion of flexible material adapted to pass generally along the small of the back in the form of a curve, said shoulder strap portion being formed of thin flat ribbon material fastened in the form of a generally enclosed roll at the curved portion thereof, a filler of material providing internal support disposed within said enclosed roll, a rear fastening member of flexible material having an oppositely directed curve therein passing closely adjacent to the curve in said shoulder strap portion, said rear fastening member also being constructed of thin flat ribbon material formed into a generally enclosed roll at the curved portion thereof, and a generally tubular connector member of metal or the like enclosing the adjoining parts of said shoulder strap portion and said rear fastening member, said connector member having a plurality of integrally-formed inwardly-protruding prongs constructed and arranged to penetrate the roll portions of said shoulder strap and said rear fastening member.

6. A suspender comprising a shoulder strap portion of flexible material adapted to pass generally along the small of the back in the form of a curve, said shoulder strap portion being formed of thin flat ribbon material fastened in the form of a generally enclosed roll at the curved portion thereof, a filler of material providing internal support disposed within said enclosed roll, a rear fastening member of flexible

material having an oppositely directed curve therein passing closely adjacent to the curve in said shoulder strap portion, said rear fastening member also being constructed of thin flat ribbon material formed into a generally enclosed roll at the curved portion thereof, a filler of material providing internal support inserted within the roll portion of said rear fastening member, and a generally tubular connector member of metal or the like enclosing the adjoining parts of said shoulder strap portion and said rear fastening member, said connector member having a plurality of integrally-formed inwardly-protruding prongs constructed and arranged to penetrate said roll portions and to engage said fillers, thereby to prevent lateral shifting of said connector member relative to said shoulder strap portion or said rear fastening member.

HENRI JOSEPH BAYON.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
363,532	Miles	May 24, 1887
496,095	Petchaft	Apr. 25, 1893
661,408	Levi	Nov. 6, 1900
1,284,542	Ziegler	Nov. 12, 1918

FOREIGN PATENTS

Number	Country	Date
862,060	France	Feb. 26, 1941