2 Sheets—Sheet 1.

G. B. GURLEY.

SUSPENDERS.

No. 193,651. Patented July 31, 1877.

Fig. 1

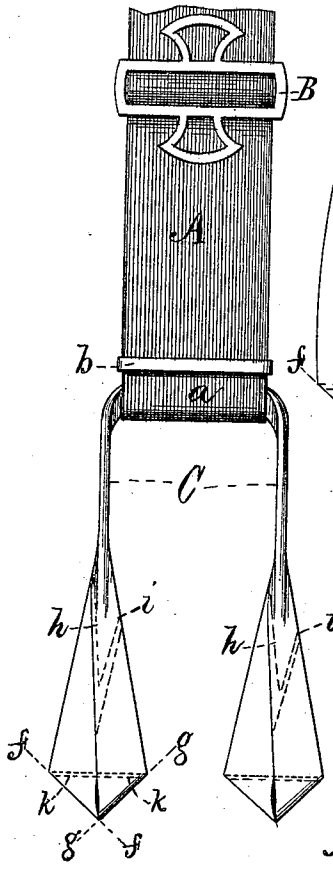


Fig. 4.

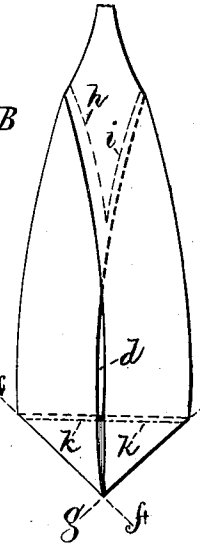


Fig. 2.

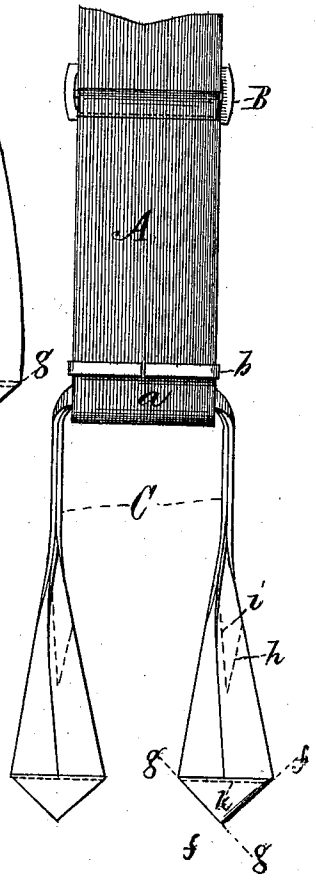
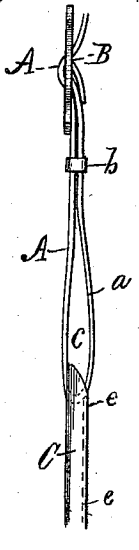


Fig. 3



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2 Sheets—Sheet 2.

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SUSPENDERS.

No. 193,651. Patented July 31, 1877.

Fig. 5.

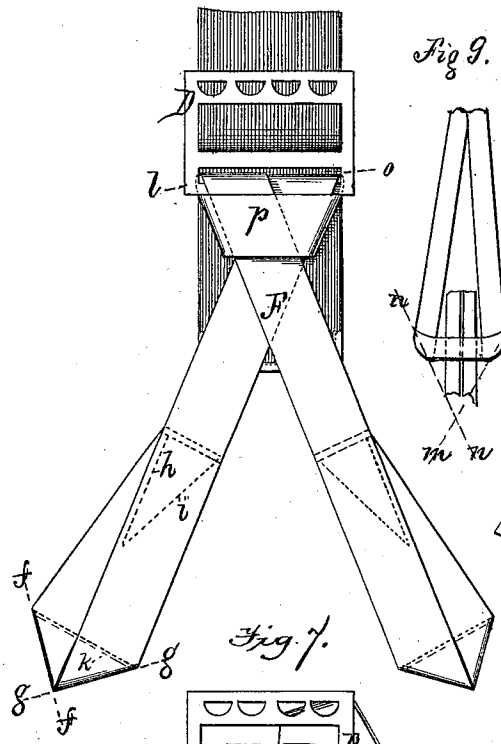


Fig. 9.

Fig. 6.

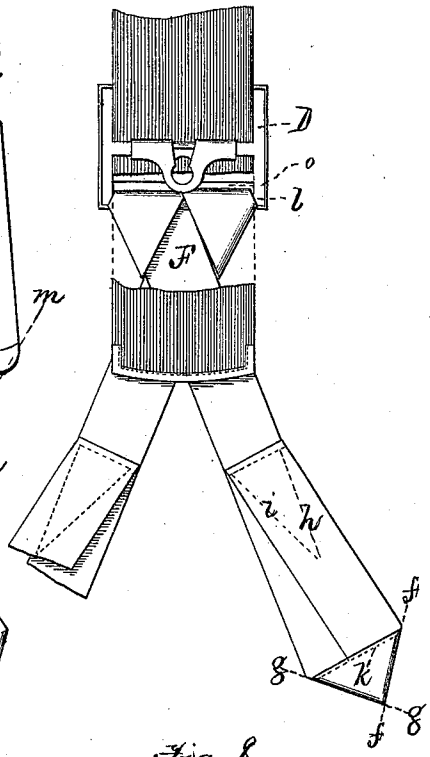


Fig. 7.

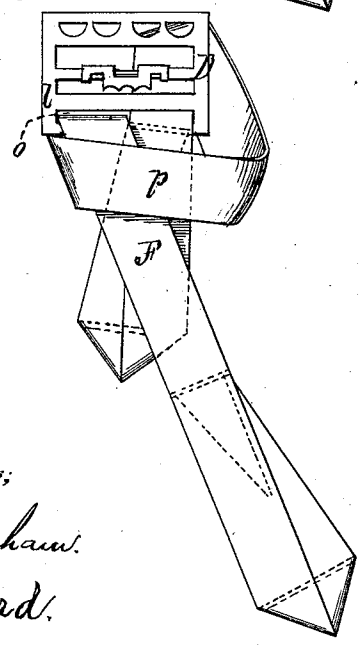
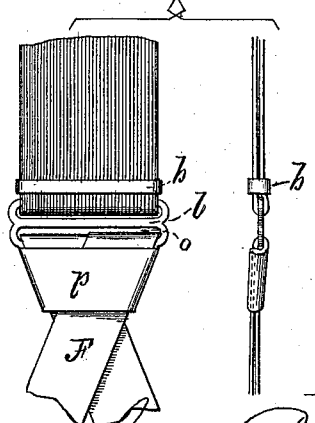


Fig. 8.



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UNITED STATES PATENT OFFICE.

GEORGE B. GURLEY, OF NEW YORK, N. Y.

IMPROVEMENT IN SUSPENDERS.

Specification forming part of Letters Patent No. **193,651**, dated July 31, 1877; application filed June 22, 1877.

To all whom it may concern:

Be it known that I, GEORGE B. GURLEY, of the city, county, and State of New York, have invented certain new and useful Improvements in Suspenders, of which the following is a specification:

This invention relates to that class of suspenders in the construction of which the use of leather trimmings is entirely dispensed with, all the parts, excepting buckles and slides, being formed from webbing.

The present invention consists, first, in the peculiar formation of the ends, the webbing of which the ends are made being so folded and overlapped upon itself as to form a substitute for the usual worked button-hole, such substitute presenting a similar shape to a button-hole, the various selvage edges of the webbing forming the faces and bottom thereof; second, in the method of applying and attaching such suspender-ends to the webbing forming the body of the suspender; and, lastly, in the application of a metal slide to the body of the suspender, in connection with such suspender-ends, all of which, together with details of the arrangement, application, and the various modifications, will be hereinafter fully pointed out and described.

In the drawings, which form an essential part of this specification, Figure 1 is a front view of a suspender and its ends, in which my invention is fully embodied. Fig. 2 is a reverse view of the same. Fig. 3 is an end view thereof. Fig. 4 is an enlarged front view of the suspender-end, showing method of folding. Fig. 5 is a front view of a suspender embodying my invention in a modified form. Fig. 6 is a rear view of the same. Fig. 7 is a detached view of the suspender-end, showing method of applying it to the buckle; and Fig. 8 is a view showing the application of the modified form of suspender-ends to the suspender shown in Figs. 1 and 2.

Similar letters of reference found in the various figures of the drawings will locate and point out corresponding parts.

It is a fact well known to all manufacturers of suspenders that in the present form of constructing suspenders and suspender-ends, many serious defects exist, calling for a new form of construction, by which the faults may be overcome and eradicated. The use of leather trimmings is very objectionable, owing to the rapid deterioration thereof from the effects of perspiration. The leather not only decays and gives way, but frequently hardens, and in that condition wears the clothing. The absorption into the leather of the perspiration also has the effect of soiling the under-clothing. Furthermore, such leather trimmings are costly, which, added to the labor of attaching them to the webbing, renders it decidedly advantageous to dispense all that class of trimmings.

The attachment of webbing suspender-ends to the suspender proper by rings, clasps, slides, and buckles, and other similar metallic devices, is objectionable, being costly, and also very annoying to the wearer.

In my invention I have reduced all such parts to the minimum, and form the doubled suspender-end from a single piece of webbing.

A represents the body of the suspender, made from the usual form and width of elastic or non-elastic webbing. Its base or lower end *a* is looped, and secured to a sliding buckle, B, which is attached to and slides upon the body A in the usual manner. *b* is a sliding clasp or guard, made from metal, and encircling both the body A and the looped end *a* where doubled, and is adjustable up and down thereon at pleasure. The doubling of the suspender-body A at its base forms an elastic pocket, *c*, (see Fig. 3,) through which the suspender-end is passed, the sliding guard *b* being raised, as shown, for that purpose. After the end is passed through the pocket the clasp *b* is lowered to the position as shown in Figs. 1 and 2, thus closing the pocket *c* down upon the suspender-end, holding it in place, also aiding in preventing the doubled body of the suspender from being displaced, and the buckle B from slipping.

The construction of the body of the suspender does not differ from the general form in common use, any of the sliding buckles, or buckles of forms similar to those shown in Figs. 5, 6, and 7, being used in connection therewith. The suspender-ends, however, are modified to meet these various forms, as

will now be fully explained. I prefer to dispense with all of the metal attachments possible, and to use but one buckle, and prefer that shown in Figs. 1 and 2.

The suspender-end C consists of a single piece of webbing of suitable length, each end of which is folded and overlapped upon itself, as shown in Figs. 1, 2, 4, 5, and 6, the first fold being made on the line *f f*, the second fold on line *g g*. (Seen best in Fig. 4.) These folds are secured by lines of stitches *h* and *i* at the top, and the folds at the bottom by line of stitching *k*. This system of folding results in forming the equivalent of the button-hole, all of the edges and bottom of which are formed of the selvage edges of the webbing. This at once gives the advantage of great strength, as the heavy selvage edge is far superior to any worked button-holes.

In Fig. 4 the webbing is shown drawn sidewise in order to expose the opening *d*, through which the button passes. The central portion of the webbing, between the two folded ends, is doubled over upon itself, and united at the edges by a line of stitches, *e*. This being a common method in the case of leather ends, no further description is needed. This suspender-end, combined with the suspender-body shown in Figs. 1 and 2, has, in addition to the merit of cheapness, the advantage of longer life than those ends attached to metal clasps or buckles.

It is plainly obvious that the strain upon the base of the looped pocket *c* will cause the outer selvage edges of the webbing to give, and that as the strain is lessened or removed the elastic nature of the webbing will cause it to at once regain its first position, and this results in preventing any great amount of wear upon either the suspender or suspender-ends.

In some cases it has been found desirable to adapt my improved form of suspender-end to the forms of metal clasps and buckles now in use. I therefore have, in Figs. 5 to 9, inclusive, shown how it may be so applied. In Fig. 8 I also show the sliding guard *b* applied in connection therewith.

The ends of the suspender-ends F are both overlapped and finished as first described, the body thereof, between the ends, being left flat, and afterward folded into a loose knot, as shown, about the clasp *l*, which may be a part of the buckle, as in Fig. 7, or a simple double slotted clasp only, as in Fig. 8.

In forming this knot about the lower arm of the clasp *l*, the suspender-end is overlapped upon itself at the center, as shown in Fig. 9, upon the lines *m m n n*. The two folded ends, being laid flat together, are then passed through the slot *o* in the base of the clasp *l*, (being inserted from the rear,) and drawn until the folded portion *p* is brought to a position near the base of the clasp. The two ends are then passed through the loop *p* in front of the clasp, and the knot thus formed drawn closely thereto, taking the form and position as shown in Figs. 5 and 6.

I claim as my invention—

1. The combination of the suspender-body A, looped at its base, forming a pocket, *c*, provided with sliding buckle B and adjustable guard *b*, and the suspender-end C, the two ends of which are formed by overlapping the webbing upon itself on lines *f* and *g*, and secured by stitching at lines *k*, *h*, and *i*, forming an equivalent of a button-hole, substantially in the manner as herein shown and set forth.

2. The suspender-end C, each end of which is formed by overlapping the webbing upon itself on lines *f* and *g*, such folds being secured by lines of stitching *k*, *h*, and *i*, such arrangement of folds forming an opening, which is a substitute for a button-hole, the faces and bottom of which are formed by the selvage edges of the webbing, all substantially as herein shown and set forth.

3. In combination with the suspender-body A, looped at its base, forming a pocket, *c*, and provided with sliding buckle B, and a suspender-end inserted through the pocket *c*, the sliding guard *b*, encircling the body of the suspender, applied as and for the purposes as herein shown and set forth.

4. The combination of the suspender-body A, provided with buckle D, having slot *o* in its base, and the suspender-end F, the two ends of which are formed by overlapping the webbing upon itself on lines *f* and *g*, and secured by lines of stitching at lines *k*, *h*, and *i*, such suspender-end being folded at its center on lines *m n*, and attached to the base of the buckle D by passing the ends through the slot *o*, and thence through the folded loop *p* of the webbing, forming a knot, all substantially as and for the purposes as herein shown and set forth.

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