

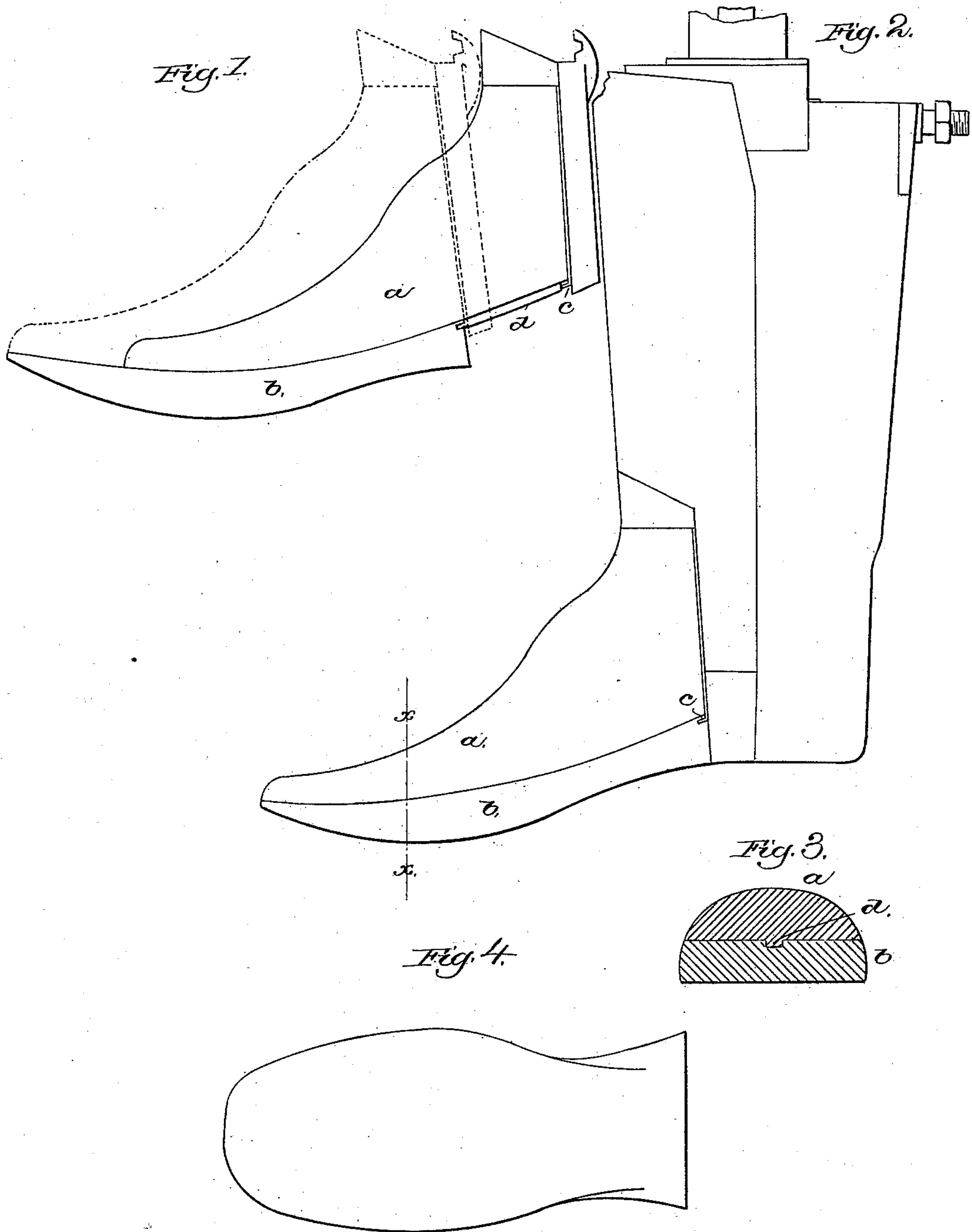
(No Model.)

J. W. D. FIFIELD.

BOOT TREE.

No. 299,971.

Patented June 10, 1884.



Witnesses.
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UNITED STATES PATENT OFFICE.

JOHN W. D. FIFIELD, OF NORTH BROOKFIELD, MASSACHUSETTS.

BOOT-TREE.

SPECIFICATION forming part of Letters Patent No. 299,971, dated June 10, 1884.

Application filed March 29, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. D. FIFIELD, of North Brookfield, county of Worcester, Massachusetts, have invented an Improvement in Boot-Trees, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

It is very desirable to give to boots and shoes at the shank, both in the upper and sole, a considerable "spring," as it is called, or to fashion the upper so that it will fit the foot snugly where it meets the latter at the side of the hollow therein.

In boots and shoes wherein the shank has very considerable spring, or is narrow, the space within the shoe between its shank and the point where the ball of the foot will fall is so much narrower than at the shank that an ordinary tree cannot be used to advantage, and trees such as heretofore made, if used at all, stretch and strain the boot or shoe at that portion of it which covers the shank, and destroys in a great measure the shape given to the boot or shoe by crimping. To obviate this difficulty, and enable boots and shoes made narrow in the shanks or having very considerable spring to be readily treed on a tree without removing or disturbing the shape given to the upper by crimping before lasting, I have devised a novel tree, the principal or essential feature of which is that the sole of the foot of the tree is made detachable from the foot of the tree, so that the sole may be first placed in the boot or shoe, and after it the foot of the tree, the two being connected together in the boot or shoe by a tongue and groove, as will be described, the foot of the tree being attached to a leg part in usual manner.

Figure 1, in side elevation, represents a sufficient portion of a tree to enable my invention to be understood, the full and dotted line positions showing the two relative positions of the sole and foot pieces. Fig. 2 shows the foot and sole pieces, with the other usual parts of the tree added, as they will appear when in a boot or shoe and the latter is being rubbed to tree the same. Fig. 3 is a section of Fig. 1 on the dotted line *x x*, and Fig. 4 an under side view of the sole-piece.

The back piece, A, the main front piece B,

the changeable front piece E, center block, draw-bar, and devices actuated thereby to expand or operate the tree and retain the foot-piece while the boot or shoe is being treed, are, as herein shown, the same as represented in United States Patent No. 293,945, dated February 19, 1884, and the parts hereinbefore referred to and designated by letters of reference may be found in the said patent, where the same are marked by like letters; but I desire it to be understood that my improvements, to be hereinafter described, may be applied advantageously to any and all trees now used in boot and shoe work, and as the entire mechanism of the tree herein shown, except the foot, is old, the same need not be herein specifically described, and in this my invention, in practice, the foot-piece and changeable front piece will preferably be made so as to adapt the same to right and left boots and shoes, as described in the said Patent No. 293,945, to which reference may be had.

My invention relates especially to the foot-piece *a* and its detachable sole-piece *b*. The foot-piece *a* at its rear or large end next the draw-bar, or it may be the usual center piece of the tree, is provided with a slotted plate, whereby the foot-piece is engaged and clamped to the other main parts of the tree. The foot-piece is provided at its large end with a sole-holding device, *c*, made as a metal hook, extended across the foot-piece and adapted to engage a groove made across the rear end of the sole-piece *b*. The under side of the foot-piece is provided with a tongue, *d*, which is adapted to enter a correspondingly-shaped groove (see Fig. 2) made in the upper side of the sole-piece.

When a boot or shoe is to be treed, the sole-piece *b* will first be inserted therein, and the foot-piece *a* will then be inserted into the boot or shoe above the sole-piece, the tongue *d* entering the groove in the sole-piece, or it might be vice versa, it being thus guided into the front part of the boot or shoe in correct position. After the sole-piece-locking device *c* enters the groove made for its reception at the rear end of the sole-piece the foot-piece and sole-piece thereafter move forward together under strain or pressure exerted upon the foot-piece and the center and front and back pieces

by the movement of the usual draw-bar, the boot or shoe, with the sole and foot piece, having been first pushed upon the front, back, and center pieces, held in usual manner, or substantially as represented in United States Letters Patent No. 293,945.

Viewing Fig. 1, it will be supposed that the sole-piece has been pushed forward into the boot or shoe to be treed, the said sole-piece, when so introduced, being pushed into the fore part of the boot or shoe easily through its central part, then entirely unobstructed. The sole-piece having been placed in position, the operator will next by hand engage the foot-piece *a* and insert it into the fore part of the foot or shoe above the sole-piece *a*.

In Fig. 1 the foot-piece is shown in full lines as pushed partially forward, and as soon as the foot-piece has been pushed into the fore part of the boot or shoe by hand, as in dotted lines, the said boot or shoe will be applied to the other parts of the tree until the foot-piece is engaged, as usual, and thereafter by operating the draw-bar the tree is expanded and the foot-piece and sole are finally sealed and pushed fully forward into the fore part of the boot or shoe to occupy the relative positions, Fig. 2. When the boot or shoe is to be removed, the draw-bar will be operated to disengage the foot-piece, the boot or shoe, with the foot-piece and sole-piece therein, will be withdrawn from the usual front and back

pieces, the foot-piece will be drawn out by hand, and thereafter the sole-piece will be removed.

My improved foot-piece and separable sole may be applied to the class of trees represented in United States Patent No. 151,701.

I am aware that lasts have been provided with iron and other plates at their under sides; but in this invention the sole-piece is made separable from the foot-piece, about in the center line of the ball of the foot, as shown.

I claim—

1. In a tree, the combination, with the detachable foot-piece, of a detachable sole-piece to operate substantially as and for the purpose described.

2. The foot-piece and detachable sole-piece combined with a locking device to hold the same together after they have been inserted into the fore part of the boot or shoe being treed, substantially as described.

3. In a tree for boots and shoes, a foot-piece provided with a tongue combined with a detachable sole-piece provided with a groove, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN W. D. FIFIELD.

Witnesses:

G. W. GREGORY,
B. J. NOYES.