(No Model.)

A. GROSS.

BOOT OR SHOE.

No. 592,140. Patented Oct. 19, 1897.

Fig. 1.

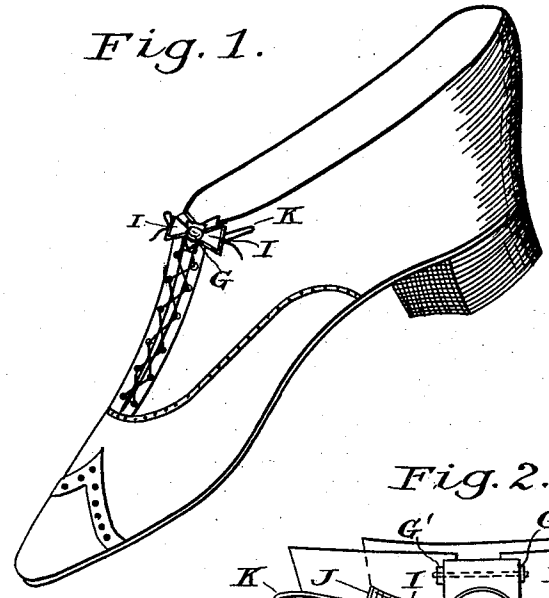


Fig. 2.

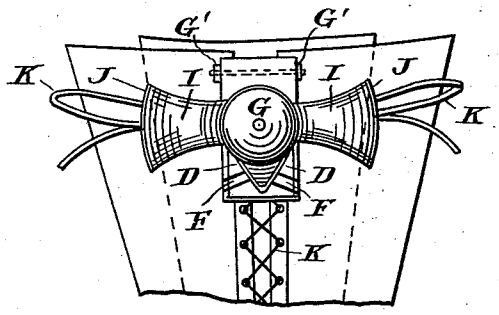


Fig. 3.

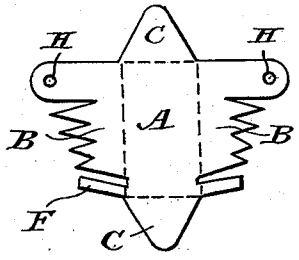


Fig. 5.

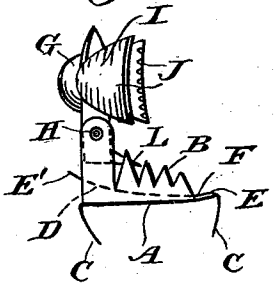
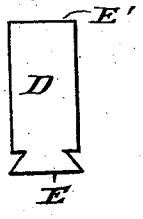


Fig. 4.



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UNITED STATES PATENT OFFICE.

AUGUSTUS GROSS, OF SYDNEY, NEW SOUTH WALES.

BOOT OR SHOE.

SPECIFICATION forming part of Letters Patent No. 592,140, dated October 19, 1897.

Application filed October 10, 1896. Serial No. 608,459. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTUS GROSS, engineer, a subject of the Queen of Great Britain, and a resident of Sydney, in the Colony of New South Wales, have invented certain new and useful Improvements in Boots or Shoes, of which the following is a specification.

The object of my invention is to provide a novel device for attaching to the tongue of laced boots and shoes, or for the purpose of securing the tongue (when the boots or shoes are being worn) in the proper position, and also to lock or secure the lace after being tied and prevent it becoming loosened or undone except when desired by the wearer.

Hitherto great annoyance and inconvenience have been experienced by persons who wear laced boots or shoes by the laces frequently becoming loosened or undone, caused very often by the constant friction of the wearer's garments and the laces, or by the action of the feet while walking or running. The tongue of the boot or shoe instead of remaining in its proper position in the center of the boot or shoe almost invariably, when in use, slips down between the foot and the side of the boot or shoe.

Now this invention has been especially designed to overcome these deficiencies in the construction of boots or shoes, and is by its simple construction inexpensive and capable at any moment of locking the tongue of the boot or shoe in its proper position; also of clasping the lace after being tied in a bow and preventing it becoming untied or loosened except at the will of the wearer.

In order that this invention may be more fully understood, reference will now be made to the drawings which form a part of this specification.

Figure 1 is a view of a shoe with this invention. Fig. 2 is a front view of the tongue and lace-lock. Fig. 3 is a view of the under part of the lock before being pressed into shape to receive the top. Fig. 4 shows the spring. Fig. 5 is a side view of the lace and tongue-lock open.

In all figures similar letters are used to denote similar parts.

A is a piece of suitable metal stamped or shaped as shown in Fig. 3. The toothed sides B are bent up at about right angles to the center part of the metal. The tapered ends C are bent in the opposite direction to B.

D is a piece of curved spring-steel of the required length, with the dovetailed end E. This spring is laid on A in the space between the upward-turned sides B. The lugs F are then bent right over, so as to secure the spring in position. The dovetailed end of the spring allows the lugs to so press against it as to keep it secure. The clamp or lock G is placed over the spring D, and a pin passes through G at G′ and through the holes H in A, securing the clamp or lock to the lower portion of the device. The wings I of the clamp or lock G are shaped so as to follow the curve of the foot and are provided on the inside with short teeth along the outer edges J. These teeth, when the clamp or lock is closed, grasp and hold the lace K and prevent it becoming untied. The toothed edges of B also assist in holding the lace secure.

When the clamp or lock G is opened, as shown in Fig. 5, there is no pressure on the spring D, but as the clamp or lock is closed the fulcrum L compresses the spring D. When the clamp or lock G has been fully closed, the fulcrum L assumes such a position that the end E′ of the spring D will press against the fulcrum L its full force and thus keep the clamp or lock closed, thereby causing it to firmly grip the lace K and securing the tongue of the boot or shoe in its correct place.

In Fig. 1 the clamp or lock is shown closed, keeping the tongue of the shoe in the correct position and securing the lace.

I do not claim any particular design for the clamp or lock, as it will be obvious that many modifications may be made, but in all the small inward teeth on the outward edges will be provided. The construction of the clamp or lock may be of any suitable metal, may be made ornamental by the insertion of precious stones, or in any other way.

I am aware that other devices have been on the market for the prevention of laces becoming untied, but these have been of a very weak construction and were not intended to secure the tongue as well as the lace, and were not permanently attached to the boot or shoe.

My invention is intended to form a part of the construction of the boot or shoe, it being secured to the tongue of the boot or shoe by passing the tapered ends C of A through the tongue and clasping them round against the inside. A piece of some soft leather or other suitable material may be sewed or secured over the ends C, so as to prevent them pressing directly against the foot.

The device may be secured to the tongue of the boot or shoe in any other suitable manner, but in all cases it must be placed in the center of the tongue and about level with the top eyelet or lace-hole of the boot or shoe, so that the tying of the lace may be done across the device when the clamp or lock is raised, as shown in Fig. 5.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination, the plate A, having rearwardly-turned projections and two upwardly-turned sides, the spring extending between the sides, the ears F for holding one end of said spring, ears at the opposite end of the plate, the toothed locking-plate pivoted between said last-named ears, and the extension on the locking-plate adapted to bear against the free end of the spring, substantially as described.

2. In combination, the plate A having downwardly-turned projections C at each end, the spring extending lengthwise of the plate and having notches at one end, the ears or projections F formed integral with said plate and engaging said notches and folded over to hold the spring in place, the upwardly-turned sides B integral with plate A and forming a guide for the spring, said sides having serrated edges and perforated ears H, and the locking-plate having a pivot extending through the perforations in the ears, said locking-plate having teeth J in line with the serrated edges of the base-plate and having laterally-extending wings I, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

AUGUSTUS GROSS.

Witnesses:

PERCY SYDNEY DAWSON,

OCTAVIUS PLATER CLAYTON.