T. A. McDONALD.
Shoe-Lace Fastening.

No. 198,134. Patented Dec. 11, 1877.

Fig. 1.

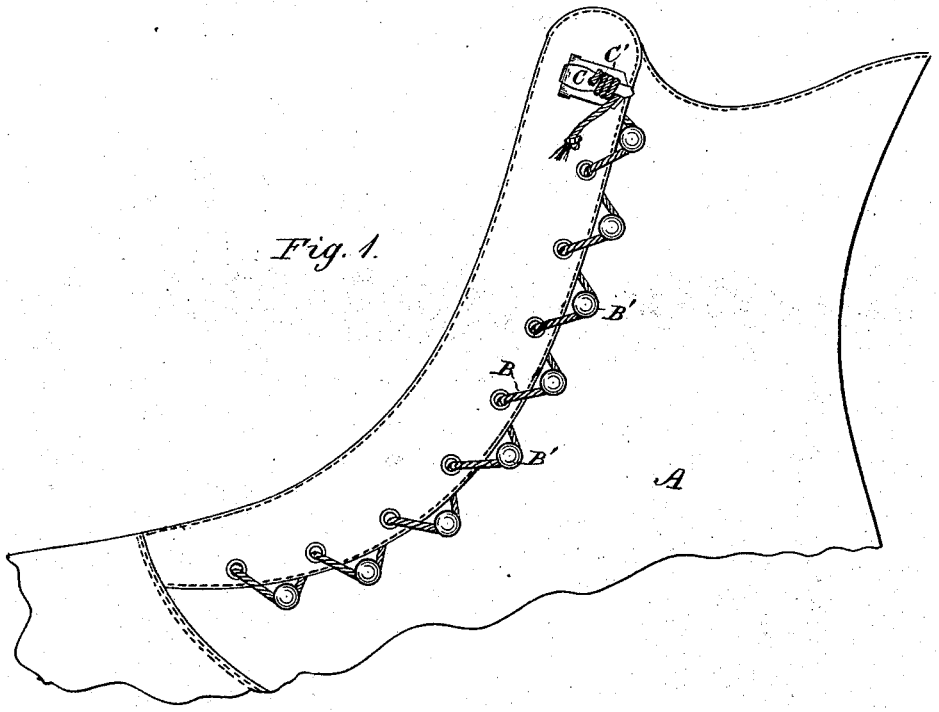
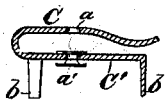


Fig. 2.

Fig. 3.



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THOMAS A. McDONALD, OF DURHAM, NOVA SCOTIA, CANADA.

IMPROVEMENT IN SHOE-LACE FASTENINGS.

Specification forming part of Letters Patent No. **198,134**, dated December 11, 1877; application filed November 8, 1877.

To all whom it may concern:

Be it known that I, THOMAS A. McDONALD, of Durham, in the county of Pictou, Nova Scotia, Canada, have invented a new and Improved Shoe-Lace Fastening; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a side view of a portion of a shoe, showing a single-cord lace and my improved fastener for the same applied thereto. Fig. 2 is a top detail view of the fastener. Fig. 3 is a longitudinal section of the same.

My invention relates to an improved fastening for that form of shoe-lacing in which a singe cord is used, which is permanently laced in eyelets in one flap, and the turns or loops formed thereby are adapted to be buttoned over hooks or buttons on the other flap without removing the lacing-cord from the eyelets. The fastener consists of a single spring-finger made in a continuous piece with and bent around parallel to a perforated base-plate, which is affixed to one of the flaps by clips and an eyelet, the said base-plate and spring-finger being each perforated, so that when the cord is passed through the perforations in the base-plate and the finger, and is then wrapped around the finger, a tension upon the cord, from the straining movement of the foot, presses the spring-finger tighter against the base-plate, and cramps and binds the folds of the cord wrapped around the same, thus increasing the security of the fastening in proportion to the increased strain upon the cord.

In the drawing, A represents the upper leather of a shoe to which my fastener is applied. B is the single-cord lacing, arranged permanently in eyelets in one flap, and forming turns or loops that are adapted to be buttoned over hooks or buttons B′ arranged on the other flap. The upper end of this single lacing-cord is secured by my improved fastener, which consists of a spring-finger, C, made continuous with, and bent around parallel to, and in front of, a base-plate, C′. This base-plate is attached to one of the flaps by clips *b* and an eyelet, *a′*, arranged in a central perforation just beneath a similar perforation, *a*, in the spring-finger. The spring-finger near its extremity is also bent inwardly toward the base-plate, so as to better retain the folds of the lacing wrapped about the finger.

Now, in fastening the upper end of the lacing, the cord is passed first through the eyelet in the base-plate from the inside of the flap carrying the base-plate, and then is passed through the perforation in the finger. The cord is next wrapped, with any desired number of convolutions, about the end of the finger, and the convolutions cramped past the inward curve of the finger, and securely held between the said curve and the portion of the cord passing through the holes.

With this arrangement of fastening it will be seen that the cord is quickly secured in a simple manner, and one that will not permit the accidental disengagement of the lacing, as the fastener automatically adapts itself to the varying strains upon the cord due to the motions of the foot, a greater strain upon the cord drawing the spring-finger against the base-plate, and more tightly holding the convolutions of cord around the same, while for a relaxation of the cord the spring draws outwardly, and takes up, to some extent, the slack in the cord that would permit the cord to slip over the hooks.

In applying the fastener and its lacing to the shoe, they may be located upon the side, as shown, upon the front, back, or in any other desired relation.

Having thus described my invention, what I claim as new is—

1. The fastener composed of base-plate C′, with perforation *a′*, and the perforated spring-finger, made continuously of the same piece of metal with the base-plate, and bent around over the same, with an inward curve near its extremity, substantially as described, and for the purpose specified.

2. The combination, with a single lacing-cord, B, and the hooks or buttons B′, of the fastener consisting of plate C′, with perforation *a′*, and the perforated spring-finger C, bent around from the same piece of metal and having an inward curve near its extremity, for the purpose described.

THOMAS A. McDONALD.

Witnesses:
JAMES PATTERSON,
DANIEL McDONALD.