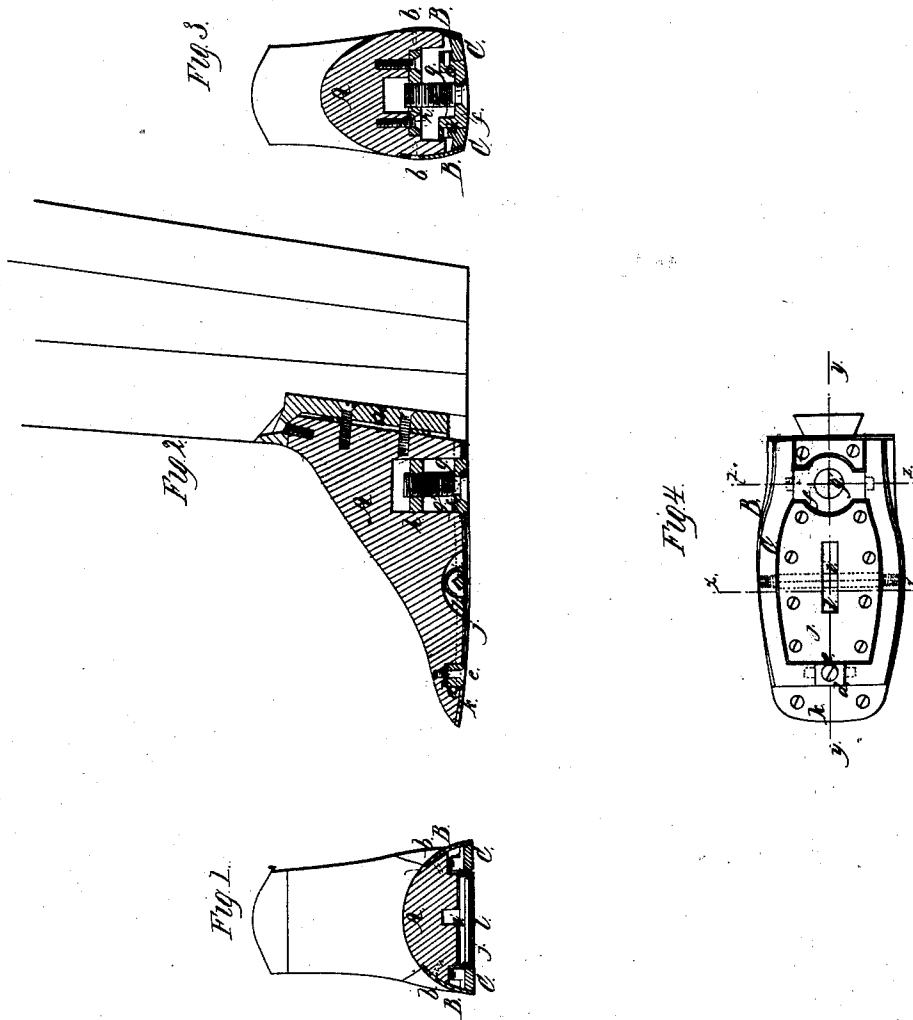


Fay & Collier,

Boot Tree.

N^o 23,157.

Patented Apr. 5, 1859.



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UNITED STATES PATENT OFFICE.

WINTHROP B. FAY AND RUSSELL W. COLLIER, OF UPTON, MASSACHUSETTS.

BOOT-TREE.

Specification of Letters Patent No. 23,457, dated April 5, 1859.

To all whom it may concern:

Be it known that we, WINTHROP B. FAY and RUSSELL W. COLLIER, both of Upton, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Boot-Trees; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a transverse vertical section of our invention taken in the line *x, x*, Fig. 4. Fig. 2, a vertical longitudinal section of ditto taken in the line *y, y*, Fig. 4. Fig. 3, a transverse vertical section of ditto taken in the line *z, z*, Fig. 4. Fig. 4, an inverted plan or bottom view of ditto.

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

This invention consists in having the foot piece of the tree constructed in a novel way as hereinafter fully shown and described, whereby said foot piece is rendered capable of being expanded laterally, and also adjusted to the instep so that the foot piece may be adjusted to the foot of the boot and made to conform perfectly to the same.

To enable those skilled in the art to fully understand and construct our invention we will proceed to describe it.

A, represents the foot piece of a boot tree, which foot piece is attached to the tree in the usual way, to wit, by means of a dove-tail metal plate *a*, attached to the back end of the foot piece and fitting in a corresponding shaped socket in the tree. The foot piece is constructed mainly of wood, that is to say, the body is of wood, and the attachments which constitute the improvement are of metal. These consist 1st: of two metal plates B, B, which extend nearly the whole length of the foot piece, one at each side, and are secured to the foot piece near their upper edges by screws *b*. The plates B, B, are sufficiently thin as to admit of being sprung outward laterally from the foot piece and they are bent or curved to conform to the shape of the foot piece.

In the bottom of the foot piece A, two metal bars C, C, are placed, one at each side, suitable recesses being made in the bottom of the foot piece to receive them. These bars have their outer

sides beveled, and their front and back parts are provided with eyes to receive horizontal guide pins *c*, which are attached at the front part of the foot piece to a metal stud *d*, that is secured to the bottom of the foot piece by a screw *e*, see Fig. 2, and dotted lines in Fig. 4. The guide pins at the back part of the foot piece are attached to an adjustable stud *f*, which is fitted in a recess *g*, in the foot piece and is rendered adjustable in a direction in and out from the foot piece by a screw *g'*, which works in a nut *h*, in the foot piece, see Figs. 2 and 3.

In the bottom of the foot piece A, a metal rod *i*, is placed transversely. The ends of this rod have screw threads formed on them, a right hand thread being on one end and a left hand thread on the other. These screw threads fit in female screw threads in the bars C, C, see Fig. 1. The bottom of the foot piece between the bars C, C, is covered with a metal plate *j*, and a metal toe piece *k*, is secured to the front part of the bottom of the foot piece. The plate *j*, has a slot *l*, made in it at its center to allow a wrench to pass through and fit on the rod *i*.

From the above description it will be seen that the foot piece may be expanded laterally by turning the rod *i*, the bars C, C, being thrust out, thereby the pins *c* guiding the bars and keeping them in proper position. It will also be seen that by screwing out the screw *g'*, the instep of the foot piece will be raised, as the back parts of the bars C, C, and stud *f*, will rest or bear against the sole of the boot, and the foot piece will be virtually increased in depth or expanded in a line passing through the instep. The stud *f*, it will be understood actuates the bars C, C, in consequence of the latter being connected to it by the guide pins *c, c*. The front stud *d*, it will be understood is stationary.

The two adjustments above described render the foot piece capable of being fitted perfectly to the boot. The arrangement is simple and does not greatly enhance the cost of the tree.

We are aware that adjustable lasts and foot pieces of boot trees have been arranged in various ways in order to modify their shape or form, so that they may be fitted perfectly in boots, and we do not claim broadly such device irrespective of the par-

ticular construction and arrangement herein shown and described for effecting the purpose; but,

Having thus described our invention, 5 what we claim as new and desire to secure by Letters Patent, is—

The elastic plates B, B, attached to the sides of the foot piece A, in connection

with the adjustable bars C, C, arranged to operate substantially as and for the purpose 10 herein set forth.

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RUSSELL W. COLLIER.

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