

(No Model.)

2 Sheets—Sheet 1.

L. LINBERG.
LAST.

No. 474,994.

Patented May 17, 1892.

Fig. 1.

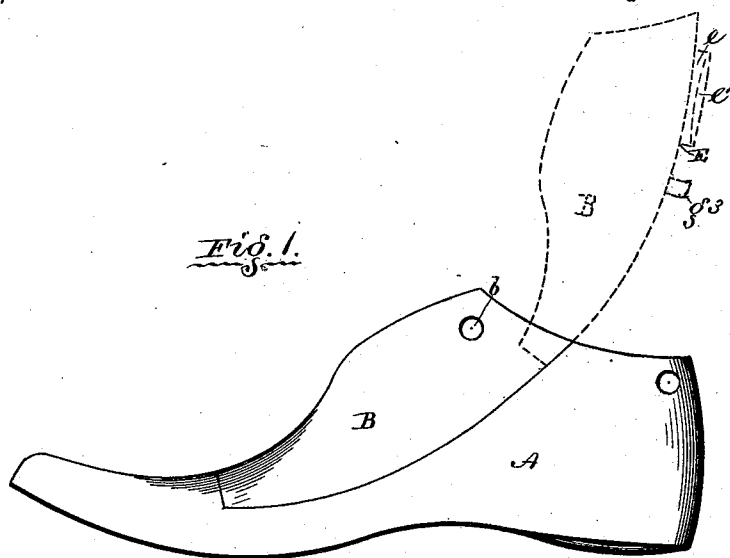


Fig. 2.

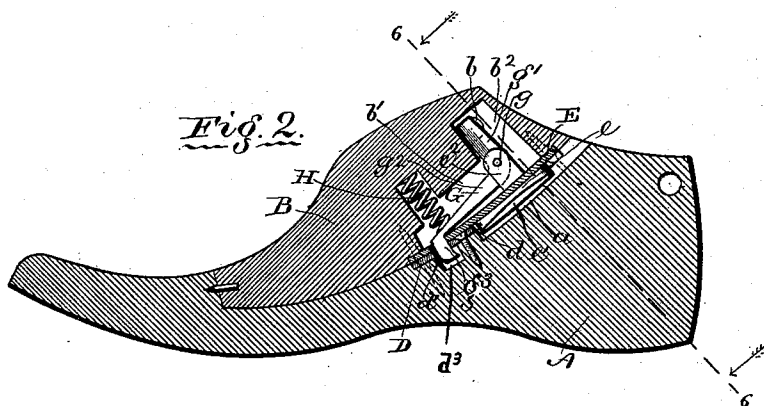
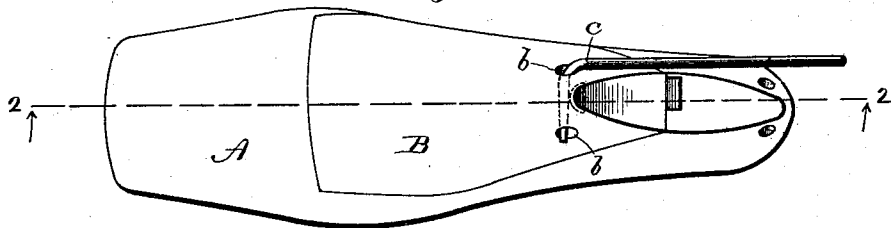


Fig. 3.



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Fig. 4.

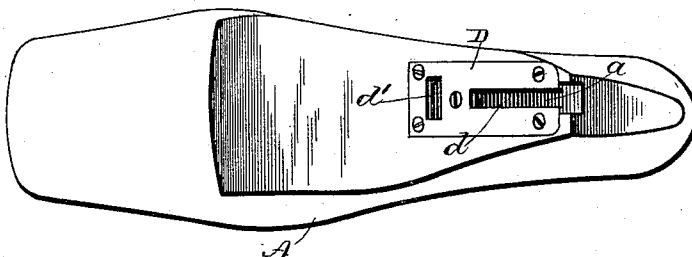


Fig. 5.

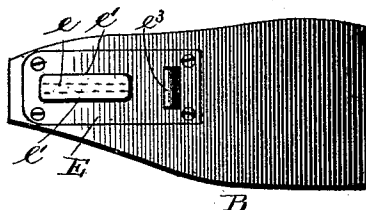
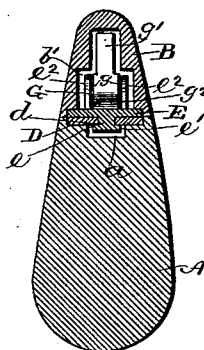


Fig. 6.



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UNITED STATES PATENT OFFICE.

LARS LINBERG, OF GALESBURG, ILLINOIS.

LAST.

SPECIFICATION forming part of Letters Patent No. 474,994, dated May 17, 1892.

Application filed January 28, 1892. Serial No. 419,522. (No model.)

To all whom it may concern:

Be it known that I, LARS LINBERG, a citizen of the United States, residing at Galesburg, in the county of Knox and State of Illinois, have invented certain new and useful Improvements in Lasts, of which the following is a specification.

The object of this invention is to furnish a last with a removable instep, which instep piece or block can be readily, easily, and quickly put in place after the other part of the last is inserted in a boot or shoe, and which is provided with means for guiding the instep-piece to its seat on the last, and also with means for automatically locking the instep to the last when it has reached its place thereon, and which lock is of such organization of parts that it is released by the insertion of an ordinary instep-withdrawing hook in an ordinary manner to withdraw or remove the instep from the last.

The novel means employed in carrying out the objects of my invention are hereinafter described and made the subject-matter of the claims hereto appended. The preferred construction of parts and arrangement thereof are illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a last embodying my invention, showing the instep-block in position for insertion in dot line; Fig. 2, a vertical sectional elevation in Fig. 3 on the line 2 2; Fig. 3, a top plan of the last with the instep-withdrawing hook in place; Fig. 4, a top plan of the last with the instep-block removed; Fig. 5, a plan of the instep-block with its lower side upward, and Fig. 6 a transverse sectional elevation in the line 6 6 in Fig. 2.

The main part A and the instep part B are of ordinary construction and fitted together in an ordinary manner, and the instep B is provided with the ordinary hole *b*, into which the ordinary hook *c* is inserted to withdraw the instep B from a boot or shoe.

D is a metallic plate located substantially as shown and fixed to the upper face of the part A. The plate D has a slot *d* lengthwise of the last and a slot *d'* transversely thereof, and beneath the slot *d* is a groove *a* in the part A, which is slightly wider and longer than the slot *d*. The slot *d'* is transversely

of the slot *d* and transversely of the last, and beneath said slot is a recess *d*³ in the part A.

E is a metallic plate fixed to the under side of the instep B, so as to be substantially coincident with the plate D when the instep B is in position on the part A. Fixed to the outer face of the plate E is a lug *e* with side flanges *e'* at its outer end. From the face of the plate E next the instep B project ears *e*².

G is an elbow-shaped locking-lever, and is pivoted at its bend by a pin *g* to the ears *e*². The instep B has a suitable recess *b'* for the locking-lever G, a portion *b*² of which recess is extended so that the hole *b* passes through its walls. The end or arm *g'* of the locking-lever G extends past the hole *b* and is coincident therewith, and this end *g'* is triangular in its cross-section, and is seated with the apex of the triangle toward the toe of the last and the base toward the heel thereof. The end or arm *g*² of the lever G extends forwardly of the last and has a detent or downwardly-projecting catch *g*³, which extends through the slot *e*³ in the plate E when the lever G is in its normal position, as held by the thrust-spring H—that is, with the catch *g*³ projected outwardly through the slot *e*³ and the end *g'* resting in line with the hole *b*.

The upper end of the spring H is seated in a circular recess in the instep to retain the spring in place, and its lower end rests on the arm *g*² and tends to exert a force thereon to thrust the catch *g*³ through the slot *e*³ and yields to permit of its retraction. The forward side of the catch *g*³ is beveled, as shown.

To put the instep B in place on the part A, either when in a boot or shoe or not, the instep B should be placed about as shown by dot lines at Fig. 1 relatively to the part A, and so that as the instep is moved forwardly and downwardly of the last the lug *e* will enter the slot *d* and act as a guard or guide in directing the instep as it is pushed forwardly to its seat, while the flanges *e'* pass beneath the edges or walls of said slot and hold the instep down to its seat on the part A. The forwardly-beveled side of the catch *g*³ sliding on the plate E as the instep is pushed forwardly to its seat will force said catch backwardly into the slot *e*³ until the instep reaches its proper seat, when the catch *g*³ will be coincident with the slot *d'*, into

which slot it will be thrust by the spring H, and thus hold the instep firmly and securely against withdrawal rearwardly, while the lug *e* and its flanges *e'* hold it securely against displacement otherwise.

To withdraw the instep or remove it from the part A, the end of the hook C is inserted in the hole *b* in the ordinary manner, and in inserting said hook its end, pressing against the inclined or beveled forward side of the arm *g'*, will force it rearwardly, and thus tilt or swing the lever G, so as to retract the catch *g³* and withdraw it from the slot *d'*, when the instep may be withdrawn rearwardly by the hook C in the ordinary manner. When the hook C is withdrawn from the hole *b*, the lever G will again be forced by the spring H into its normal position with the catch *g³* projected through the slot *e³*. It will be evident that the lever G may be tilted or swung to raise the catch *g³* by means of a hook C with a tapering point operating on an arm *g'*, which does not quite extend to the forward side of the hole *b*.

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

1. In a last, the combination, with the body having a channel formed therein, and a plate on the body above the channel, having an elongated longitudinal slot of a width less than the width of the channel, of an instep-block having a chamber therein, a plate on the instep,

a depending elongated lug on the instep-plate of a width substantially the width of the slot in the body-plate, side flanges on the outer edge of the lug extending the entire length thereof and engaging below the edge of the slotted portion of the body-plate, and a locking-lever mounted in the chamber of the instep-block engaging the plate on the body when the parts are forced together, substantially as described.

2. In a last, the combination, with the body having a channel formed thereon, and a plate on the upper face of the body over the channel, formed with an elongated longitudinal opening and a lateral opening near its forward end, of a chambered instep-block, a perforated plate on the instep below the chamber, a depending lug on the perforated plate, flanges on the side of the lug at the outer end thereof, an angular locking-lever pivotally secured to the perforated plate, having a locking-lug located in the perforation of the plate, a spring for normally forcing the locking-lug through the perforation, and an arm on the lever having a curved upper end arranged in the hook-hole of the instep-block, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

LARS LINBERG.

Witnesses:

JOHN C. STEWART,
NORMAN CHURCHILL.