No. 706,933. Patented Aug. 12, 1902.

C. R. HARRIS.

ATTACHMENT FOR SUSPENDERS.

(Application filed Feb. 24, 1902.)

(No Model.)

Fig. 1.

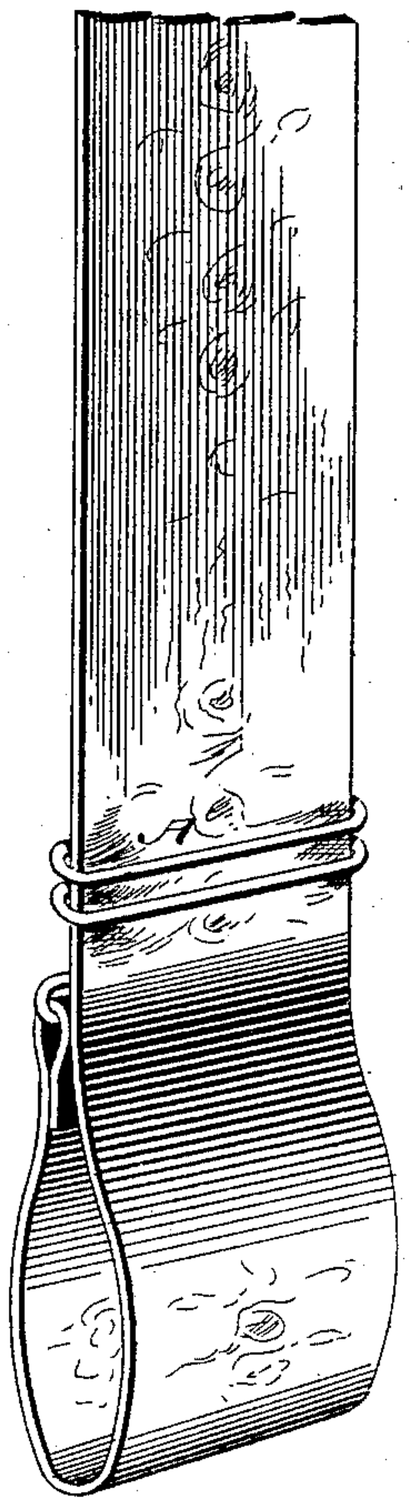


Fig. 2.

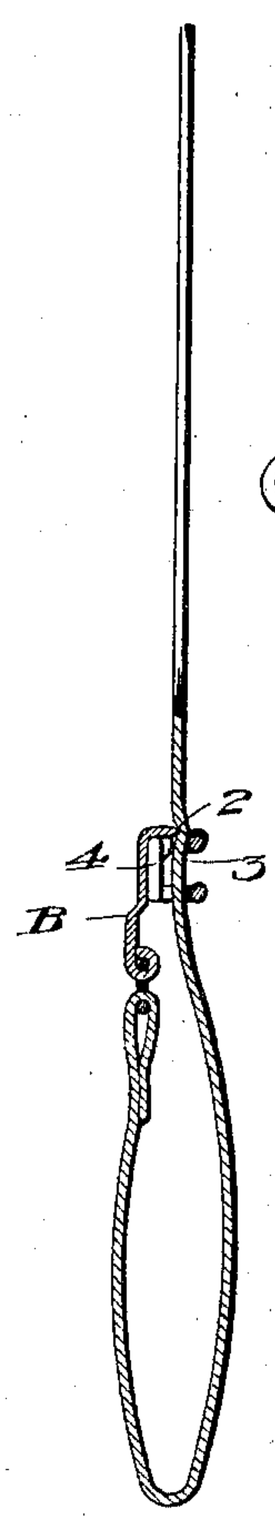


Fig. 3.

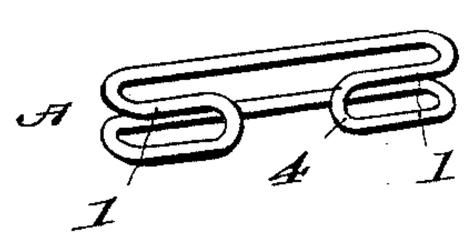


Fig. 4.

Fig. 5.

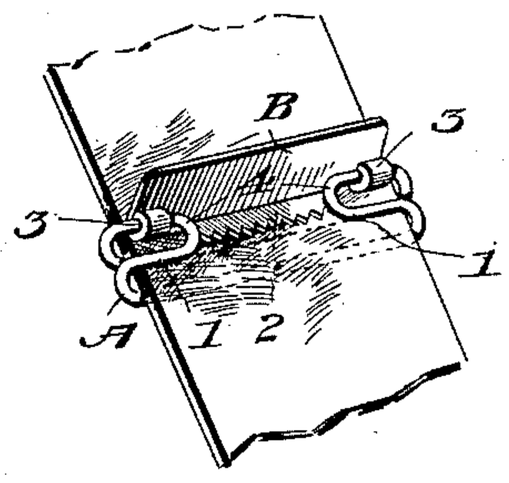
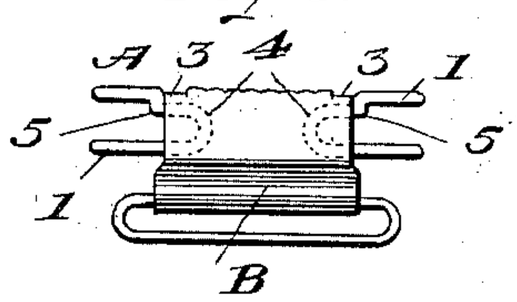


Fig. 6.



Witnesses

"Illegible"

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UNITED STATES PATENT OFFICE.

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ATTACHMENT FOR SUSPENDERS.

SPECIFICATION forming part of Letters Patent No. 706,933, dated August 12, 1902.

Application filed February 24, 1902. Serial No. 95,304. (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, State of Pennsylvania, have invented a new and useful Improvement in Attachments for Suspenders, of which the following is a specification.

My invention relates to an improvement in attachments for suspenders, the object being to provide an adjusting-clamp designed more particularly for lengthening and shortening the shoulder-straps; and the purpose of my invention is to provide a simple and neat-appearing device which will present smooth surfaces to the web, which will be effectual in fastening the parts together, and the initial cost of which will be comparatively small, as the invention contemplates the employment of a minimum of material and labor.

My invention consists in the main of a frame composed of wire bent into the form of an attenuated ellipse, the ends of which are adapted to be folded around the edges of the web forming the shoulder-strap or other part of the suspender or other article to which my present invention is to be applied, thus presenting two parallel bars on the front side of the web in connection with a clamping-lever which is pivoted or hinged to the overlapping ends of the frame, and provided with a biting edge, which may be toothed or smooth, adapted to engage the web and clamp it between said biting edge and one of the parallel bars or between the biting edge and an intermediate point between said bars.

The invention further consists in certain additional details and accessories which will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in perspective of the complete attachment. Fig. 2 is a vertical sectional view. Fig. 3 is a detached view of the frame. Fig. 4 is a view of the frame before the ends are bent inward. Fig. 5 is a modification, and Fig. 6 is also a modification.

A represents the frame. This is made of a piece of wire of the required length, size, and quality. This wire is bent into the form of a narrow elongated or attenuated ellipse, as shown in Fig. 4, thus forming a pair of parallel bars, which are all that appear of the device on the front or outer surface of the web or strap. The ends of the frame are folded over, as shown at 1 1, to embrace the edges of the web and form a space between them and the parallel bars or body portion to receive the web.

The letter B indicates the clamping-lever. This is composed of sheet metal, preferably, although it could be cast. One edge is bent at or approximately at right angles to constitute a gripping or biting edge 2, and this may be toothed or plain, as preferred, its function being to engage the web and clamp it between one or both of the parallel bars of the frame and itself. A portion of the sheet metal composing this clamping-lever is bent around in the form of bearings 3 3, by means of which the lever is hinged to the frame. While the extreme closed ends 4 4 of the frame would prevent lateral play of the lever to a certain extent and probably would absolutely prevent it if made in just the right proportions, still it is considered advisable to form the shoulder or offset 5 5 in each end for this purpose, as shown in the modification.

While the clamping-lever may be variously constructed, only two forms are shown, one being provided with a loop 6 at the end to receive the end of the web and the other with the loop omitted, as it might be possible to use the device in this form with slight modifications for other purposes.

It is obvious that the frame might be variously constructed and its design and ornamentation modified to suit the taste, the main thing being an adherence to the wire-frame principle, in which the frame is composed of two members or bars bent at the ends to overlap the web. Such a construction is easy to manufacture, neat in appearance, and possessed of all needed strength.

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

1. The combination with a frame of metal in the form of an elongated endless loop the ends of which project inward toward each other, of a clamping-lever hinged to corresponding sides of said ends, the gripping

edge of the lever coöperating with the main portions of the frame to clamp the suspender-strap.

2. An attachment for suspenders comprising a frame of wire having the form of an elongated endless loop, the sides of which are parallel and the ends of which project inwardly toward each other parallel with and opposite the intermediate portion and a sufficient distance therefrom to allow space for the passage of a suspender-strap between the central portion and the ends, in combination with a clamping-lever hinged to corresponding sides of the two ends and provided with a gripping edge which coöperates with the intermediate portion of the frame to clamp the suspender-strap between them.

3. The combination with a frame of wire in the form of an elongated endless loop the ends of which project inward toward each other, of a clamping-lever hinged to one strand of the ends, its gripping edge coöperating with the main portion of the frame to clamp the suspender-strap.

4. The combination with a frame of wire in the form of an elongated endless loop, the ends of which project inward toward each other, said ends having shoulders, of a clamping-lever hinged to one strand of the ends, its gripping edge coöperating with the main portion of the frame to clamp the suspender-strap.

5. The combination of a frame composed of a single piece of wire in the form of two parallel bars connected together at their ends, these end portions projecting inwardly parallel with the intermediate portion and a sufficient distance therefrom for the passage of a suspender-strap therebetween, of a clamping-lever having bearings mounted on corresponding strands or wires of said ends and provided with a gripping edge which coöperates with the intermediate portion of the frame to clamp the suspender-strap.

6. The combination with a wire frame, the wire of which is in the form of an endless elongated loop the ends of which loop bend toward each other, of a clamping-lever hinged to one wire of each end and resting on the opposite wire of each end when in clamping position.

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

CHAS. R. HARRIS.

Witnesses:
H. S. G. McCARTNEY,
WILLIAM H. FULLER.