

G. H. White.

Shoestring Ferrule.

N^o 90,710.

Patented Jun. 1. 1869.

Fig. 6.



Fig. 4. Fig. 5.



Fig. 3.

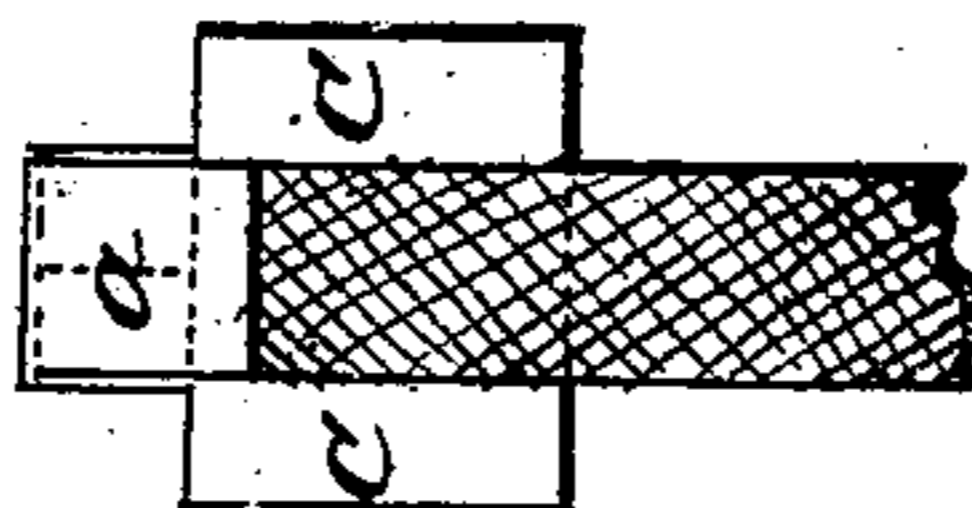


Fig. 2.

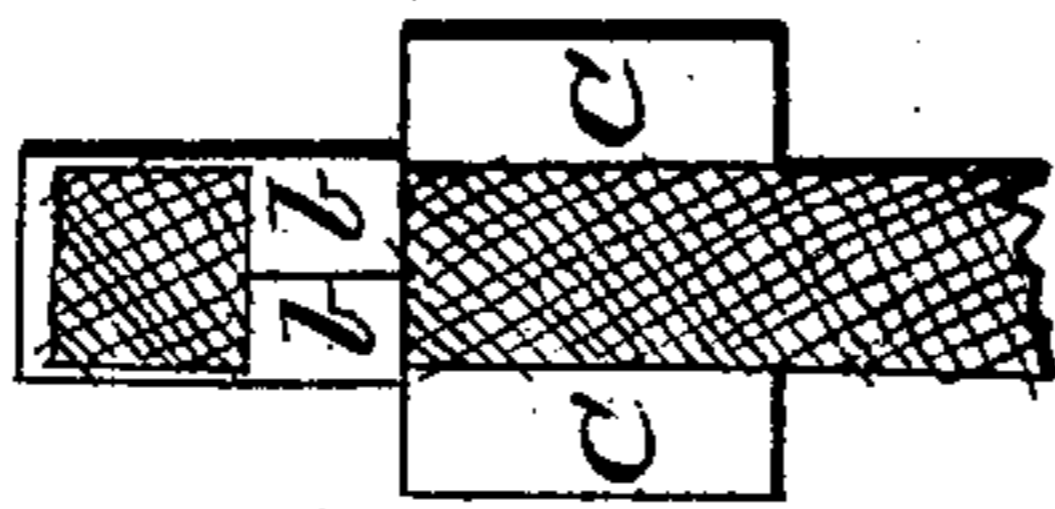
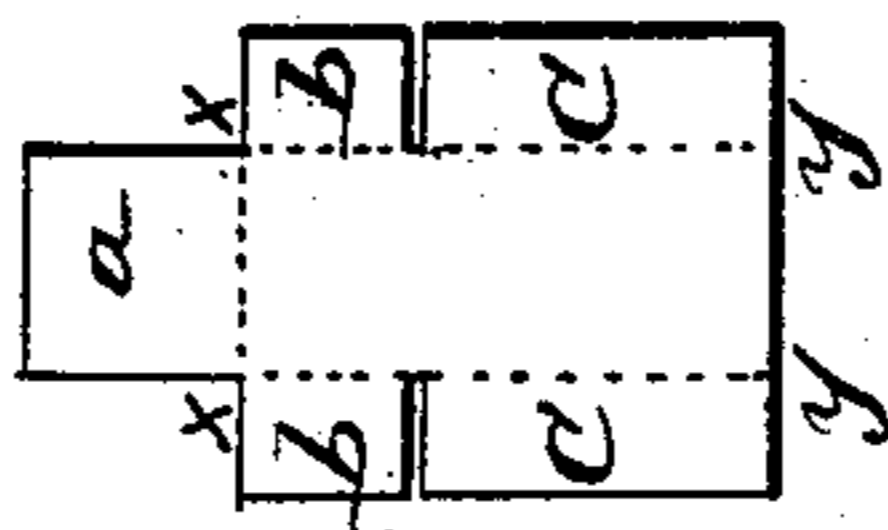


Fig. 1.



Witnesses:

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Letters Patent No. 90,710, dated June 1, 1869; antedated May 20, 1869.

IMPROVED FERRULE FOR SHOE-STRINGS.

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, GEORGE H. WHITE, of the town of Huntington, county of Suffolk, and State of New York, have made certain new and useful Improvements in Ferrules, or Metal Binding for the Ends of Shoe-Strings, and other Laces; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, making part of this specification.

The object of this invention is to have a metal binding for the ends of shoe and other laces, which will hold firmly upon the end of the lace, and does not slip from it in using it, as is frequently the case with those heretofore known and used.

In producing this metal binding, the same is cut out from flat sheet-metal, of a form as represented in Figure 1.

Figure 2 represents a face view of the binding, after the first operation of enclosing the lace has been performed.

Figure 3 is the same, after the second, and

Figure 4, the same, after the third operation of enclosing has been performed.

Figure 5 represents a vertical section of the same, as shown in fig. 4.

Figure 6 is a perspective view of the binding, after completed and ready for use.

Similar letters of reference indicate corresponding parts in the several figures.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction in detail.

The metal blank, of which the binding is made, is constructed with a central lip, *a*, and two lips, *b* and *c*, on each side, of which the lips *b b* are narrow, and are immediately under the lip *a*.

The dotted lines, *y x* and *x y*, indicate the lines to

which these lips are turned or bent, and the distance from *x* to *x* is made corresponding with the lace for which it is made or used.

After this blank is obtained, the end of the lace is laid centrally upon it, and so that the end of it projects a little beyond the lips *b b*, and the lips *b b* are turned, or folded to lie upon the lace, as shown clearly in fig. 2.

Hereafter, I fold the lip *a* with the projecting end of the lace upon the lips *b b*, as shown in fig. 3, and finally, I fold in the lips *c c*, which close upon the end of the lip *a*, as shown in figs. 4 and 5.

After these lips have been closed upon the lace, and the binding been pressed, and well flattened down, the whole of it is rolled up, or swaged, in cylindrical, or tubular form, as shown in fig. 6, and is then ready for use.

The cutting of the blank can readily be performed in the usual cutting-press, but particular mechanism is required to fold these lips, similar to those employed in folding envelopes, and the rolling off, or forming it in tubular shape, is readily produced in a rapid manner by swaging the same between proper dies.

From the foregoing, it will be seen the binding herein shown encloses the end of the lace with firmness, is not liable to slip from it, and is more stiff and durable than those heretofore known and used.

Having fully described my invention,

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

A metal binding for shoe-strings, and other laces, constructed of a blank, which is folded in the manner shown, substantially as and for the purpose specified.

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Witnesses:

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