I. W. Myers,

Boot Tree.

No. 111,137. Patented Jan. 24, 1871.

Fig. 1

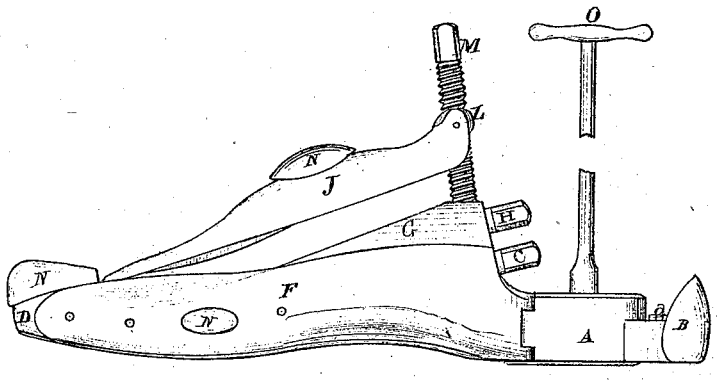


Fig. 2

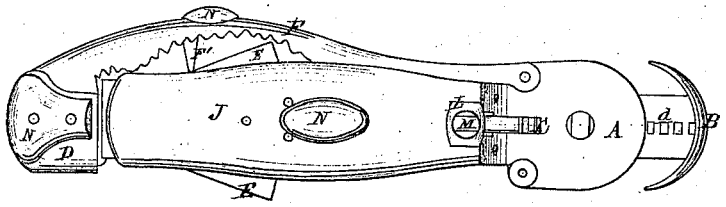


Fig. 3

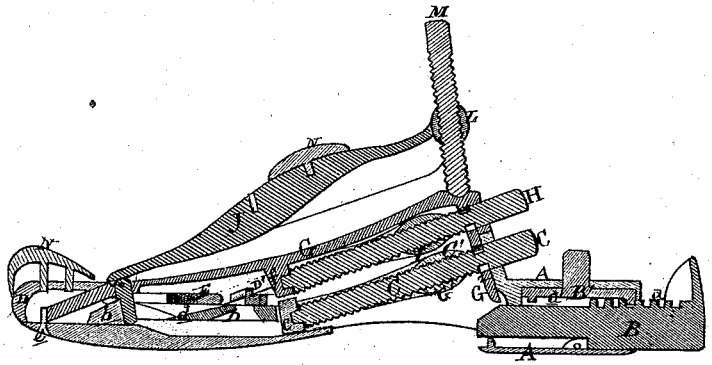
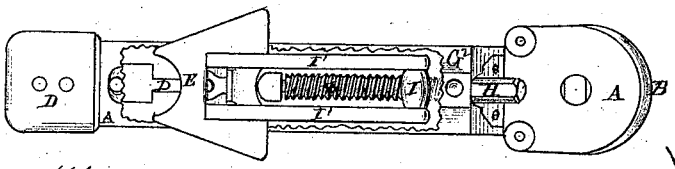


Fig. 4



ATTEST

Frederick Eberth

Saml J. Spragg

INVENTOR

Isaac W. Myers.

Per attorney.

Thos. J. Spragg.

United States Patent Office.

ISAAC W. MYERS, OF SAN FRANCISCO, CALIFORNIA.

Letters Patent No. 111,137, dated January 24, 1871.

IMPROVEMENT IN BOOT-STRETCHERS.

The Schedule referred to in these Letters Patent and making part of the same.

To whom it may concern:

Be it known that I, ISAAC W. MYERS, of San Francisco, in the county of San Francisco and State of California, have invented a new and useful Improvement in Boot-stretching Lasts; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon and being a part of this specification, in which—

Figure 1 is a side elevation of my improvement;

Figure 2 is a bottom plan of the same, with one of the side-plates removed, and a portion of the remaining one broken out, to show the action of the wedge against its rib;

Figure 3 is a vertical longitudinal section; and

Figure 4 is a plan, with instep-plate and side-plates removed, and the upper section of the last broken out, to show the interior arrangement of the various parts.

Like letters indicate like parts in each figure.

The nature of this invention relates to an improvement in boot-stretching lasts, and consists in the novel and peculiar construction and arrangement of its various parts for that purpose, as more fully hereinafter set forth.

In the drawing—

A represents a metallic skeleton of the lower part of the last, constructed in the form shown.

B is a sliding heel-piece, whose shank moves in a longitudinal slot in the hollow heel of the last.

On the top of the heel-piece is a worm-rack, *a*, with which meshes a worm, *a'*, on the under side of the disk B' lying on the shank of the heel-piece, and whose shaft projects up through the heel, squared at the top, so as to be rotated by a socket-wrench. The rotation of the worm-disk moves the heel-piece out or in.

In the front part of the part A is an upward-projecting stud, *b*, and just to the rear of the ball of the foot is another one, *c*, into which is socketed the point of a screw, C, whose head projects out of an inclined wall just in advance of the heel.

D is a slotted toe-piece, sliding in the forward part of the skeleton foot, and provided with arms, D', pivoted at the rear corners, said arms having swiveled in their rear ends a nut, C', through which the screw C is threaded.

The rear part of the slot in the body of the toe-slide is an inclined plane, *d*.

The construction and arrangement of the foregoing parts are such that, by rotating the disk B', the heel-piece is caused to move out of the heel and push the last forward into the boot; and, by rotating the screw C, the toe-piece is pushed forward out of the last.

E is a wedge, lying on the shank of the slide, and slides freely thereon.

F are wings or side-pieces, curved to the outline of the foot, and are provided in their broadest part with an internal vertical rib, F'. They are hinged at their rear ends to the front corners of the heel of the part A.

G may be termed the upper section or instep of the last, and is secured to the part A by a screw, *e*, passing up through the bottom of the front part of the foot, and entering a projection, G^1, on its front part, which passes through the slot in the toe-slide.

G^2 is an angle of the part at the rear end, and is secured to the inclined wall of the part A by proper screws.

The screw C passes through the angle, which, when adjusted, has the upper part of the screw-hole drop into an annular recess in the neck of the screw, and thereby prevents the latter from being drawn out.

f is a stud depending from the under side of the part G, about midway of its length, and is socketed to receive the point of the screw H, whose head is journaled in the angle-plate G^2, in the manner just described.

I is a nut, swiveled in the rear ends of the arms I', whose front ends interlock with the wedge E, so that, when the screw is rotated to move the nut I forward, the advance of the wedge will throw outward the wings F, and thus stretch the boot in width across the foot.

J is the instep-plate proper. It has pivoted under its front end a prop, K, passing down through a hole in the section G behind the stud *b* of the lower section, which serves as a brace to it. The lower end of the prop is beveled, and usually rests on the lower end of the inclined plane of the toe-slide.

L is a nut swiveled in the rear end of the instep-plate, and has threaded therein the screw M, whose lower end rests in a recess or step in the back end of the section G. By rotating the screw M the rear of the instep-plate may be raised, while the front end is also raised if the toe-piece is projected forward, by reason of its inclined plane passing under the prop.

N are lumps or movable bosses, which are placed on the various parts of the device, in such localities as may be necessary to meet the requirements of growers of corns, bunions, and other enlargements of the feet.

For convenience in operating, the screws are cut with left-hand threads, and are all squared on their heads, to be rotated by a socket-wrench, O.

It will be seen that with the device any size of boot, from number four to number twelve, may be stretched in any part or all over, and that the last

may be adjusted in the boot before commencing to stretch in any part, so that a pressure or strain may be exerted on that place or part alone of the boot requiring to be stretched.

I claim as new and desire to secure by Letters Patent—

1. The skeleton foot-piece A, constructed as described, and the heel-piece B, disk B′, worm *a*′, and rack *a*, arranged and operating as and for the purpose set forth.

2. The boot-stretching last, composed of the skeleton A, the heel B, disk B′, screw C, toe-piece D, wedge E, wings F, instep G, screw H, nut I, plate J, screw M, and bosses N, when the parts are severally constructed and arranged as described and shown, and as and for the purposes set forth.

ISAAC W. MYERS.

Witnesses:
SAM. J. SPRAY,
FREDERICK EBERTS.