No. 734,861. PATENTED JULY 28, 1903.

C. R. HARRIS.

CAST-OFF.

APPLICATION FILED JAN. 29, 1903.

NO MODEL.

Fig. 1.

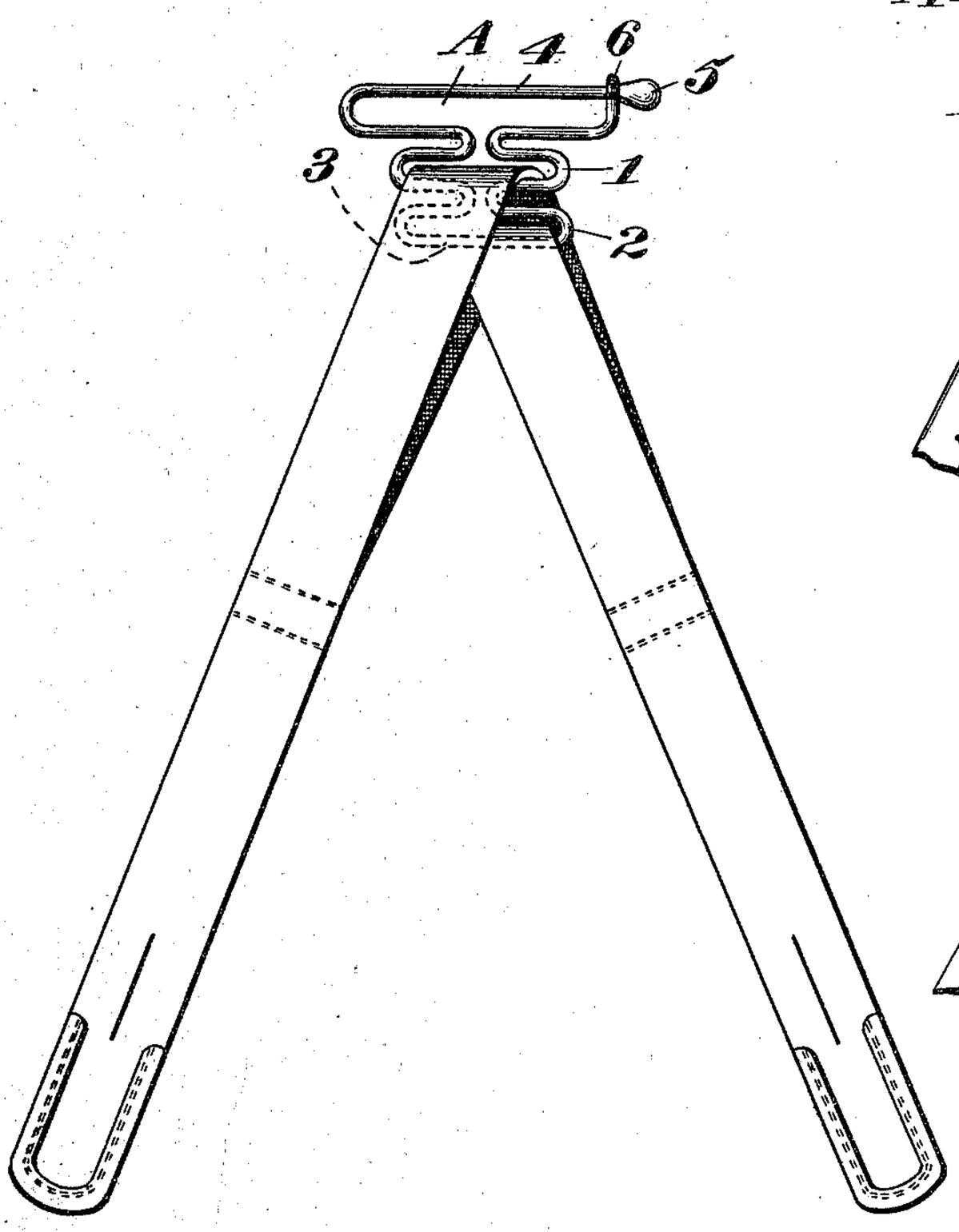


Fig. 2.

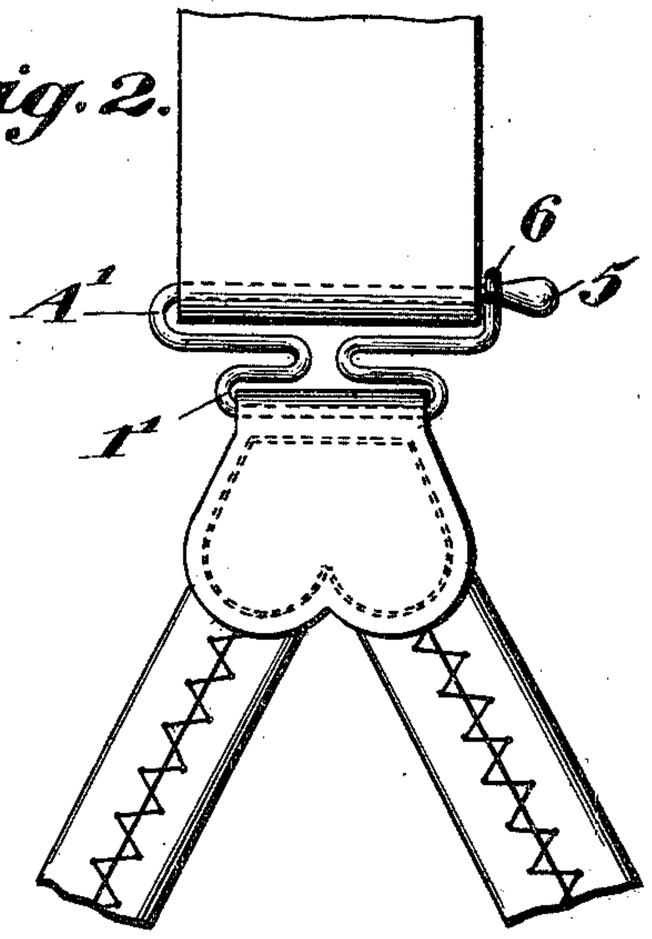


Fig. 3.

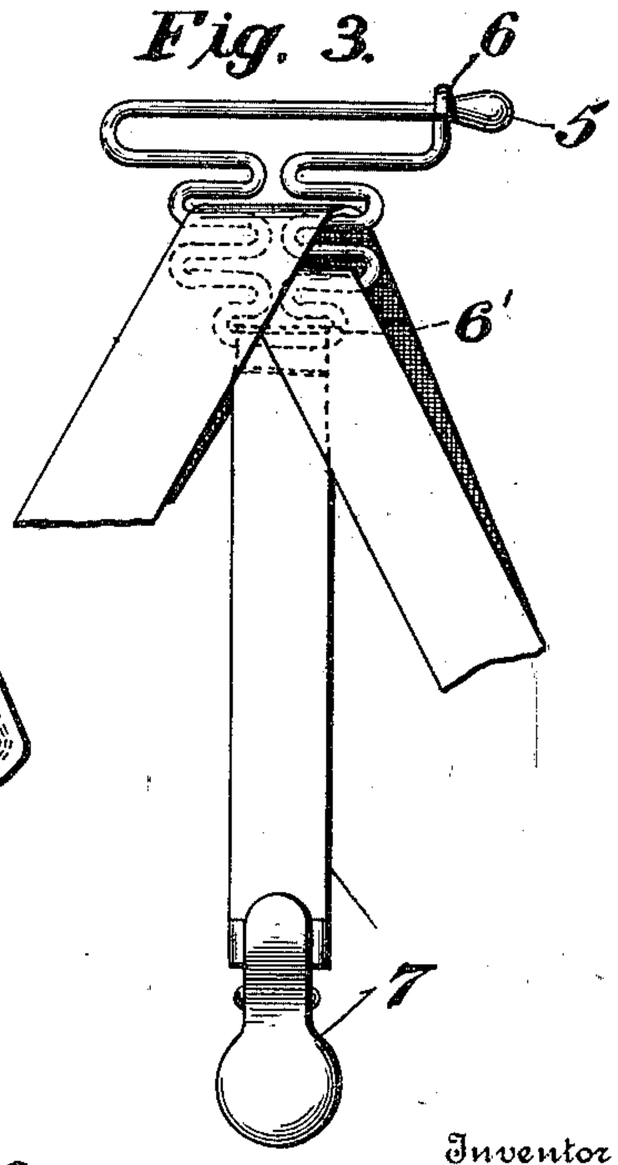
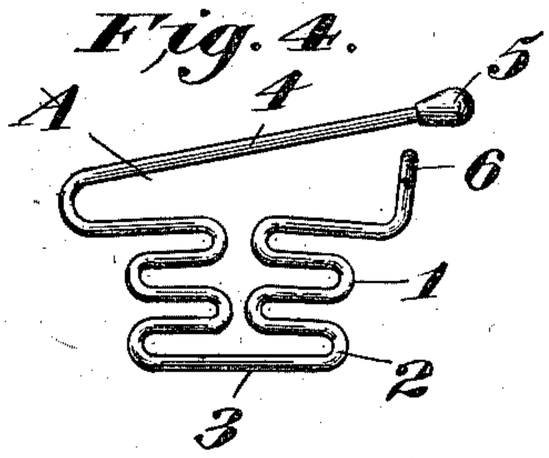


Fig. 4.



Witnesses

Elmer Seavey

Watts T. Estabrook

Inventor

Charles R. Harris

By Thos. E. Hodges

Atty

No. 734,861. Patented July 28, 1903.

UNITED STATES PATENT OFFICE.

CHARLES R. HARRIS, OF WILLIAMSPORT, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO JOSEPH E. AUSTRIAN, OF NEW YORK, N. Y.

CAST-OFF.

SPECIFICATION forming part of Letters Patent No. 734,861, dated July 28, 1903.

Application filed January 29, 1903. Serial No. 141,041. (No model.)

To all whom it may concern:

Be it known that I, CHARLES R. HARRIS, a citizen of the United States, and a resident of Williamsport, in the county of Lycoming and State of Pennsylvania, have invented a new and useful Improvement in Cast-Offs, of which the following is a specification.

My invention relates to an improvement in suspender attachments, and more particularly to what is termed a "cast-off;" and it comprises in addition to the cast-off proper a loop or loops made integral with the cast-off by means of multiple bends in the wire which forms the cast-off. In other words, my present invention consists in two or more loops made of a single piece of metal, and thus integral with each other, one loop being open to form a so-called "cast-off."

Among the advantages of this construction may be mentioned the greatly-increased resiliency, which obviates the danger of breaking resulting from the multiple bends and the corresponding length of wire composing the parts of the attachment.

Another obvious advantage is in the use of wire instead of sheet metal commonly used for the loop, and this advantage resides in the fact that the wire is round, thus presenting smooth round surfaces which do not abrade or tear the webbing of the suspender or the garments of the wearer.

Further objects are to provide a simple, neat-appearing, and inexpensive device for the purposes specified which will effectually perform the functions required.

In the accompanying drawings, Figure 1 is a view of the form of device adapted for cantab ends. Fig. 2 shows a slightly modified form adapted for braid ends. Fig. 3 may be said to be another modified form especially adapted for drawer suspender attachments, and Fig. 4 shows the device open.

All three of the foregoing constructions are the same in type, comprising a single wire bent to form two or more loops, one of which is open to constitute an integral cast-off, and the only difference is in the number of loops, which may be one or more, as the case may be. Referring to these three forms in the order mentioned above, the letter A and numerals 1 and 2 represent three integral loops formed by multiple outward and inward bends in the wire, the lower bar 3 being originally the center or approximate center of the wire from which the entire article is formed. The bar 4 is the upper bar of the loop A and preferably has a knob 5 on its outer end, which affords a convenient means by which to open or close loop A, which loop constitutes the cast-off, and this knob also affords a means against which the hook 6 engages to prevent spreading or any tendency to spread at this point. By means of the multiple bends employed in the formation of the loops adequate resiliency is given to the cast-off, the entire length of the wire being utilized to cause the cast-off to spring open the required distance when unhooked and at the same time distributing the bending of the wire throughout an increased area, thus preventing its taking a set at any point and as a result ultimately becoming weakened or broken.

In the form of construction shown in Fig. 2 the cast-off A′ has a single loop 1′ for the braid ends; but it has sufficient resiliency in the length of wire employed to accomplish the purposes desired.

In the construction shown in Fig. 3 an additional loop 6′ is added for the drawer-supporter 7, which depends therefrom.

From the foregoing it will be seen that a single piece of wire is bent into the different forms described so that the loops are in each instance integral, thus reducing the cost to a minimum, making a light, simple, and inexpensive device with round surfaces throughout its entire length. In short, the construction is such that the device comprises two or more loops formed from a single wire, one of which loops is open at one end to form a cast-off, this open end being adapted to hook together, the resiliency of the entire piece of wire thus being utilized to cause the cast-off to spring open when its ends are unhooked.

Other slight changes might of course be made in the form and arrangement of the several parts described without departing from the spirit and scope of the invention, and hence I do not wish to be limited to the exact constructions herein set forth; but,

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. As an article of manufacture, a cast-off composed of a single piece of wire bent to form two loops, one of which is closed at its ends and adapted to receive the button-straps of a suspender, and the other of which is open at one end to form a cast-off, said open end constructed and adapted to hook together, the resiliency of the entire piece of wire being thus utilized to throw open the cast-off when the ends are unhooked.

2. As an article of manufacture, a cast-off composed of a single piece of wire bent to form three loops, two of which receive button-straps, and the third open at one end and adapted to be hooked when closed thereby forming a cast-off, which springs open when released, deriving this spring action from the resiliency of the entire wire.

3. A combination of a cast-off and three loops made of a single wire and integral with each other, in connection with can-tab ends adapted to slide in two of the loops and a drawer-supporter depending from the third loop.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CHAS. R. HARRIS.

Witnesses:
TRUSTEN P. DYER,
MARY L. CUSHING.