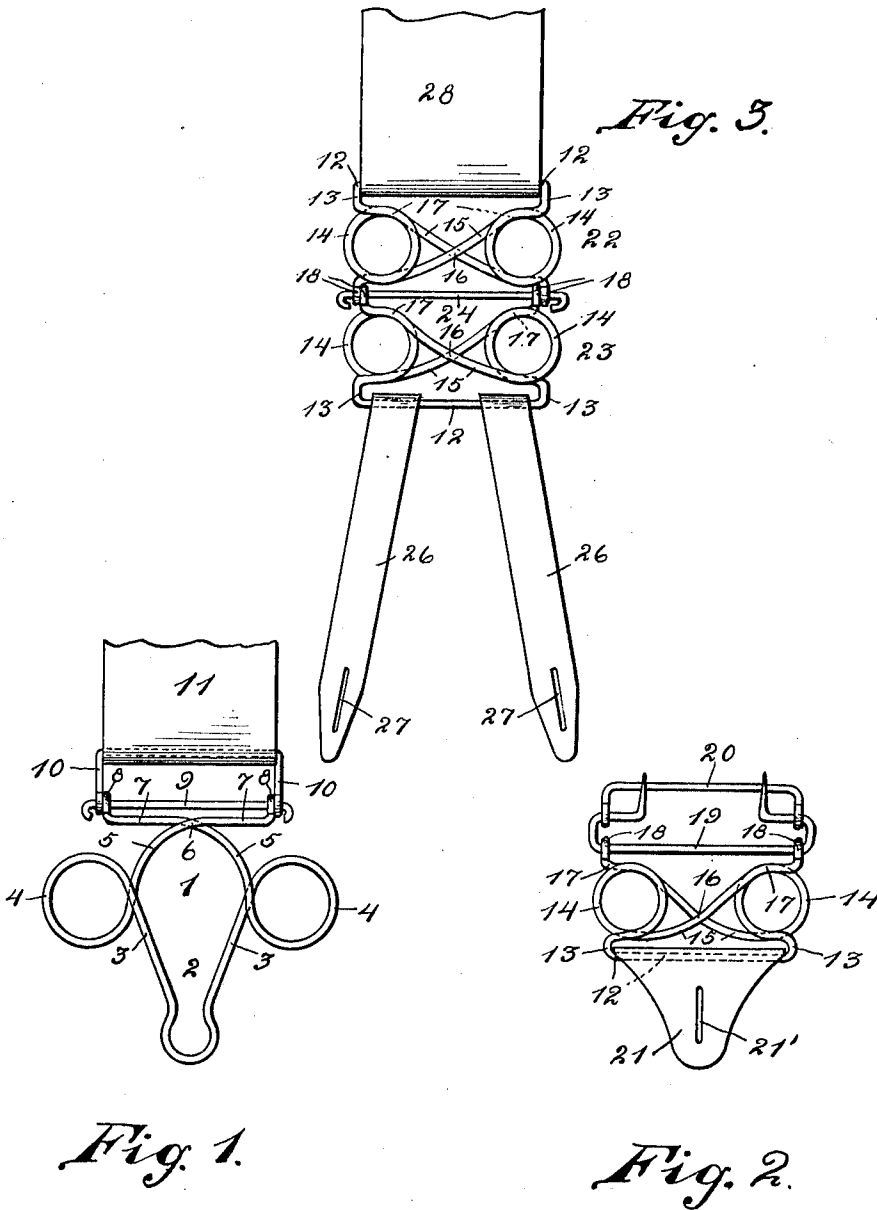


A. C. F. BARTZ.
 SPRING ATTACHMENT FOR APPAREL SUPPORTS.
 APPLICATION FILED DEC. 20, 1910.

1,020,473.

Patented Mar. 19, 1912.



Witnesses

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SPRING ATTACHMENT FOR APPAREL-SUPPORTS.

1,020,473.

Specification of Letters Patent. Patented Mar. 19, 1912.

Application filed December 20, 1910. Serial No. 598,456.

To all whom it may concern:

Be it known that I, AUGUST C. F. BARTZ, a citizen of the United States, residing at Keystone, in the county of Chippewa and State of Wisconsin, have invented certain new and useful Improvements in Spring Attachments for Apparel-Supports, of which the following is a specification.

My invention relates to a spring attachment to be used in connection with apparel supports, such as over-all straps, hose supporters, and relatively inelastic suspender webs.

An important object of this invention is to provide a spring attachment, to be used in connection with a relatively inelastic strap, such as the shoulder strap of an over-all or the like, such spring attachment being sufficiently elastic to allow the strap to move, whereby the same result is obtained as if the strap was made of elastic material.

A further object of this invention is to provide a spring attachment of the above character, which is simple in construction, cheap to manufacture, and highly durable.

Other objects and advantages of this invention will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification, and in which like numerals are employed to designate like parts throughout the same, Figure 1 is a side view of my improved attachment. Fig. 2 is a similar view of a slightly modified form of the attachment, and Fig. 3 is a similar view of a third form of the invention.

In the drawings wherein is illustrated a preferred embodiment of my invention, in connection with Fig. 1, the attachment is shown as comprising a continuous strand of spring-wire 1, having a substantially V-shaped lower body portion 2, the lower end of which is bent outwardly for the reception of a button or the like, (not shown). Arms 3 of the substantially V-shaped body portion are extended to form coils 4, as shown. Corresponding end portions 5 of the coils 4 extend inwardly and upwardly, as shown, and cross each other at 6, to form horizontal portions 7. These horizontal portions 7 have their ends bent upon themselves, as shown at 8, to form loops, which are slidably mounted upon a rod 9. This rod 9 is connected with a U-shaped rod or bracket 10, which is suitably connected with a relatively inelastic and suitably flexible strap 11. This strap 11

may be an over-all strap, suspender web, or the like. In the use of this form of the invention, a button is introduced into the opening of the substantially V-shaped body portion 2 and moved downwardly to be positioned and held in the lower end of the same. When a pull is exerted upon the V-shaped body portion 2, the coils 4 tend to contract and the ends 8 moved toward each other along the rod 9. The attachment is very elastic and the different portions thereof will return to their normal positions when relieved of pressure.

In connection with Fig. 2, the attachment comprises a single strand of spring-wire having a lowermost horizontal portion 12, the upwardly curved ends 13 of which are extended to form coils or turns 14, having inwardly extending end portions 15, which cross, as shown at 16. These end portions continue upwardly, so that a horizontal portion 17 of the end portion of one coil 14 is disposed adjacent the upper side of the other coil, as shown. The upper ends of these end portions 15 are bent, as shown as 18, to form loops, which are slidably mounted upon a horizontal portion 19 of a pin member. This pin member coöperates with a bracket 20, which is pivotally connected with the same, as shown, to form a buckle. A relatively inelastic strap, (not shown) is suitably connected with the buckle. The lower horizontal portion 12 carries a tab 21, which is provided with a button-hole 21'; for receiving a button in the usual manner. In the use of this second form of the invention, when a pull is exerted upon the tab 21, the coils 14 are contracted and the ends 18 move toward each other, whereby the pull is yieldingly opposed. When released, the parts of the device will return to their normal positions.

The attachment shown in Fig. 3, comprises a pair of spring members 22 and 23, which are like the attachment shown in Fig. 2, the tab 21 and the buckle formed of members 19 and 20 being dispensed with. The upper spring member 22 is inverted so that its ends 18 are disposed outwardly of and near corresponding ends of the spring member 23. The pairs of ends 18 are slidably mounted upon a common rod 24. The horizontal portion 12 of the spring member 23 carries a pair of tabs 26, which are provided at their lower ends with button-holes 27. The horizontal portion 12 of the spring member 22

has suitable connection with a relatively in-
elastic and suitably flexible strap 28. The
operation of this form of the invention is
just like the operation described in connec-
5 tion with Fig. 2, except that twice the
amount of elasticity is gained by employing
two spring members 22 and 23.

I wish it understood that the form of my
invention herewith shown and described is
10 to be taken as a preferred example of the
same, and that certain changes in the shapes,
sizes and arrangements of parts may be re-
sorted to without departing from the spirit
of my invention as defined by the subjoined
15 claims.

Having thus fully described my inven-
tion, I claim:—

A device of the character described, com-

prising a strand of spring wire having a
horizontal portion bent at its ends to ex- 20
tend upwardly in the form of coils having
their free ends disposed lowermost and ex-
tended in diagonal directions to cross and
terminate in eyes disposed adjacent the
upper sides of said coils, a buckle compris- 25
ing a horizontal member upon which the
eyes are slidably mounted, and a tab dis-
posed upon said horizontal portion and hav-
ing a button-hole opening formed therein.

In testimony whereof I affix my signature 30
in presence of two witnesses.

AUGUST C. F. BARTZ.

Witnesses:

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F. A. SMITH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
