

(No Model.)

M. H. BORTREE.
LACING STRIP FOR SHOES, &c.

No. 575,387.

Patented Jan. 19, 1897.

Fig. 1.

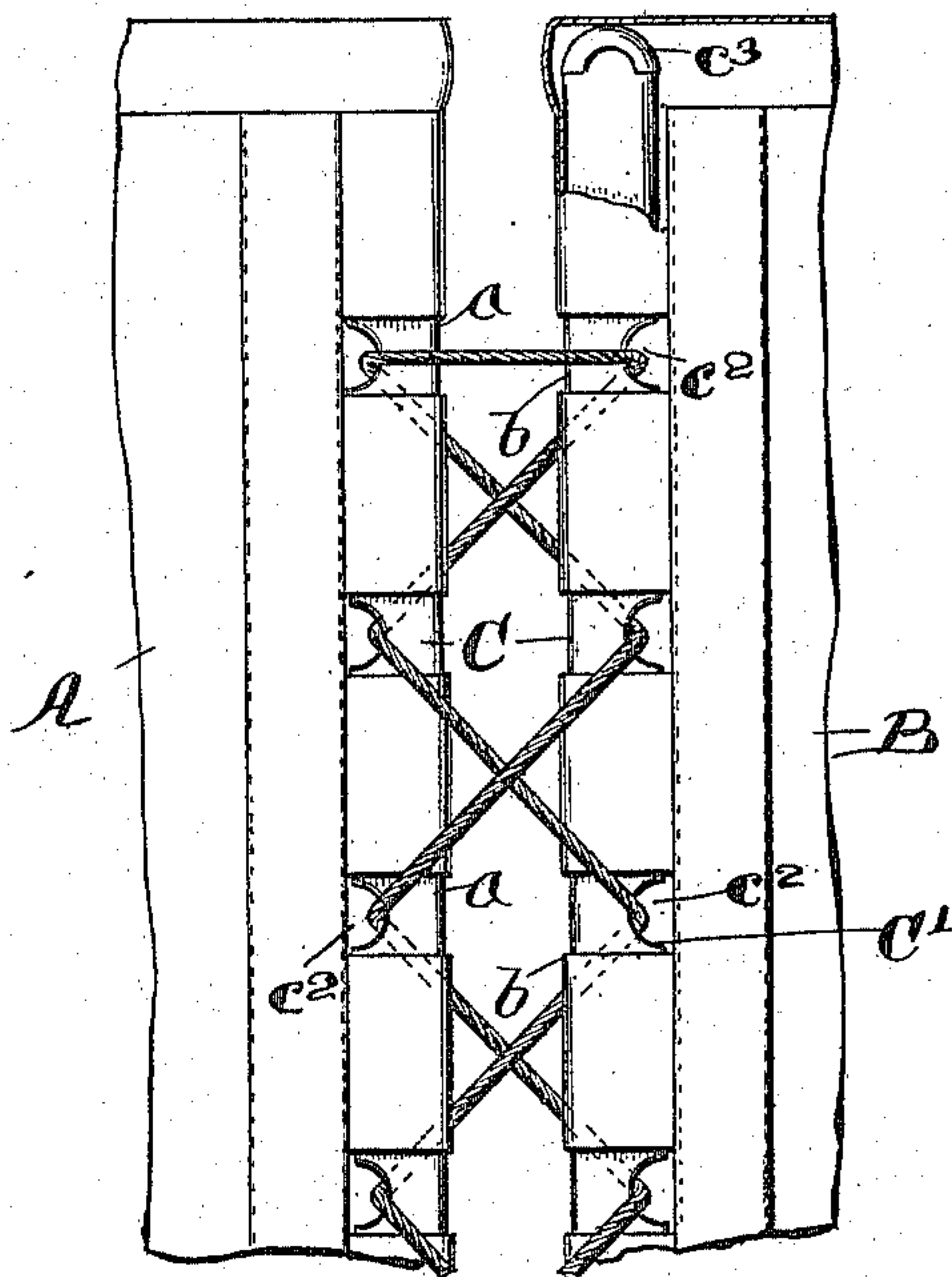


Fig. 2.

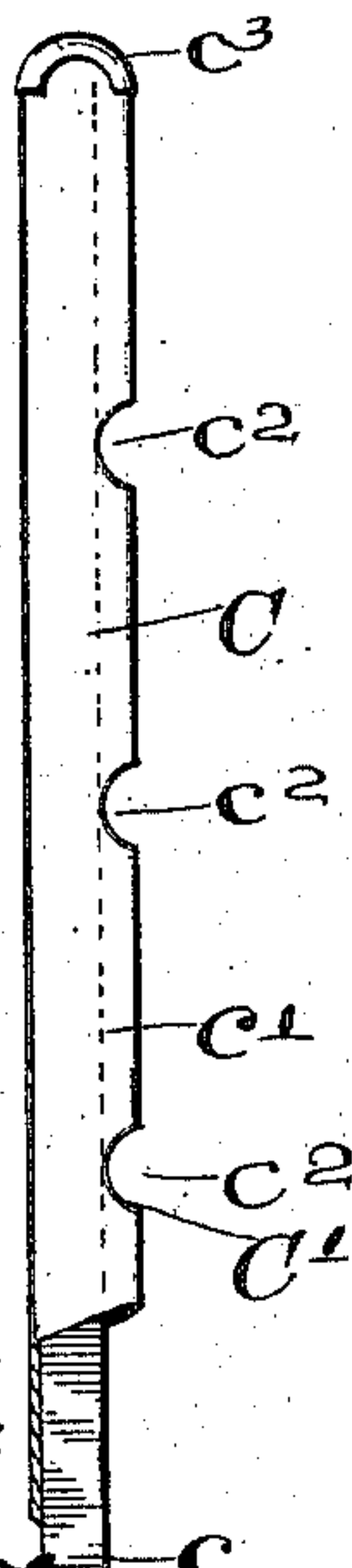


Fig. 4.

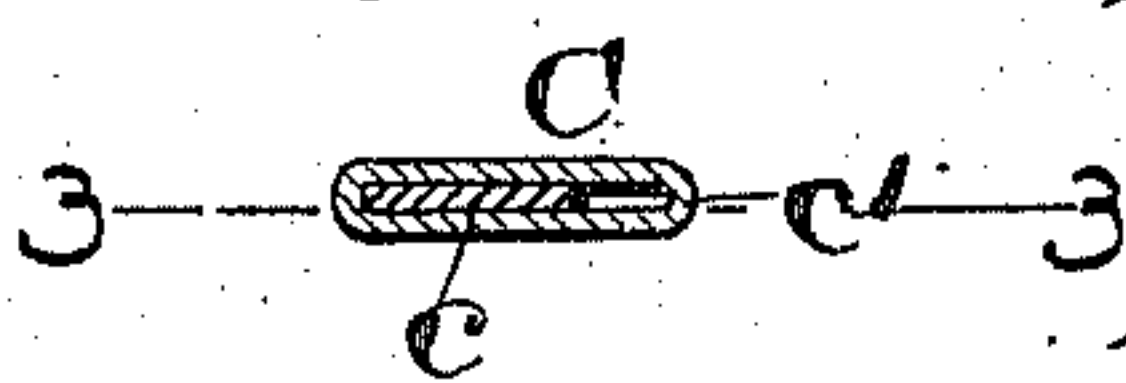


Fig. 5.

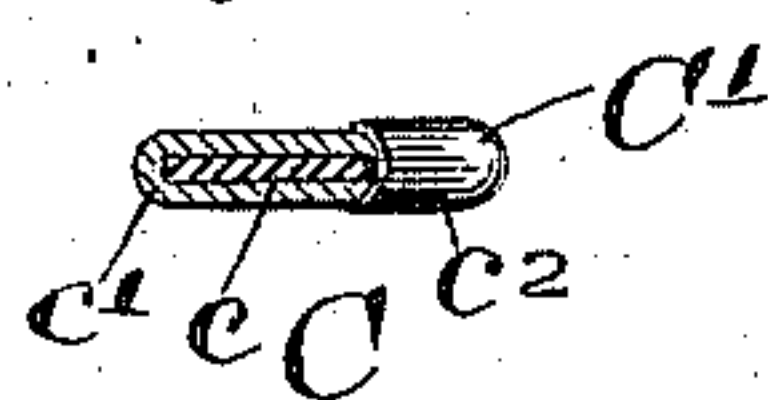
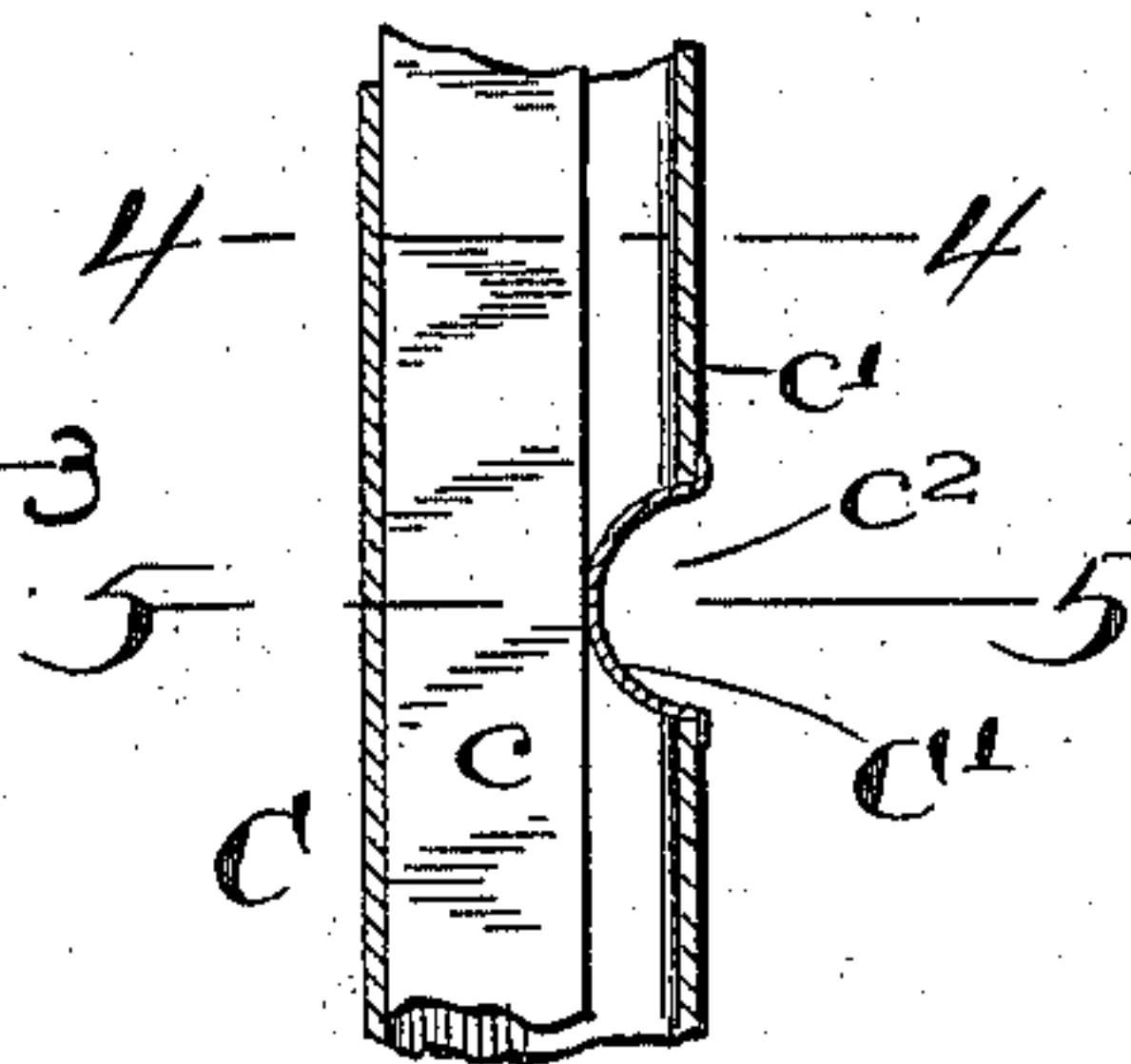


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

MARY H. BORTREE, OF GRAND RAPIDS, MICHIGAN.

LACING-STRIP FOR SHOES, &c.

SPECIFICATION forming part of Letters Patent No. 575,387, dated January 19, 1897.

Application filed February 28, 1896. Serial No. 581,105. (No model.)

To all whom it may concern:

Be it known that I, MARY H. BORTREE, a citizen of the United States of America, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Lacing-Strips for Shoes and Analogous Articles, of which the following is a specification.

My invention relates to certain improvements in lacing-strips for use on shoes and other wearing-apparel; and it consists in certain novel features of construction, which will be fully described in this specification and particularly pointed out in the appended claims.

To such end it consists in a certain novel lacing device, the nature and essential features whereof will appear from the following specification and claims.

The invention is illustrated in the drawings presented herewith, in which—

Figure 1 is a front view of the meeting edges of an article of apparel with my improved lacing-strip applied thereto. Fig. 2 is a side view of the strip. Fig. 3 is a vertical section in line 3 3 of Fig. 4 and shown upon an enlarged scale. Fig. 4 is a cross-section in line 4 4 of Fig. 3, and Fig. 5 is a cross-section in line 5 5 of Fig. 3.

In the drawings, A B represent the meeting edges of an article of apparel provided with my lacing-strip in its preferred form. The meeting edges of the article are folded upon themselves, as seen in Fig. 1, and stitched to the remaining portion of the article and formed so as to present a series of openings *a b*.

Into the pockets thus formed are slipped the lacing-strips, each consisting of a flexible flattened tubular casing *c'*, inclosing a materially narrower band *c*, preferably of spring metal. The casing has circular segments cut from its inner margin to form notches *c'*, registering with the openings *a b*, and the band *c* fills the internal space between the inner limits of the notches and the opposite side of the casing and slides freely therein. The parts being thus in place, a lacing-cord may be passed through the openings *a b* to rest in the notches and apply strain in the plane

of both casing and band without tending to distort these openings.

The lacing-strip may be removed as a whole from the pocket in which it lies, or the band *c* may be removed and replaced by another without disturbing the casing or the lacing.

It is obvious that a somewhat inferior lacing-strip can be made out of a single band of metal with the notches stamped out of one of its edges, and I have found this very well for a cheaper grade of articles. The ends of the strips may be provided with a cap *c'* to form a finish for the ends thereof, if desired.

The invention thus far described has obvious advantages, but practically the notched strip, whether of one or two pieces, is greatly improved by applying to its notches a bead *C'*, covering the margin of the notch itself and the adjacent portion of the edge in which the notch is cut. This bead is somewhat like a half-eyelet in appearance. Were an eyelet cut through diametrically and were the material of each half then extended to arch the space between the cut flanges and integrally unite them with each other and with the cut portion of the eyelet-tube, the structure thus formed would be approximately the bead here employed. I have found it inexpensive and very satisfactory to form the bead, in place, of celluloid, which rigidly unites with the parts upon which it is placed. Whatever its material, the bead or half-eyelet gives a smooth rounded surface over the margin of the notch and also over the adjacent portions of the edge in which the notch is cut. Where the casing is used, the bead firmly unites the edges formed by cutting the notches, and, as it rests against the edge of the band *c*, it transmits strain directly thereto, although there is no attachment.

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

1. The combination with a flexible lacing-strip having along one margin segmental notches, of the rigidly-attached beads, or half-eyelets, covering the margins of the notches and the immediately adjacent portions of the edge in which the notches are cut.

2. The combination with the flexible tubular casing provided with the notches along

one margin, of the narrow band inserted in the casing between the inner limits of the notches and the opposite side of the casing.

3. The combination with the flat tubular
5 casing having the segmental notches cut in one margin, of the beads covering and uniting the edges formed by such cutting, and

the band filling the internal space between said beads and the opposite side of the casing.

MARY H. BORTREE.

Witnesses:

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