J. Twamley,

Suspender.

No 108.067. Patented Oct. 4. 1870.

Fig. 1.

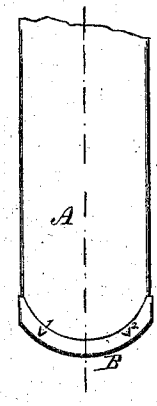


Fig. 2.

Fig. 3.

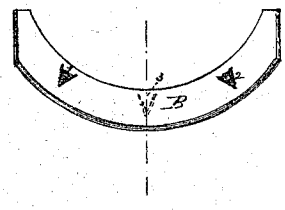


Fig. 4.

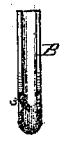
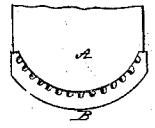


Diagram.



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United States Patent Office.

JAMES TWAMLEY, OF NEW YORK, N. Y.

Letters Patent No. 108,067, dated October 4, 1870.

IMPROVEMENT IN METALLIC BINDINGS FOR TEXTILE FABRICS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JAMES TWAMLEY, of New York, of New York county, in the State of New York, have invented certain new and useful Improvements in Metallic Binding for Textile Fabrics; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing making part of this application.

My invention relates to a new method of attaching metallic bindings to the tips or ends of suspenders, garters, &c.

Previous to my invention it has been customary to tip the ends of suspenders, garters, &c., with a binding or edging of sheet metal, in order that the ends of such textile fabrics might not easily fret or ravel, and to make such articles of wear more durable and desirable. But in all instances in which such articles have been manufactured the metallic bindings or tips have been secured to the fabric either by simple circular indentations, or, more generally, by making a series of small corrugations crosswise of the binding, or in the direction in which the tendency to slip off would be. The objection to this method of attachment has been that the bindings are so easily pulled off that the advantage intended to be gained by the use of them is in a great measure lost.

My invention has for its object to provide a method of attachment of the metallic binding to the textile fabric which will insure the lasting retention of the parts together, while at the same time the manufacture is not rendered any more expensive, and thus produce all articles requiring metallic binding in a much more desirable condition than that in which they have heretofore been put into the market; and to these ends,

My invention consists in forming the metal binding with points cut in it in such a direction, and afterward bending these points to impinge on the textile fabric, in such a manner that the binding will be securely fastened to the fabric, and in such a manner that any strain exerted to detach the parts will have a tendency to more securely interlock or fasten them together, as will be hereinafter more fully explained.

To enable those skilled in the art to make my invention, I will proceed to describe it more minutely, referring by letters to the accompanying drawing, in which—

Figure 1 is an elevation, and

Figure 2 a section of a portion of a suspender-strap or garter, having the end tipped with metal, according to my invention.

Figures 3 and 4 are detail views, in elevation and cross-section, of the metal binding, drawn on an enlarged scale, and illustrating the peculiar form of the securing points or barbs.

In the several figures the same part will be found designated by the same letter of reference.

A illustrates part of a suspender-strap, ladies' garter, or other article of a fibrous and textile nature, to the end of which is applied the metallic binding or tip B, as clearly illustrated.

The binding B is, as usual, made to conform in contour to the shape of the edge of the material which is to be bound, and is placed over said edge in the usual manner, and as shown, but, in lieu of being clamped or fastened onto the material A in the customary manner, by small corrugations, as shown at the "diagram" in the drawing, it has cut in it several barbs or points, 1 2 3, &c., which are so arranged, with their points toward the outer and their roots toward the inner edge of the binding, that, when bent inward, so as to impinge upon and partially penetrate the material A, (as seen at figs. 2 and 4,) they will take a firm bite or hold on the material, and securely fasten or interlock the metallic binding B and material A together. It will be understood that the points or barbs 1 2 3 will be further cramped or buckled into the material by any pull on the parts which would have a tendency to separate the binding from the material, and that thus any tendency to pull these parts away from each other will only tend to more securely interlock or fasten them together. Of course the number, precise shape, and size of the securing barbs 1 2 3 may be varied to suit the character of the article, and not material to the carrying out of my invention, so long as a sufficient number of securing points be used, of a proper size, and of such a shape that the operation will be such as I have explained and illustrated.

In the manufacture of metal-bound articles the barbs may be either cut in the binding, when it is made, and afterward bent as the binding is applied to the article A, or the cutting and bending of the barbs may be done simultaneously as the binding is applied to the article, by suitable machinery for that purpose.

The operations of forming and bending and putting together the textile fabric form no part of my invention, and will be performed in the manner most expedient in the manufacture of various articles to which my invention is applicable. It is most expedient, however, to arrange the barbs, if used on both sides of the binding, so that they will not be opposite, but so that the point of each can be upset against the plane portion of the metal binding opposite, as shown.

Having explained my invention so that those skilled can make use of it,

What I claim as new, and desire to secure by Letters Patent, is—

A metallic binding for textile fabrics, united thereto by means of "barbs" turned toward the fold of the metal, substantially as and for the purposes set forth.

In testimony whereof, I have hereunto set my hand and seal, this 27th day of June, 1870.

JAMES TWAMLEY. [L. S.]

Witnesses:

J. MCINTIRE,

CHAS. E. WARREN.