

(No Model.)

G. H. STEPHENS.
BOOT TREE.

No. 510,654.

Patented Dec. 12, 1893.

Fig. 1.

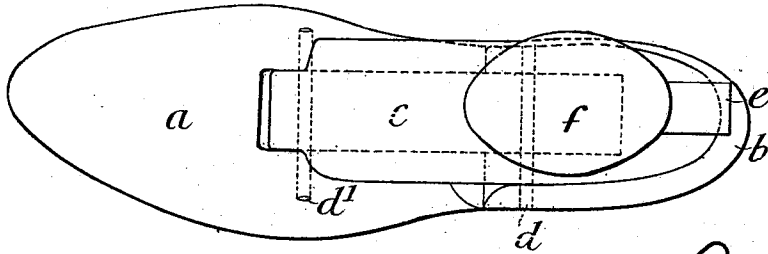


Fig. 2.

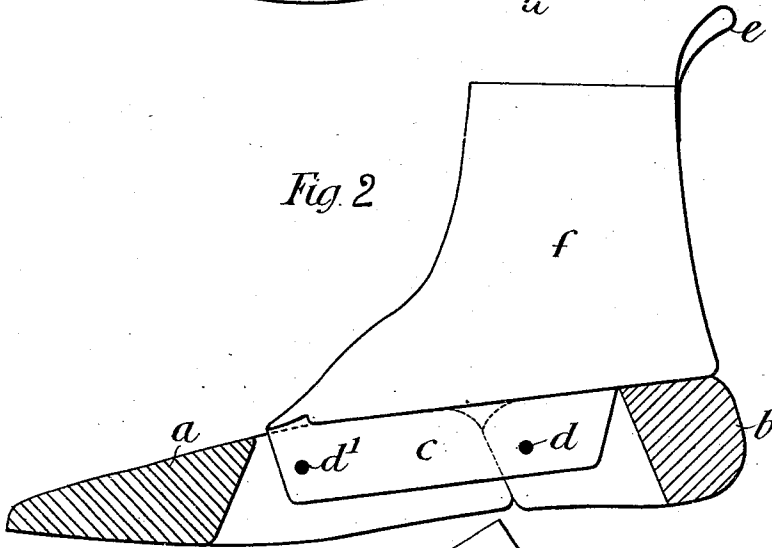


Fig. 4.

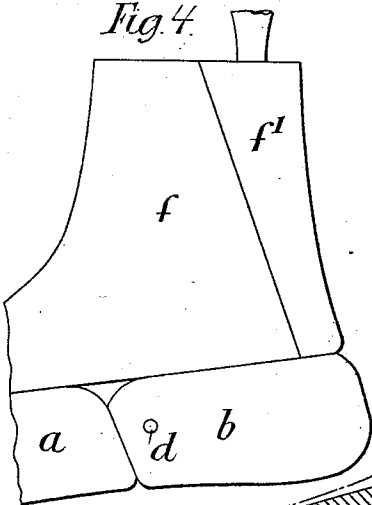
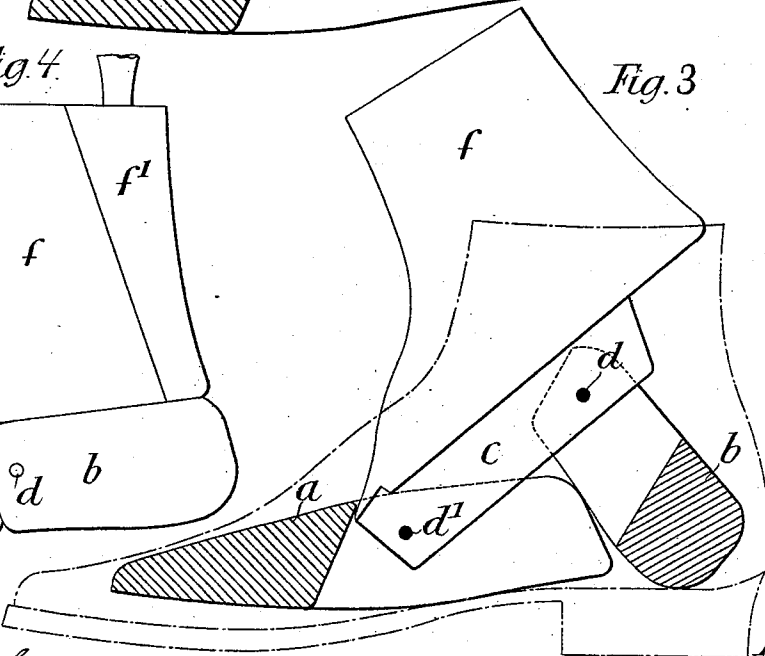


Fig. 3.



Witnesses.

G. H. Stephens.
John E. Dousfield.

Inventor.

G. H. Stephens.

UNITED STATES PATENT OFFICE.

GEORGE HENRY STEPHENS, OF LONDON, ENGLAND.

BOOT-TREE.

SPECIFICATION forming part of Letters Patent No. 510,654, dated December 12, 1893.

Application filed June 17, 1893. Serial No. 477,946. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HENRY STEPHENS, a subject of the Queen of Great Britain, residing at London, England, have invented new and useful Improvements in Boot-Trees, of which the following is a specification.

My invention relates to boot-trees of the kind described in the specification of former Letters Patent granted to me February 2, 1892, No. 468,006. The tree described in my former patent was only shown as adapted for stretching the golosh portions of boots or shoes.

The chief object of my present invention is to show how the tree can be adapted for stretching the portions of a boot or shoe above the golosh.

In the accompanying drawings, Figures 1 and 2 are a plan and a sectional elevation respectively of a tree constructed according to my invention, adapted to stretch the upper as well as the golosh portion of a boot. Fig. 3 is a sectional elevation showing how this tree is applied. Fig. 4 is an elevation showing a slight modification which I sometimes employ in connection with trees for stretching button boots.

Similar letters of reference indicate corresponding parts in the several figures.

a and *b* are respectively the toe and heel parts of my boot trees and *f* is the portion for stretching the upper or leg portion of boots or shoes. The part *f* is provided with or rigidly secured to a narrowed portion which I term the "link *c*," to which are pivotally connected the toe and heel portions *a* and *b*, by pins *d'* and *d* respectively. The heel and toe parts *a* and *b* have their adjacent faces parallel and inclined forwardly so that the tree may be inserted in the boot or shoe in the manner illustrated in Fig. 3, and then by depressing the part *f* the toe portion *a* will be forced forward and the heel portion *b* will be forced rearward by means of the link connection between the parts until the tree assumes the position shown in Fig. 2 when the points of pivoting *d d'* will be substantially in a horizontal plane, parallel with the sole of the shoe, and the adjacent faces of the toe and heel portions *a* and *b* will be brought into contact and take the strain off of the pivots.

The upper or leg stretching portion *f* has shoulders *f^x f^x* at each side of the link or rearward portion *c* which engage the upper faces of the toe and heel portions when the tree is in this position. The part *f* it will be seen will be drawn into position as the parts are forced into the shoe or boot, so that it will stretch the upper or leg portion thereof.

This form of boot tree is best adapted for stretching boots and shoes having elastic uppers or leg portions and for those provided with laces. In using it with the latter kind the part *f* will project through the opening in the upper, and the shoe may be laced up over the part *f* to stretch the upper or leg portion.

When the tree is to be used for button boots I advantageously make the leg portion *f* of the tree with a removable back piece or wedge *f'* provided with a cam face *f²* as shown in Fig. 4, to engage a cam face *f³* on the part *f*. This wedge, after the main part of the tree has been introduced and the boot buttoned upon it, is inserted and forced in, in order to tighten or stretch the leg-portion of the boot upon the tree. I sometimes provide the front portion *f* with india-rubber or other yielding material or I form grooves therein so as to allow a certain amount of flexibility in the material adjacent to the buttons.

Some of the chief advantages of my improved boot-tree are that it can be quickly and easily applied and removed, that it is comparatively light, and that it is extremely portable and very suitable for travelers, there being no loose parts to become detached.

What I claim, and desire to secure by Letters Patent, is—

1. A boot tree comprising a portion for stretching the upper, and toe and heel stretching portions each pivotally connected to said upper stretching portion, said pivotal connections with the upper stretching portion forming the sole connection between the heel and toe stretching portions, substantially as described.

2. A boot tree comprising a portion for stretching the upper, having downwardly extending portions, and toe and heel stretching portions pivotally connected to said downwardly extending portions, said pivotal connections with the upper stretching portion

forming the sole connection between the toe and heel stretching portions, substantially as described.

3. A boot tree comprising a portion for stretching the upper having a downwardly projecting narrowed part, heel and toe stretching portions pivoted independently to said narrowed part, said toe and heel portions having each a face for engaging the other, said upper stretching portion having shoulders adjacent to its said narrowed part, for engaging the heel and toe portions, when the tree is in operative position, substantially as described.

4. In a boot tree the combination with the portion for stretching the upper formed in two separable parts provided each with an inclined cam face, of the toe stretching portion and heel stretching portion independently pivoted to said upper stretching portion, substantially as described.

GEORGE HENRY STEPHENS.

Witnesses:

G. F. REDFERN,

JOHN E. BOUSFIELD,

Of the firm of G. F. Redfern & Co., 4 South Street, Finsbury, London, Patent Agents.