(No Model.)

A. C. JAMES.

SHOE LACER.

No. 422,131. Patented Feb. 25, 1890.

Fig. 1.

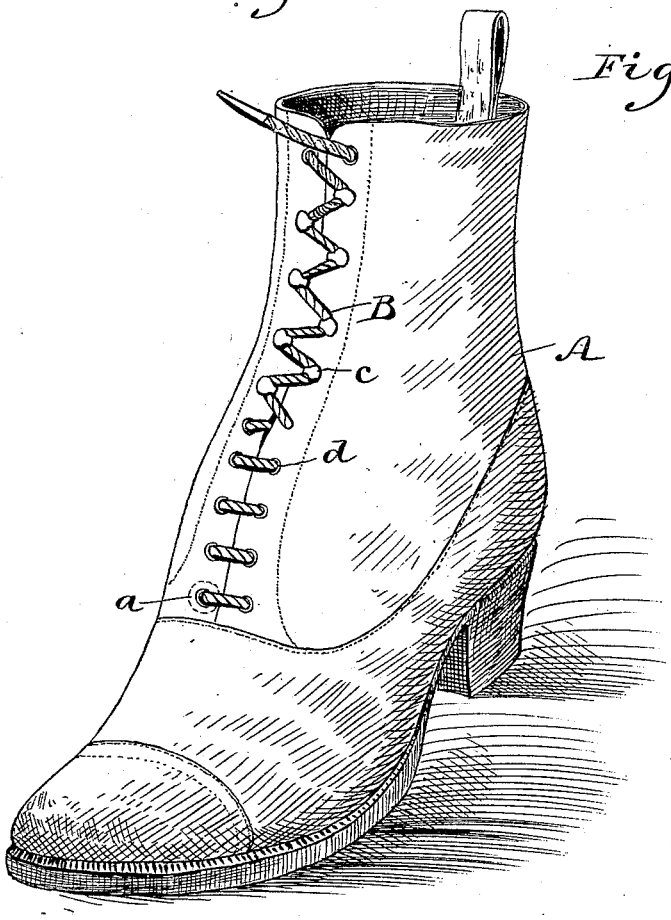

Fig. 2.

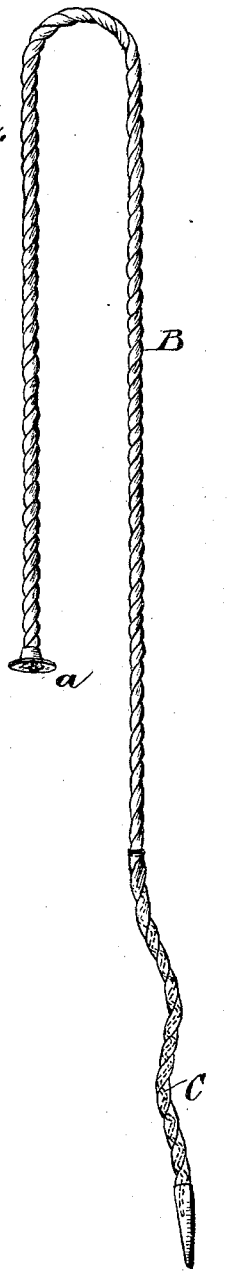

Fig. 3.

WITNESSES:
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ABNER C. JAMES, OF POMONA, CALIFORNIA.

SHOE-LACER.

SPECIFICATION forming part of Letters Patent No. 422,131, dated February 25, 1890.

Application filed July 23, 1889. Serial No. 318,400. (No model.)

To all whom it may concern:

Be it known that I, ABNER C. JAMES, of Pomona, in the county of Los Angeles and State of California, have invented a new and useful Improvement in Shoe-Lacers, of which the following is a full, clear, and exact description.

The main object of my invention is to provide an improved means for fastening the lacer after it has been been properly laced and drawn up.

The invention consists in the construction hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a shoe with my improved lacer applied thereto. Fig. 2 is an enlarged detached view of the lacer. Fig. 3 shows a modified method of applying the stiffening material to the end of the lacer.

A represents a shoe, which is provided with eyelets *d* and hooks *c*, of the usual, form for the engagment of a lacer B. It will be seen in Fig. 2 that one end portion of the lacer has one or more fine wires C incorporated with its material, so as to measurably stiffen the lacer and render it capable of retaining any form it is bent into. As shown, the wire is wound in with the fibrous strands of the lacer, and appears in dotted lines in the figure named. The wire used should be non-corrosive and annealed sufficiently to enable it to withstand repeated bending and a reverse movement to secure the end in the manner indicated in Fig. 1, or release it when the shoe is to be removed.

The method of applying the stiffening-wire may be varied—as, for instance, it may be inserted, woven, or platted into the material of the lacer, as shown in Fig. 3, which will effect the same result as if the metal wire were wrapped around with the lacer material, as shown in Fig. 2, and I therefore do not restrict myself to the precise method shown of carrying into effect my invention. The stop or button *a* is placed upon the shoe-lacer at one end, as shown in Fig. 2, and serves to check the string or lacer when the lacing of the shoe is begun. Its position is indicated on the shoe in Fig. 1 in dotted lines. The lacer as a single strand is inserted in the eyelet-holes and placed upon the hooks in the usual manner, and when it has been drawn sufficiently tight to hold a shoe firmly and comfortably upon the foot of a wearer the end of the lacer is bent over, as shown. Owing to the stability of the stiffening-wire, combined with the fibrous material of the lacer, the bent end will remain in that condition until a reverse movement releases it.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

As an improved article of manufacture, a shoe-lacer provided at its ends with a stop and tip, respectively, and a flexible metallic strand C, incorporated in the lace between its tip and middle portion, the metal strand being of a length to be bent back and forth in the hooks or eyelets of a shoe, substantially as set forth.

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