J. H. WALKER.

Device for Stretching Boot Legs.

No. 201,370. Patented March 19, 1878.

FIG. 1.

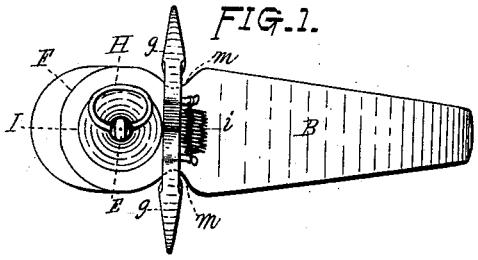


FIG. 2.

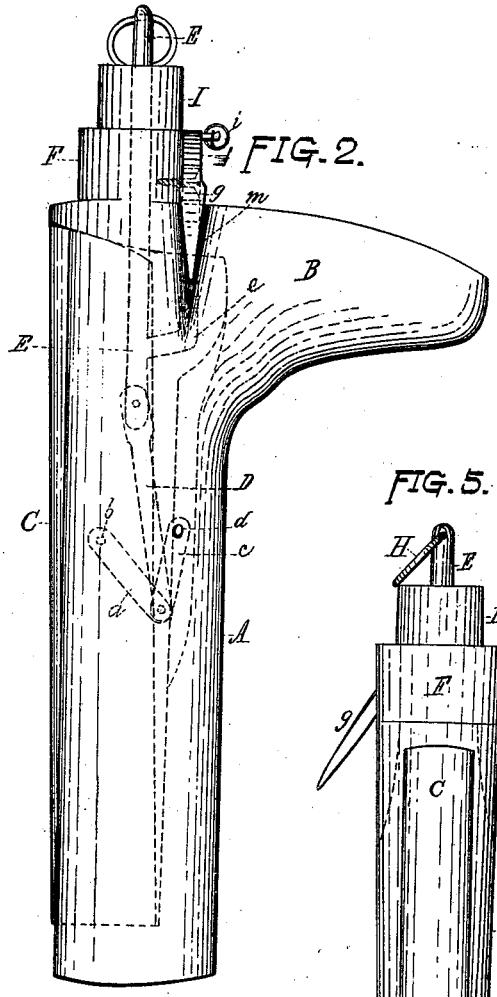


FIG. 3.

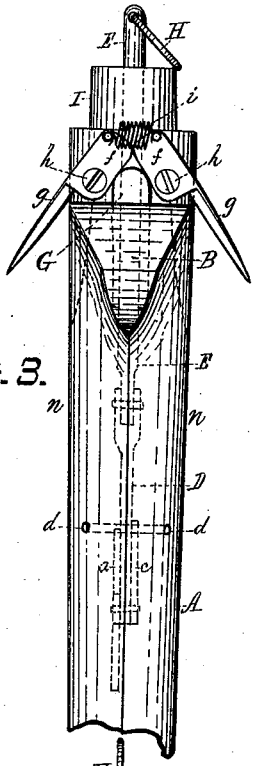


FIG. 5.

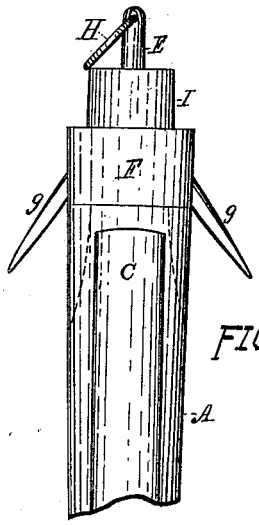
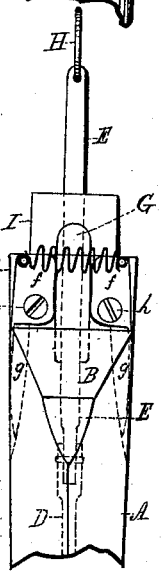


FIG. 4.



Witnesses;

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UNITED STATES PATENT OFFICE.

JOSEPH H. WALKER, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN DEVICES FOR STRETCHING BOOT-LEGS.

Specification forming part of Letters Patent No. **201,370**, dated March 19, 1878; application filed February 15, 1878.

To all whom it may concern:

Be it known that I, JOSEPH H. WALKER, of the city and county of Worcester, and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Devices for Stretching Boot-Legs preparatory to trimming the welt and rubbing down the side seams of the leg of the boot; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 represents an end view of the device, as will be hereinafter more fully described. Fig. 2 represents a side view. Fig. 3 represents a front view with a portion of the devices expanded, as they appear when the apparatus is arranged for receiving the boot-leg. Fig. 4 represents a similar view of the same parts as they appear after the boot-leg has been placed in position and the device adjusted preparatory for trimming the welt and rubbing the side seams, and Fig. 5 represents a rear view of Fig. 3.

To enable those skilled in the art to which my invention belongs to make and use the same, I will proceed to describe it more in detail.

In the drawings, the part marked A represents that portion of the device which supports the leg of the boot, and part B the front of the boot. The part A is recessed or cut out to receive the stretching-block C, which has combined with it a link-piece, *a*. (Shown in dotted lines, Fig. 2.) Link-piece *a* is pivoted at *b* in a recess or slot cut in the inside of the block C, said slot being of sufficient depth to allow the free working of link-piece *a* and link-piece *c*, the latter being pivoted at *d* in a slot in the part A, and the inner ends of both of the link-pieces *a* and *c* are pivoted to one end of a connecting-piece, D, while the other end of connecting-piece D is hinged or pivoted to the inner end of the slide-rod E, fitted to work back and forth in the projecting end or supporting hub part F of the leg-stretching device. The parts *a*, *c*, D, and E are clearly shown in dotted lines, Fig. 2.

To one side of rod E is rigidly secured a cam-rod, G. (Shown in dotted and full lines in the drawings.) Said cam-arm projects out, as shown in dotted lines at *e*, Fig. 2, and then passes up through a hole, so as to act upon the inner ends *f f* of the fingers *g g*, which are pivoted at *h h*, a spiral spring, *i*, being employed in this instance for connecting the ends *f f* together, and for expanding the fingers *g g*, as shown in Figs. 1, 3, and 5, when cam-arm G is pushed in, as fully indicated in Fig. 3 of the drawings; but any other suitable device may be employed for accomplishing the same result.

When rod E is drawn out, as shown in Fig. 4, cam-arm G is forced between the ends *f f*, thereby compressing or closing fingers *g g* down into the grooves *m m*, formed in the sides of the parts A and B, as indicated in full and dotted lines in the drawings.

It will be seen, however, that even if no grooves were formed in the boot-stretcher, the fingers *g g* would serve a very useful purpose, since they would clamp the leather firmly onto the leg or foot part of the stretcher, thus preventing the leather from working out of place, and consequently tend to facilitate the operation.

Rod E may be operated by a ring, H, or by a hook or otherwise. The device is supported by the circular hub-piece I, entering a hole in a suitable stand when in use.

As boot-leg-stretching devices were made and used prior to my said invention, the sides of the part A were curved out down near the rear part of the foot part B, thereby leaving the parts where the grooves *m m* are formed projecting out for the purpose of taking up the increased slack of leather at such points. This mode of construction involved serious objections, for the reasons that the side seams did not rest even and true; consequently the welt could not be trimmed true, nor could the seam be rubbed down even and true; and in addition to all this, there being such an enlargement or bulge in the leg-support at this point, the operation of rubbing down the seam when resting upon such uneven surface often caused the stitches to break or partially give way, and rendered the boots very liable to rip or give out at these points.

By my improvements all the foregoing objections are obviated, since, when the leg is slipped upon the parts A and B, (the fingers

g g being expanded, as shown in Fig. 3,) the leather slips under the fingers, so that when rod E is drawn out, as shown in Fig. 4, fingers *g g* are forced down upon the leather, and press it into the grooves *m m*, thereby taking up the slack of the leather at those points, and which operation brings a uniform pressure upon the side seams, and the operator is enabled to trim and rub the seams in a very perfect and uniform manner while they are supported upon the straight or nearly straight side surfaces *n n* of the leg part A, instead of upon the curved and irregular side surfaces, as in the old device.

Having described my improvements in devices for stretching boot-legs, what I claim therein as new and of my invention, and desire to secure by Letters Patent, is—

1. A device for stretching and supporting boot-legs while their side seams are being trimmed and rubbed, provided with grooves at or near the junction of the foot and leg for receiving the surplus leather at the lower end of the leg or counter, whereby the strain upon the leg-seams at such points can be adjusted as desired, and for the purposes set forth.

2. The combination, with the leg-stretching device, of a cam for forcing the fingers or arms into the grooves, substantially as described.

3. The fingers or arms *g g*, hinged or pivoted to the boot-leg stretcher, as described.

4. The combination of the fingers *g g* with the rod E and cam-arm G, substantially as described.

5. The combination of spring *i* with the fingers *g g*, for the purposes set forth.

6. The combination, with the parts A, B, and F, of the fingers *g g*, cam-arm G, and spring *i*, substantially as and for the purposes set forth.

7. The combination, with a boot-leg stretcher, of holding or clamping fingers.

JOSEPH H. WALKER.

Witnesses:

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EDWIN E. MOORE.