

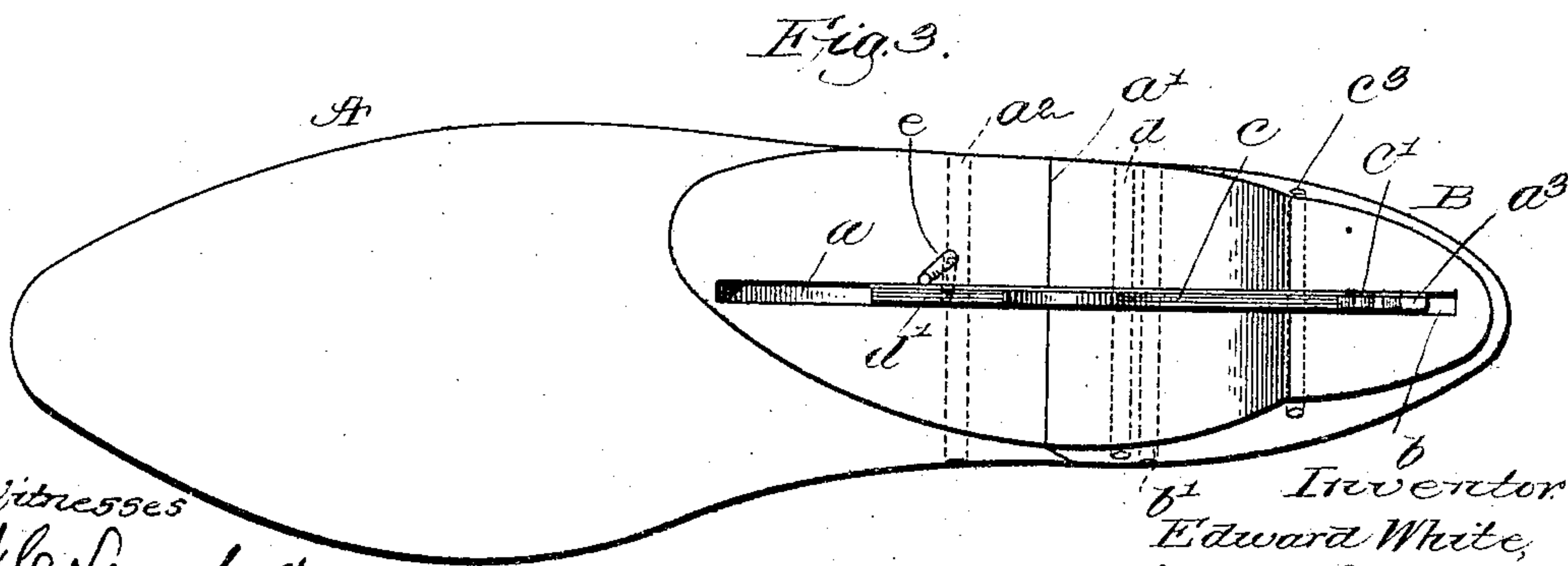
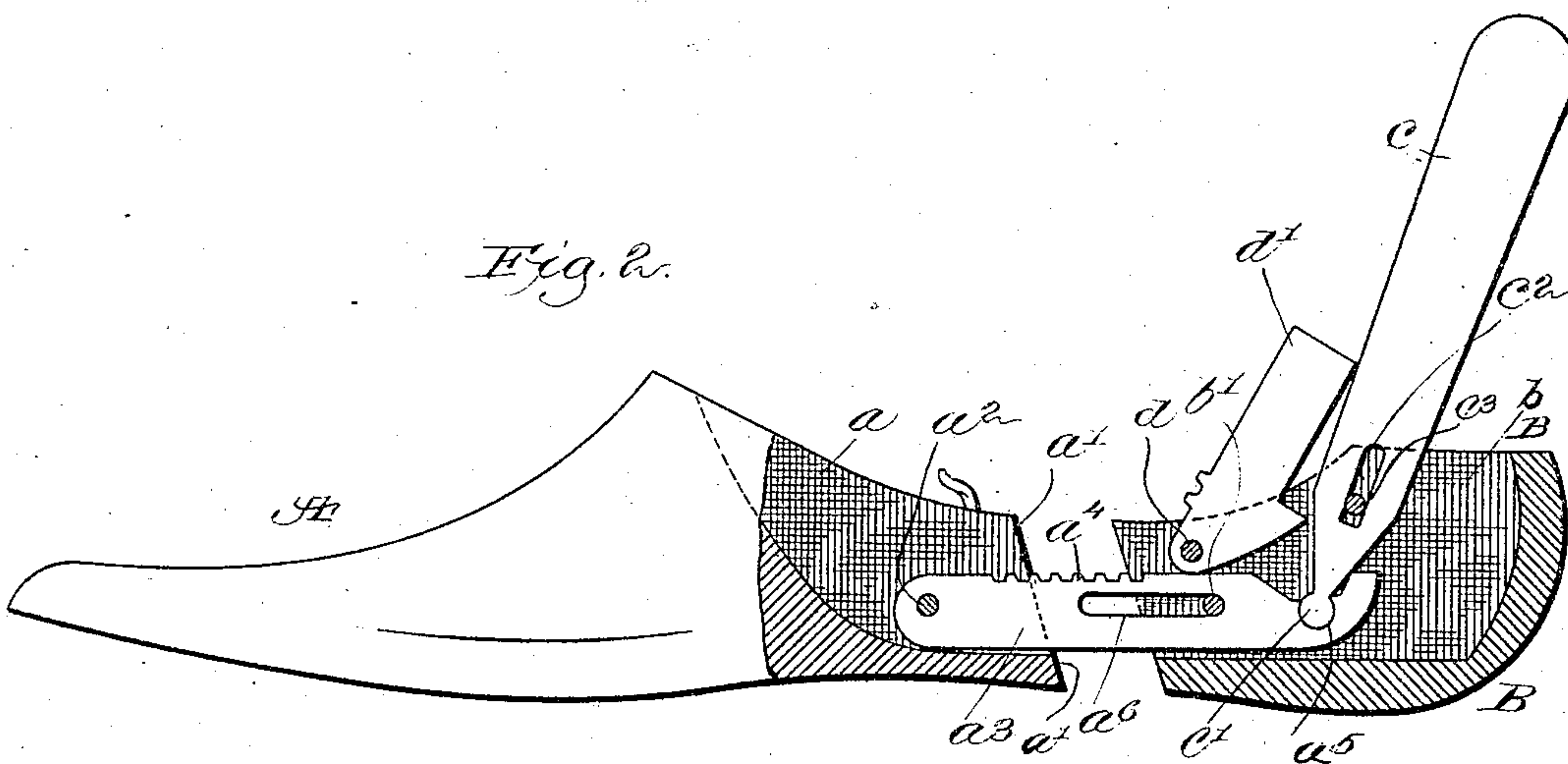
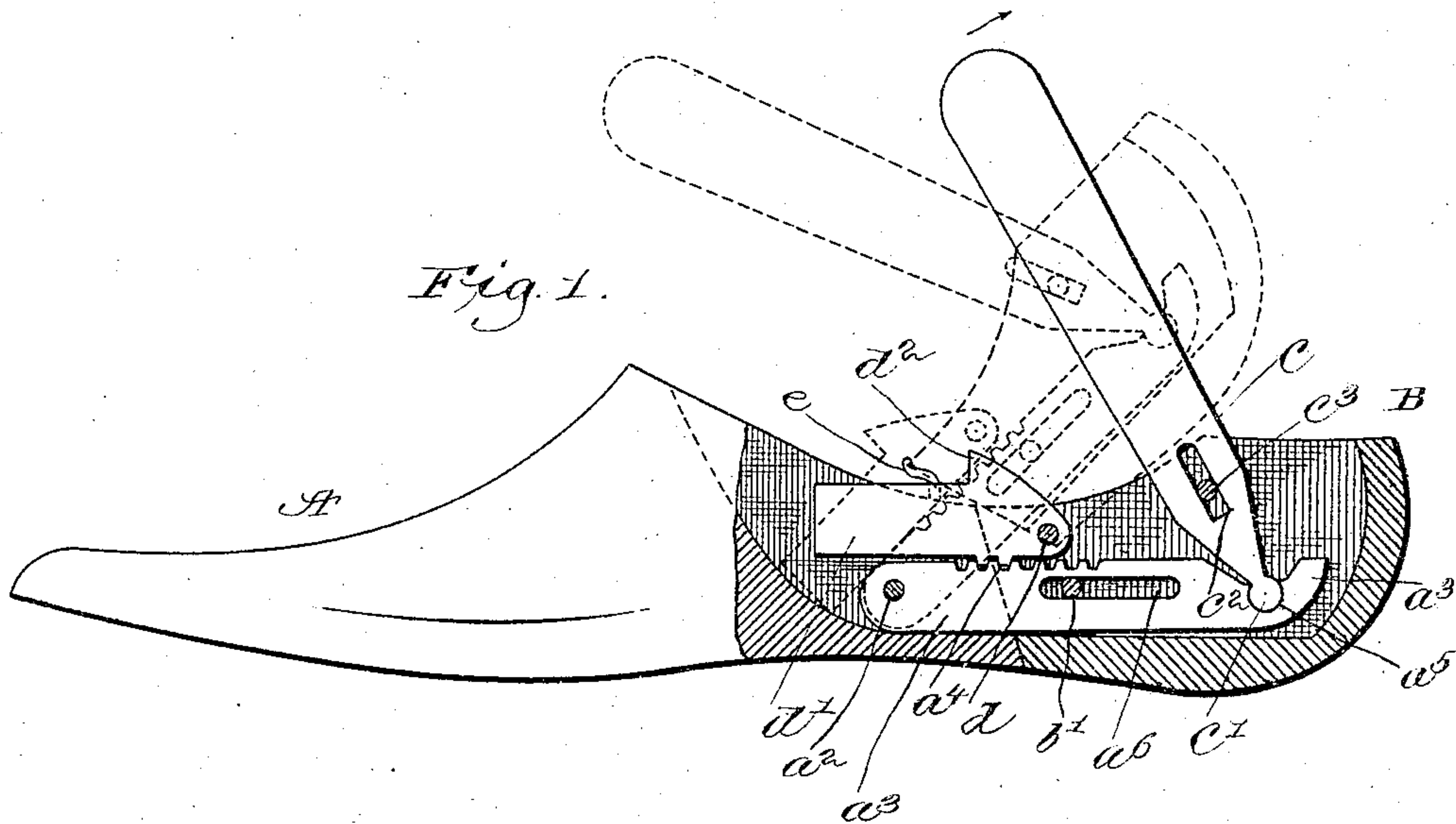
No. 765,910.

PATENTED JULY 26, 1904.

E. WHITE.  
SHOE TREE.

APPLICATION FILED JAN. 13, 1904.

NO MODEL.



Witnesses  
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# UNITED STATES PATENT OFFICE.

EDWARD WHITE, OF STOUGHTON, MASSACHUSETTS.

## SHOE-TREE.

SPECIFICATION forming part of Letters Patent No. 765,910, dated July 26, 1904.

Application filed January 13, 1904. Serial No. 188,815. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD WHITE, a citizen of the United States, residing at Stoughton, in the county of Norfolk and State of Massachusetts, have invented an Improvement in Shoe-Trees, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object the production of a shoe-tree especially adapted to be put into a finished shoe to keep the shoe in shape, the same being intended for use at home or in a shoe store to preserve the shape of a shoe.

My improved tree may be readily adjusted as to its length to fit any length of shoe and will be locked in its adjusted position. In accordance with my invention I pivot upon the fore part of the tree a toothed bar. This bar may be slotted for the reception of a guiding-pin carried by the heel part, said pin and slot adding strength to the structure. The heel part has a pivoted lever that is jointed loosely with said toothed bar, the connection being such that when said lever is turned, the heel part being held, the fore part will be slid longitudinally with relation to the heel part and will be forced into the toe of the shoe. The heel part is provided with a locking device having one or more teeth to engage the teeth of the toothed bar to lock the fore part at any point to which it may be forced away from the heel part.

The particular features in which my invention is embodied will be hereinafter more fully described, and pointed out in the claims at the end of this specification.

Figure 1, in partial side elevation and longitudinal section, shows by full lines a shoe-tree with the parts contracted. The dotted lines show the heel part of the tree turned upwardly. Fig. 2 is a similar view with the fore part extended away from the heel part, and Fig. 3 shows part of the top of the tree chiefly to represent the slots therein and the device for maintaining the tree rigid for shipment.

The fore part A of the tree may be of any

material and of any shape externally to enter a shoe. The fore part has, as shown, a longitudinal slot  $a$ , and the shank end of the fore part is shown as beveled at  $a'$ . The heel part B has a longitudinal slot  $b$ . In the slot  $a$  I pivot at  $a^2$  a bar  $a^3$ , shown as provided at its upper edge with a series of teeth  $a^4$  and also with a round notch  $a^5$ , the central part of the bar being represented as slotted at  $a^6$ , said slot being entered by a guiding-stud  $b'$ , having its ends fixed in the heel part. In the slot  $b$  of the heel part I mount a hand-lever  $c$ , having a round end  $c'$  to fit the notch  $a^5$ , and said lever is slotted at  $c^2$  to embrace loosely a fulcrum-stud  $c^3$ , held in the heel part, said lever being so sustained that it may be turned from its full-line position, Fig. 1, into its full-line position, Fig. 2, and in so doing slide the fore part away from the heel part until the stud  $b'$  meets the end of the slot  $a^6$ , as in Fig. 2, it being understood, however, that the fore part may be arrested in its movement at any intermediate point, according to the length of the shoe in which the tree is to be inserted.

This invention is not, however, limited to the particular shape of the end of the hand-lever where it is operatively connected with the bar, the construction shown, however, being exceedingly desirable.

The heel part has a stud  $d$ , on which is pivoted a locking device  $d'$ , shown as a short metal plate having one or more teeth at its under side to engage the toothed part of the bar  $a^3$ , said locking device engaging automatically the teeth of said bar and holding the same in any position left by the lever  $c$ .

Preparatory to inserting the tree into a shoe the projections  $d^2$ , extending from the locking device, on one side thereof, may be engaged to disengage the teeth of the locking device from the teeth of the bar, and then the heel part may be turned upwardly into the dotted-line position. This done, the fore part may be inserted in the shoe, and the lever  $c$  will be embraced by the hand and pulled in the direction of the arrow thereon, Fig. 1. This pulling on the lever will seat the heel part in the shoe, the end of the heel part contacting with the interior of the shoe end at



its counter, and the further turning of the lever will slide the fore part into the toe part of the shoe for a greater or less distance, according to the length of the shoe, and during  
5 this operation the teeth of the locking device will click over the teeth of the bar, and said teeth will engage one the other and hold the fore part in any position in which it may be put with relation to the heel part by the lever *c*. The teeth of the locking device and  
10 of the bar may be more or less fine, according to the fineness of adjustment required.

When the tree is to be shipped, I prefer to turn the lever into the full-line position, Fig. 1, and to keep the tree straight I engage the  
15 turn-button *e* and turn the same from its full into its dotted line position, Fig. 3, so that it crosses the locking device. This maintains the tree substantially rigid.

20 Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A shoe-tree comprising a fore part and heel part, a bar pivotally connected with the  
25 fore part and entering the heel part, and a lever mounted in the heel part and engaging said bar, the movement of said lever acting through said bar to vary the length of said tree, a locking device pivoted to the heel part  
30 and adapted to extend into the fore part and

means for maintaining the said locking device in such position.

2. A shoe-tree comprising a fore part, a heel part, each of said parts being provided with a slot, a toothed bar connected with said fore  
35 part and said heel part, and disposed within said slots, a toothed locking device carried by said heel part and adapted to enter the slot of the fore part and engage the teeth of said bar, and a lever having a pin-and-slot connection  
40 with the said heel part and operatively engaging said bar at a single point.

3. A shoe-tree comprising a fore part, a heel part, a toothed bar separate from the fore and heel parts and pivotally connected with said  
45 fore part, said bar being provided with a slot, and pin in the heel part engaging said slot, a gravitating toothed locking device mounted in said heel part, and a lever also mounted in said heel part and engaging said bar to slide  
50 the fore part longitudinally with relation to said heel part.

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

EDWARD WHITE.

Witnesses:

GEO. W. GREGORY,  
EDITH M. STODDARD.