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L. J. JOSEPHS

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ATTACHING TIP FOR SUSPENDER CORDS

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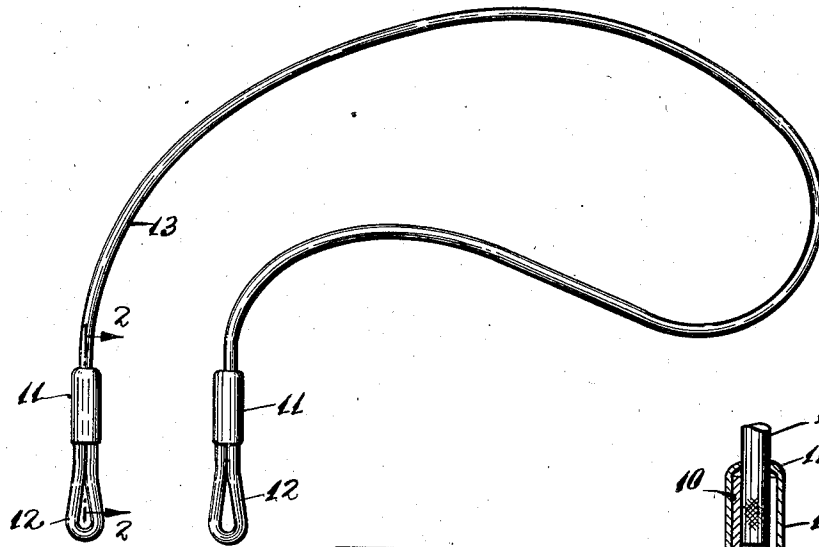


Fig. 1.

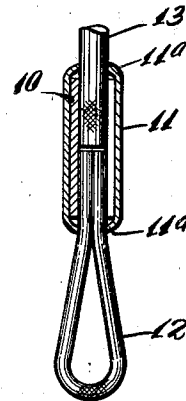


Fig. 2.

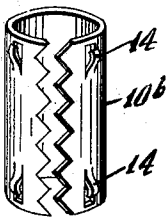


Fig. 3.

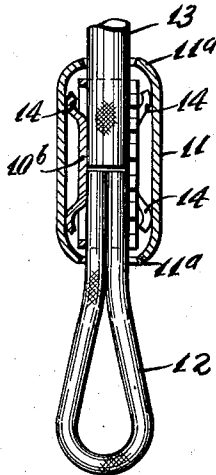


Fig. 4.

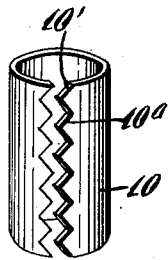


Fig. 5.



Fig. 6.

INVENTOR
Lester J. Josephs
BY *Golden H. Holbeck*
ATTORNEY

UNITED STATES PATENT OFFICE

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ATTACHING TIP FOR SUSPENDER CORDS

Lester J. Josephs, New York, N. Y.

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6 Claims. (Cl. 241-27)

This invention relates to new and useful improvements in an attaching tip for suspender cords.

The invention has for an object the construction of an attaching tip which is characterized by the fact that it includes an external celluloid tube engaging over a metallic binder which serves to hold the adjacent ends of a cord or cords together.

More specifically, the invention contemplates to construct the metallic binder from sheet metal bent into tubular form and clamped upon the ends of said cord or cords. It is then proposed to slip or in any other manner engage a celluloid tube or a tube of similar material over the metallic binder to cover it and to protect the binder from atmospheric conditions, and furthermore to protect clothing and other foreign objects which may come in contact with the attaching tip from the metallic binder.

It is an object of this invention to arrange the celluloid or other tube, with bent-in end portions to engage over the end portions of the metallic binder and so to maintain itself in position.

Still further the invention proposes to provide the metallic binder with a plurality of stamped out prongs adapted to resiliently engage against the inner wall of the celluloid tube to hold it in position.

It is an object of this invention to so construct the attaching tip that it may be used to clamp a non-elastic cord into the form of a loop usable as a button hole and to connect this loop with an elastic or a non-elastic cord.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawing, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawing forming a material part of this disclosure:—

Fig. 1 is a side elevational view of an attaching tip and suspender cord constructed according to this invention.

Fig. 2 is a fragmentary enlarged sectional view taken on the line 2—2 of Fig. 1.

Fig. 3 is a perspective view of the celluloid tube per se.

Fig. 4 is a perspective view of the metallic binder per se.

Fig. 5 is a sectional view similar to Fig. 2 but illustrating a modified construction.

Fig. 6 is a perspective view of the metallic binder used in Fig. 5.

The attaching tip for suspender cords, according to this invention, comprises a metallic binder 10 for holding the adjacent ends of a cord or cords as a fixed unit and associated with a celluloid covering tube 11 engaged thereover. More specifically, one use of the invention resides in securing a loop element 12 upon the end of a cord 13. This cord 13 may be of elastic or non-elastic material. The loop 12 preferably is of non-elastic material so as to be useable as a buttonhole. The loop 12 is formed by a strand of cord bent upon itself and having its ends engaged into and clamped by the metallic binder 10. These ends engage into one end of the binder. The end of the cord 13 engages into the other end of the binder. Preferably, the cord 13 should be of a diameter substantially equal to the combined diameter of the ends of the loop 12. A duplicate attaching tip and loop is shown attached to the other end of the cord 13.

The metallic binder 10 is constructed from sheet metal bent into tubular form and then clamped upon the ends of the cords. The adjacent edges 10' or one of the edges, is formed with a plurality of serrations 10^a adapted to better extend into and grip the cord which the binder holds. The end portions 11^a of the celluloid tube are slightly bent inwards so as to engage over the end portions of the metallic binder 10 (as clearly shown in Fig. 2) so that the celluloid tube is maintained against longitudinal motion.

In Figs. 5 and 6 a modified form of the invention has been disclosed which distinguishes from the previous form in the fact that there is a metallic binder 10^b formed with a plurality of prongs 14 near the ends thereof and stamped from the material of the binder and adapted to resiliently engage against the inner face of the tubular member 11 to hold the tubular member in position. Preferably, these prongs 14 should be curved with their free ends extending inwards so that when the tubular member 11 is slipped into position they are momentarily depressed to permit the passage of the said tube 11. When the tube 11 is in the final position the prongs 14 automatically extend and hold it so. In other respects this form of the invention is identical to the previous form and the same parts may be recognized by the same reference numerals.

While I have illustrated and described the preferred embodiments of my invention, it is to

be understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

5 Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:—

10 1. An attaching tip for suspender cords comprising in combination with adjacent cord ends, a metallic binder for holding said ends as a finished unit, a celluloid or the like tube engaging over and covering said binder, and elements on said binder engaging against the inner face of
15 said celluloid tube to hold it in position.

2. An attaching tip for suspender cords comprising in combination with adjacent cord ends, a metallic binder for holding said ends as a finished unit, a celluloid or the like tube engaging
20 over and covering said binder, and elements on said binder engaging against the inner face of said celluloid tube to hold it in position, said elements being stamped from the material of said binder.

25 3. An attaching tip for suspender cords comprising in combination with adjacent cord ends, a metallic binder for holding said ends as a finished unit, a celluloid or the like tube engaging over and covering said binder, and prongs on
30 said binder engaging against the inner face of said celluloid tube to hold it in position, said prongs being stamped from the material of said binder, and located near the ends thereof.

4. An attaching tip for suspender cords comprising in combination with adjacent cord ends, a metallic binder for holding said ends as a finished unit, a celluloid or the like tube engaging
5 over and covering said binder, and prongs on said binder engaging against the inner face of said celluloid tube to hold it in position, said prongs being stamped from the material of said binder, and located near the ends thereof, and having
10 inwardly directed end portions adapted to act as cam portions to bend inwards when the celluloid tube is slid into position.

5. An attaching tip for suspender cords, comprising a metallic binder engaged around the adjacent ends of a suspender cord and a button
15 loop, prongs stamped from the sides of said binder and extending outward, and a celluloid or the like tube engaged over said binder and having its inner face engaging said prongs to hold said tube in position and prevent rotation
20 of said tube on said binder.

6. An attaching tip for suspender cords, comprising a metallic binder engaged around the adjacent ends of a suspender cord and a button
loop, prongs stamped from the sides of said binder and extending outward, and a celluloid or the like tube engaged over said binder and having its inner face engaging said prongs to
hold said tube in position and prevent rotation
of said tube on said binder, said tube having its
ends turned inward to prevent longitudinal movement of said tube with relation to said binder.

LESTER J. JOSEPHS.