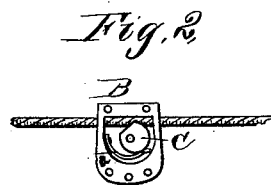
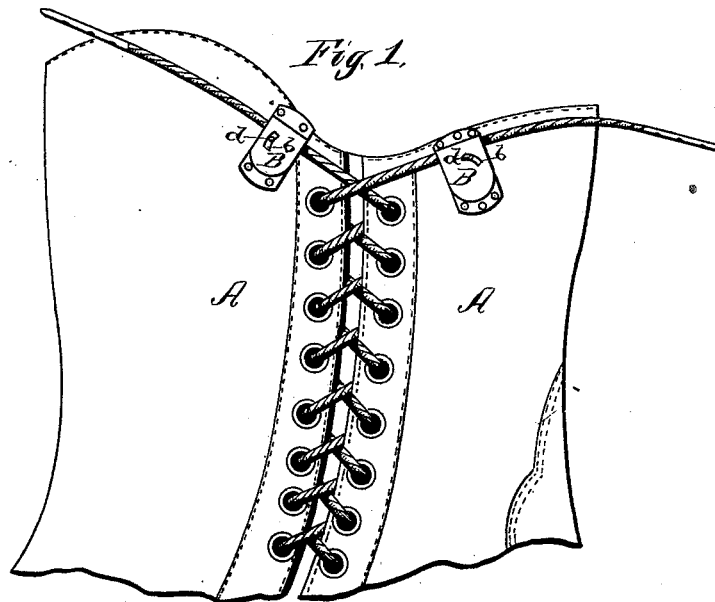


H. C. KLEIN.
Shoe-Fastener.

No. 213,666.

Patented Mar. 25, 1879.



Witnesses:
H. C. Ing. Arthur
W. J. Brooks.

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UNITED STATES PATENT OFFICE.

HENRY C. KLEIN, OF MUNCIE, INDIANA.

IMPROVEMENT IN SHOE-FASTENERS.

Specification forming part of Letters Patent No. **213,666**, dated March 25, 1879; application filed February 18, 1879.

To all whom it may concern:

Be it known that I, HENRY C. KLEIN, of Muncie, in the county of Delaware and State of Indiana, have invented certain new and useful Improvements in Shoe-Lace Fasteners; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which—

Figure 1 is a side elevation of part of a shoe, showing the mode of using my invention; and Fig. 2 is a view of the fastening device itself, with the back removed.

The object of my invention is to provide a simple and cheap device for securing a shoe-lace, which will obviate the annoyance of the laces becoming untied, and enable a shorter lace to be used, doing away with the long ends, which frequently become entangled; and it consists in supplying the shoe with a small box or case, through which the lace is passed, and automatically held by a cam operated by a spring, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation.

A represents a shoe with the usual opening, provided on each side with eyelet-holes for lacing. At the top of the shoe, on each side of the opening, is secured a small metal box or case, B, the back of which is extended at the ends, and provided with small holes for securing it to the shoe by stitches or rivets, as may be desired.

The interior of the box B is provided with

a cam, C, which is pressed upward by a small spring, *a*, as shown in Fig. 2. In the top or front of the box B is a curved slot, *b*, through which projects a small pin, *d*, secured in the cam C, for pressing back the cam to relieve the lace.

In operation the shoe is laced up, and the ends of the laces passed through the box or case B, through holes in the sides for that purpose, and the cam C, pressed upward by the spring *a*, binds the lace firmly against the top of the box.

It will readily be seen, by reference to Fig. 2, that while the lace is drawn easily through the box in one direction, the cam giving way before it, it is impossible to draw the lace in the opposite direction, as the more strain on the lace the tighter it is clamped by the cam. To unfasten the lace, it is only necessary to push back the cam by means of the pin *d*, and the lace can then be readily withdrawn.

It is obvious that this fastener may be applied also to corsets, and, indeed, to any and all purposes where lacing is used.

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

The fastener B, provided with cam C and spring *a*, and adapted to receive and hold the lacing, substantially as herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

HENRY C. KLEIN.

Witnesses:

CHAS. A. WILLARD,
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