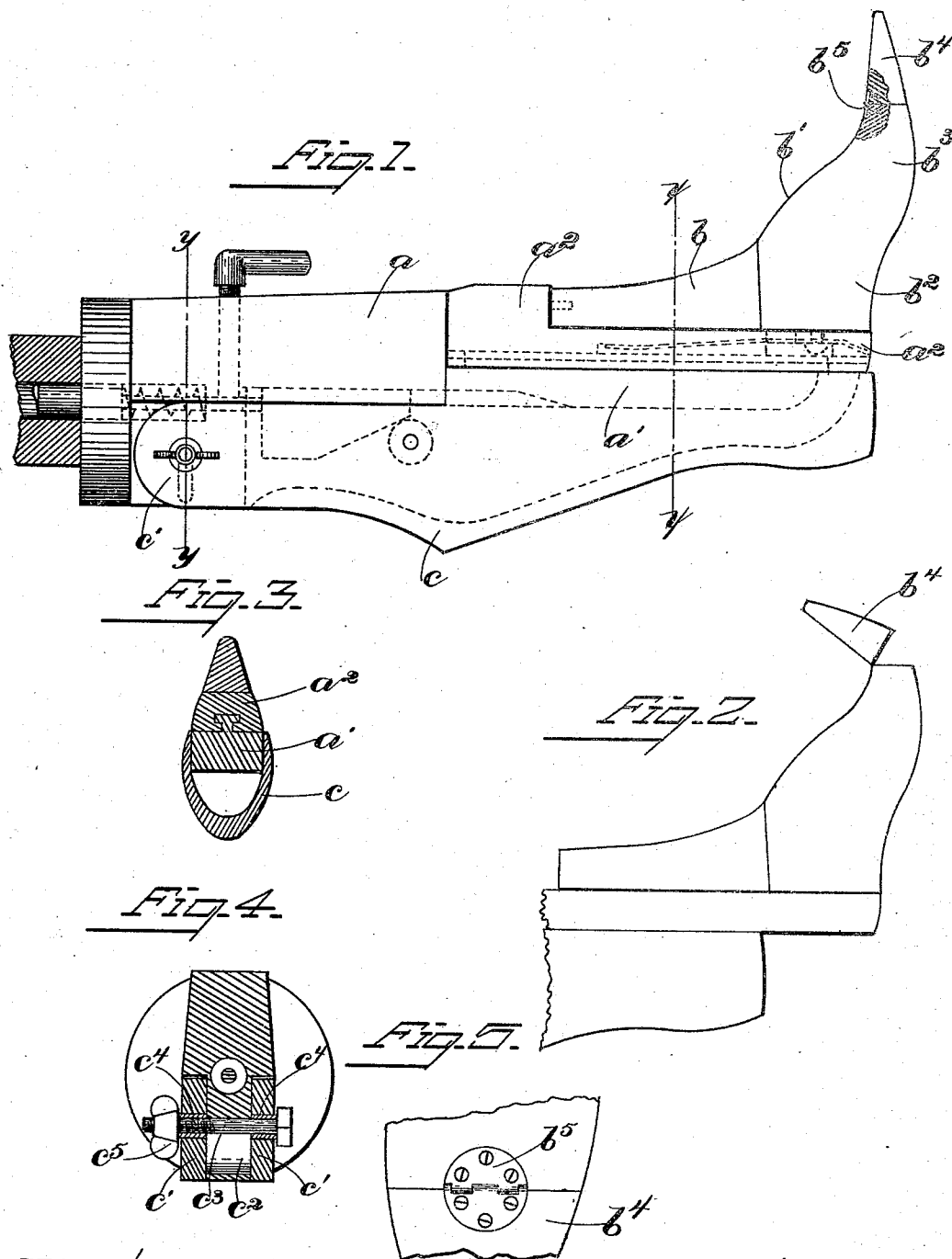


(No Model.)

G. H. CLARK.
BOOT OR SHOE TREE.

No. 543,436.

Patented July 23, 1895.



WITNESSES.
Florence H. Davis
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UNITED STATES PATENT OFFICE.

GEORGE H. CLARK, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE CLARK MANUFACTURING COMPANY, OF SAME PLACE.

BOOT OR SHOE TREE.

SPECIFICATION forming part of Letters Patent No. 543,436, dated July 23, 1895.

Application filed December 21, 1894. Serial No. 532,536. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. CLARK, of Boston, county of Suffolk, and State of Massachusetts, have invented an Improvement in Boot or Shoe Trees, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

In machines for treeing boots and shoes one of the chief objects aimed at is to so construct the tree that the boot or shoe may be easily removed after it has been treed.

Numerous ways have been devised for the accomplishment of this result—as, for instance, the fore part and heel portion of the foot of the tree have been made separable, the fore part sliding on the heel part; also, the fore part has been composed of several pieces, so that it may be collapsed or narrowed to a certain extent as the boot or shoe is withdrawn; but in all cases, so far as I am aware, the toe has been made integral with the instep, shank, and ball portions, so that the bottom of the fore part of the last remains intact, and in such event it is very difficult to remove some kinds of boots and shoes.

This invention has for its object to construct a tree for boots and shoes, whereby removal of the boot or shoe after being treed is greatly facilitated, and also to provide the tree with certain features of adjustment, whereby the width of the tree may be varied, and, furthermore, to so construct the back-leg portion as to present a shield at each side of the tree to cover the space formed by the separation of the parts of the tree.

In carrying out this invention I have so constructed the parts of the tree that the fore part slides on the heel part, thereby enabling the heel to be withdrawn from the boot or shoe.

The fore part is made in two pieces, one comprising the instep, shank, and ball portions and the other the toe portion, the latter being hinged to the former at the top side of the foot. This pivoted toe portion is or may be made by simply sawing off a short piece at the toe end of the fore part. When withdrawing the fore part, this pivoted toe-piece is permitted to turn, so as to form a continuation of the general curvature of the fore part,

which thereby greatly facilitates the removal of the boot or shoe.

The heel portion is formed integral with the back-leg part of the tree, which is pivoted to a block, forming a part of the front-leg portion, or to a support, and the pivotal connection for said parts is made adjustable, so that the width of the tree may be changed. The back-leg portion is made hollow, its longitudinal side edges being tapered or made quite thin, and the front-leg portion drops into the hollow of the back-leg portion a short distance between its thin tapering edges, so that as the parts are separated said tapering edges cover the space formed between them.

Figure 1 shows in side elevation a boot or shoe tree embodying this invention. Fig. 2 is a detail showing the heel portion and fore part and pivoted toe-piece; Fig. 3, a cross-section of the tree shown in Fig. 1, taken on the dotted line *xx*; Fig. 4, a cross-section of the tree shown in Fig. 1, taken on the dotted line *yy*; Fig. 5, a detail of the hinge for the pivoted toe-piece.

The front-leg portion of the tree consists of the block *a*, having a forwardly-extended guide *a'*, (see dotted lines, Fig. 1,) a slide-block *a²*, mounted on said guides, and a fore part detachably connected to said slide.

The detachable fore part comprises a shin-piece *b*, instep portion *b'*, shank portion *b²*, ball portion *b³*, and a toe-piece *b⁴*, the latter being pivoted to the end of the instep, shank, and ball portions, as at *b⁵*.

The hinge *b⁵*, by means of which the toe-piece is pivoted, is made flat and sunken into the material of the fore part, so as to leave an uninterrupted surface. This hinge might be merely a flat piece of leather.

By pivoting the toe-piece *b⁴*, as shown, it will be seen that it may be tilted, so as to conform with the general curvature of the remainder of the fore part to facilitate the removal of the boot and shoe.

The back-leg portion *c* is made hollow or shell-like and the guide of the front-leg portion enters said back-leg portion between the longitudinal side edges, so that as the parts are separated the space between them will be concealed or covered by said longitudinal side edges. The rear end of the hollow-leg portion

c is formed with two ears *c'*, which receive between them a projection on the block *a*. The projection on the block is slotted, as at *c*², to receive the shank of a pin *c*³, which passes through said ears and serves as a pivot-pin for the parts. Sleeves *c*⁴ are placed on the pivot-pin and contained in holes in the ears, through which the pin passes, and the pin is threaded at one end and provided with a thumb-nut *c*⁵, so that by turning said nut the sleeves *c*⁴ will be brought to bear firmly against the projection on the block *a* at any part of the slot *c*² in which the pin may be placed, and the back-leg portion turns on said sleeves.

By providing this form of pin-and-slot connection, or any equivalent form by means of which the back-leg portion is pivotally connected to the front-leg portion in an adjustable manner, it will be seen that the width of the tree may be adjusted at will.

I claim—

1. In a tree for boots and shoes, the combination of separable back and front leg por-

tions, a sliding detachable fore-part, comprising instep, shank, and ball portions, and the toe piece *b*⁴, which is pivoted to the front end of the ball portion, substantially as described.

2. A tree for boots and shoes, having the toe piece *b*⁴, pivoted at *b*⁵ to the front end of the ball portion *b*³.

3. In a boot or shoe tree, a hollow back leg portion, the sides of which are gradually reduced in thickness to a sharp edge, a front leg portion, which enters the hollow of the back leg portion, between its thin tapering side edges, and a pivotal connection for the parts, whereby they may be more or less separated, substantially as described.

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

GEORGE H. CLARK.

Witnesses:

B. J. NOYES,
FLORENCE H. DAVIS.