(No Model.)

J. H. WOLF.

APRON SUPPORTER OR SUSPENDER.

No. 533,333. Patented Jan. 29, 1895.

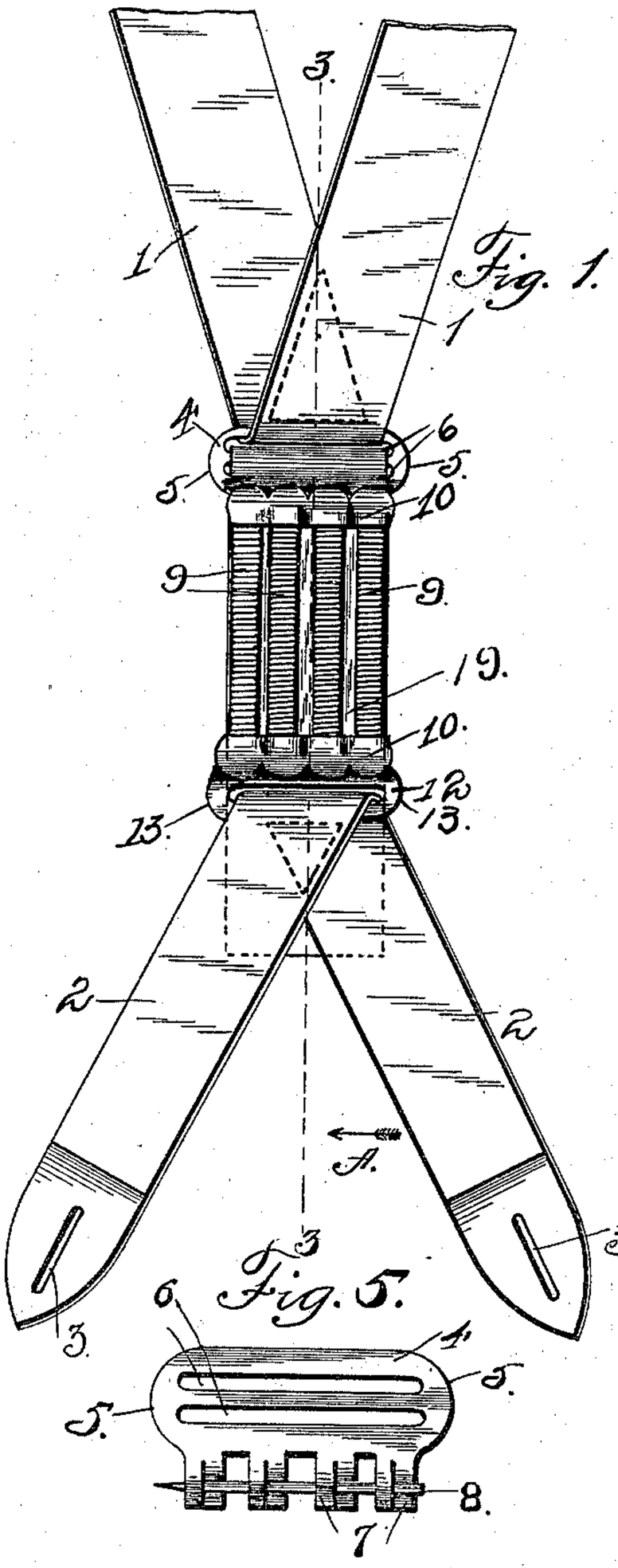

Fig. 1.

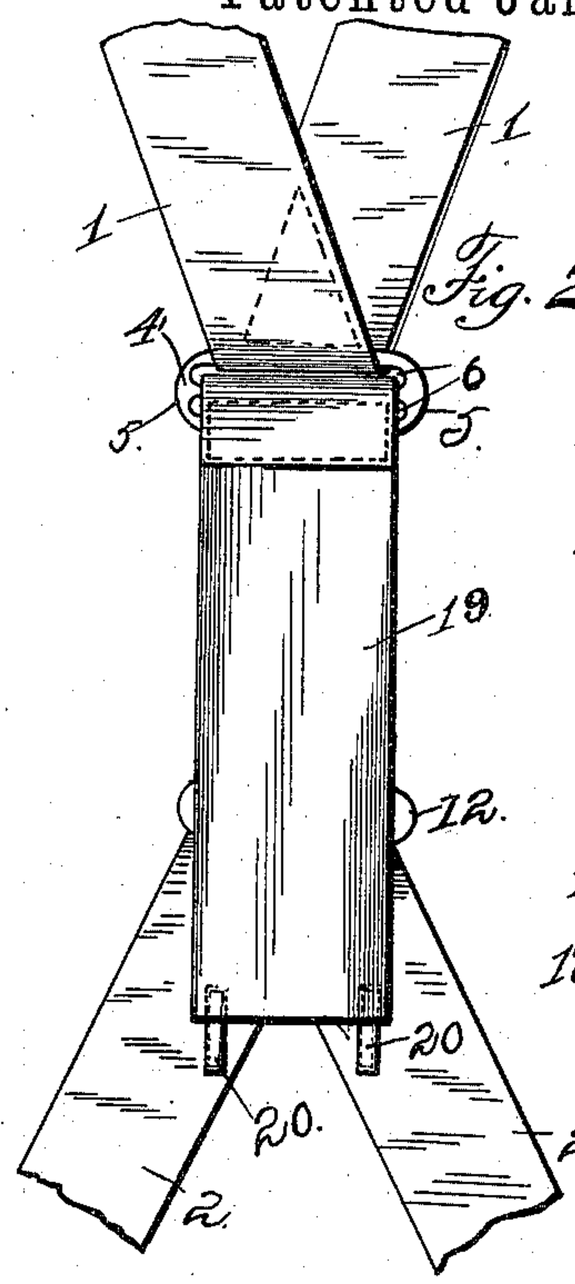

Fig. 2.

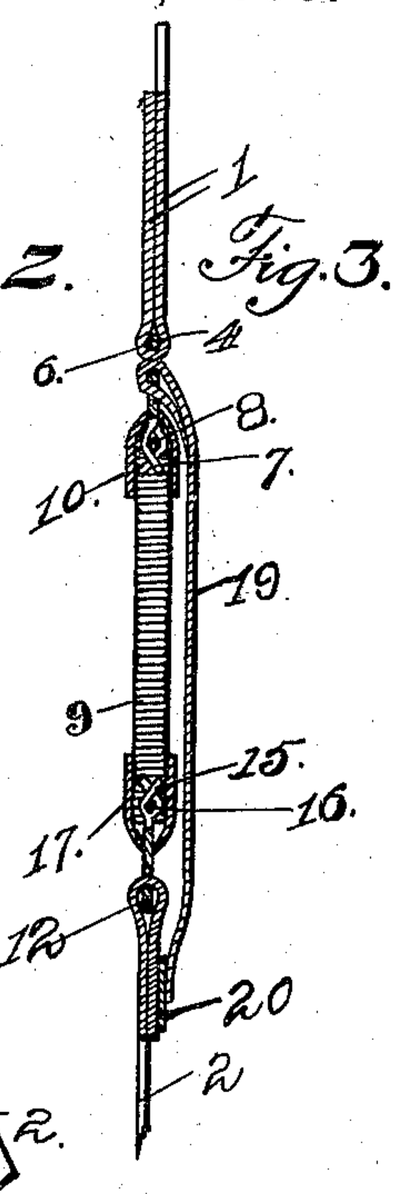

Fig. 3.

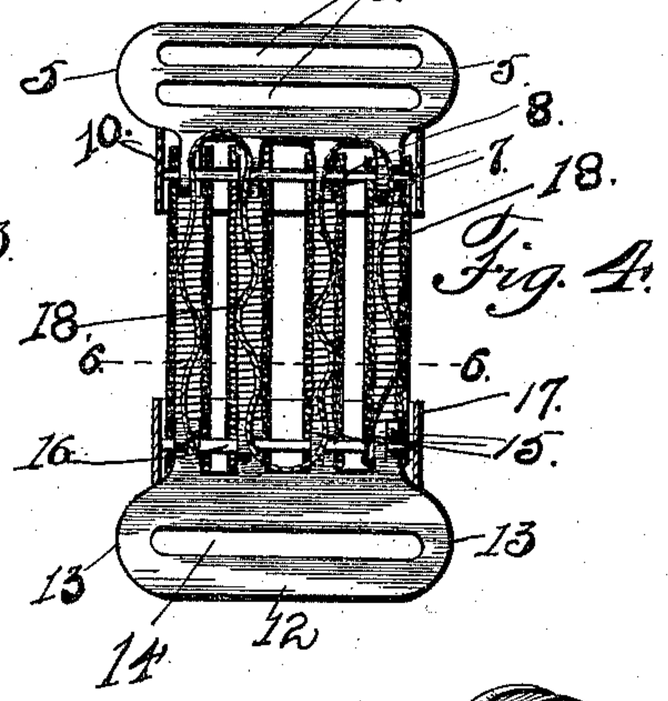

Fig. 4.

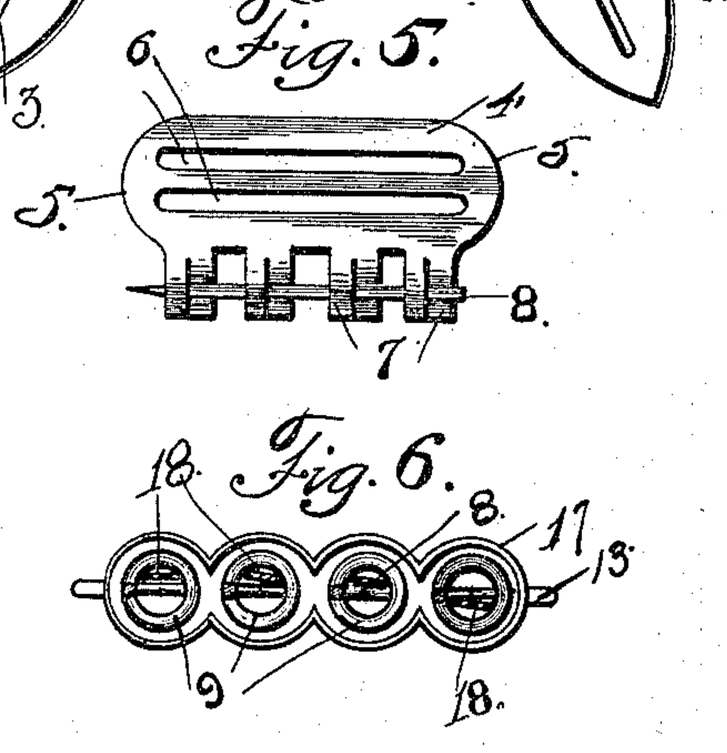

Fig. 5.

Fig. 6.

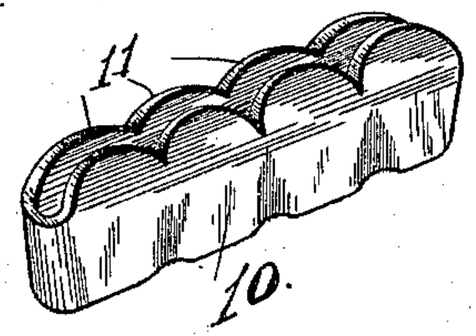

Fig. 7.

Attest:
A. A. Blankenmeister.
W. P. Smith.

Inventor:
Jacob H. Wolf.
by Higdon and Higdon and Longaul
Attys.

UNITED STATES PATENT OFFICE.

JACOB H. WOLF, OF ST. LOUIS, MISSOURI.

APRON-SUPPORTER OR SUSPENDER.

SPECIFICATION forming part of Letters Patent No. 533,333, dated January 29, 1895.

Application filed September 10, 1894. Serial No. 522,556. (No model.)

To all whom it may concern:

Be it known that I, JACOB H. WOLF, of the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in Apron-Supporters or Suspenders, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to an apron supporter or suspender, and more especially to a yielding connection between the rear suspender ends and the main web of the suspenders.

The object of my invention is to produce a yielding connection that is simple, inexpensive and durable and one that will readily yield to the various movements of the wearer.

A further object of my invention is to provide such a yielding connection with a section of leather or analogous material, said section of leather to lie immediately against the clothing of the wearer in order that the yielding connection may not come in direct contact with said clothing, thereby wearing upon and disfiguring the same.

My invention consists in a pair of slotted plates, a series of wire coils connecting said slotted plates, guards around the ends of said wire coils and where they connect with the slotted plates, and various other novel features of construction, combination and arrangement of parts, hereinafter described and claimed.

Referring to the drawings: Figure 1 is an elevation of the rear lower end of a pair of suspenders, the same being provided with my improved connection. Fig. 2 is an elevation of the rear lower end of a pair of suspenders, said view being taken in the rear of Fig. 1. Fig. 3 is a vertical sectional view on the indicated line 3—3 of Fig. 1 and looking in the direction indicated by the arrow "A." Fig. 4 is a vertical sectional view of my improved yielding connection, the tape being shown in this view that restricts the movement of the wire coils. Fig. 5 is an elevation of the upper slotted plate of which I make use in carrying out my invention, the same having the pin in position thereupon to which the upper ends of the wire coils are secured. Fig. 6 is an enlarged cross-sectional view taken approximately on the indicated line 6—6 of Fig. 4. Fig. 7 is a view in perspective of one of the guards of which I make use in carrying out my invention.

Referring by numerals to the accompanying drawings, 1 indicates the main web of the suspenders; 2, the rear suspender ends which are formed of the ordinary web and provided at their lower ends with button holes 3.

4 indicates the upper slotted plate, the same being provided with the rounded ends 5 and parallel longitudinal slots 6. Depending from the lower edge of this plate is a series of pairs of ears 7, these pairs of ears being alternately positioned upon each side of a longitudinally extending pin 8. The lower ends of these ears are then crossed beneath the pin 8, thereby firmly securing said pin in a horizontal position between said ears. Before this pin 8 is passed through the crossed ears, or to the position as shown in Fig. 5, the upper ends of the wire coils 9 are positioned around these depending pairs of ears. The pin 8 is now introduced through said coils and through the pairs of ears. Thus the upper ends of the wire coils 9 are securely held to the upper slotted plate 4. A guard 10, the same being constructed of sheet metal and provided with ornamented upper edges 11, is now positioned around the upper ends of the wire coils 9 and the upper ornamented edges 11 bent together, so that they contact with the slotted plate 4. Thus the guard 10 serves the purpose of covering the upper ends of the wire coils 9, the depending pairs of ears 7, the pin 8, and at the same time gives a finished and sightly appearance to the upper end of the yielding connection.

The lower slotted plate 12 is provided with the rounded ends 13, longitudinal slot 14, and upwardly extending pairs of ears 15. Thus it will be seen that said lower plate 12 is in every way similar to the upper plate 4 with the exception that it is provided with but a single longitudinal slot and the pairs of ears 15 extend upwardly toward the depending ears 7 of the upper plate. A pin 16, a counterpart of the pin 8, is passed through the lower ends of the wire coils 9 that surround the crossed pairs of ears 15, thus firmly securing together the lower ends of the wire coils 9 and the upwardly extending pairs of ears 15 of the lower plate 12. A guard 17, a counterpart of the guard 10, surrounds the

lower ends of the wire coils 9 and covers said lower ends, the upwardly extending pairs of ears 15 and the pin 16.

A piece of tape 18 of the desired length is fastened at one end to the first pair of upwardly extending ears 15. From thence it passes upwardly through the first wire coils 9, from thence through the remaining coils, and has its other end secured to the last pair of upwardly extending ears 15. This section of tape is of such a length as to restrict the movement of the wire coils after they have been stretched a certain distance.

The main web 1 is designed to pass through the upper one of the longitudinal slots 6 in the upper plate 4. Passing through both of the longitudinal slots 6 is the upper end of a section of leather or analogous material 19, said leather being approximately as wide as the series of wire coils 9. This section of leather 19 passes downwardly in the rear of said wire coils to a point slightly below the lower plate 12, and is secured to the rear sides of the suspender ends 2 by means of sections of elastic tape 20. It is understood that the suspender ends pass through the slot 14 in the lower plate 12.

While a pair of suspenders that are provided with my improved yielding connection are in use upon a wearer, should said wearer bend forward or to such a position as to stretch the wire coils 9, the leather section 19 being carried by the upper plate 4 will follow the movement of said wire coils 9 as the sections of elastic tape 20 stretch and give. Thus the leather section 19 always positions itself between the upper and lower plates and the wire coils and the clothing of the wearer of the suspenders. The wire coils 9 being of approximately correct resiliency, said wire coils will stretch and yield to each movement of the wearer of the suspenders.

Throughout the specification I have spoken of the yielding connection as being applied to suspenders. It is obvious, however, that this yielding connection can be applied to aprons, belts, pants straps, and various other places where such a yielding connection could be used. Thus it will be seen how I have constructed a yielding connection that possesses superior advantages in point of simplicity, durability and general efficiency.

What I claim is—

1. In a suspender, a yielding connection between the main web of the suspender and the rear suspender ends, comprising a pair of slotted plates provided with pairs of integral crossed ears, a series of wire coils, the ends of which surround said pairs of ears, pins passed through the ends of said wire coils and through the pairs of crossed ears, guards located upon said wire coils and adjacent the slotted plates, a section of tape passing through the wire coils to restrict the movement of said coils, and a section of leather carried by the upper slotted plate and covering the rear of the wire coils and the guards and slotted plates, the lower end of said leather section being secured to the suspender ends by sections of elastic tape.

2. In a device of the class described, the combination of a pair of slotted plates, a series of wire coils secured to said slotted plates, guards mounted upon the ends of said wire coils and adjacent said slotted plates, and a section of leather or analogous material carried by the upper one of said slotted plates and so arranged as to cover and guard the plates, guards and wire coils from contact with the clothing of the wearer of the suspenders, or other article to which the device is attached.

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

JACOB H. WOLF.

Witnesses:
E. E. LONGAN,
JNO. C. HIGDON.