

No. 730,475.

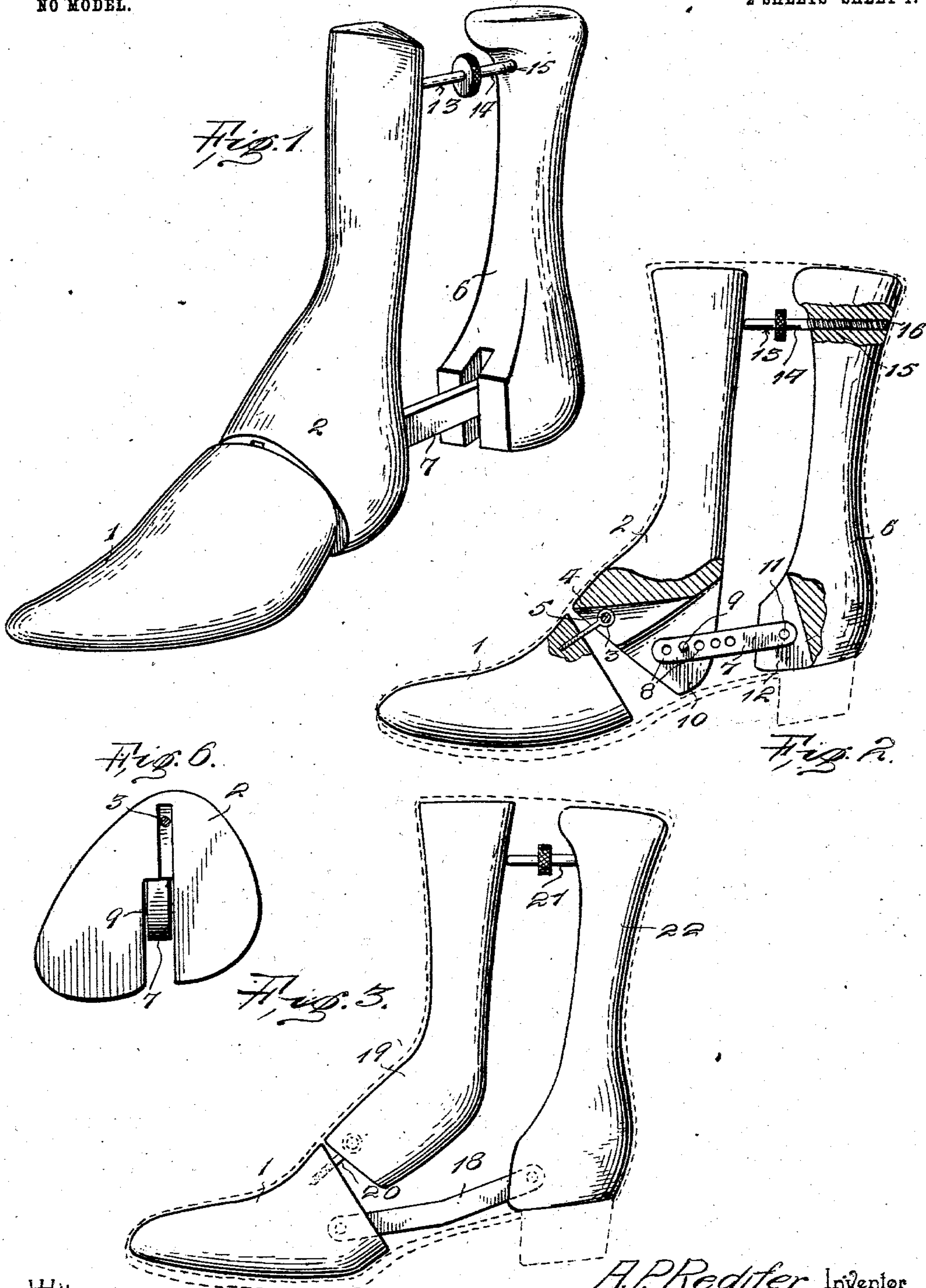
PATENTED JUNE 9, 1903.

A. P. REDIFER.  
SHOE TREE.

APPLICATION FILED NOV. 13, 1901.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses  
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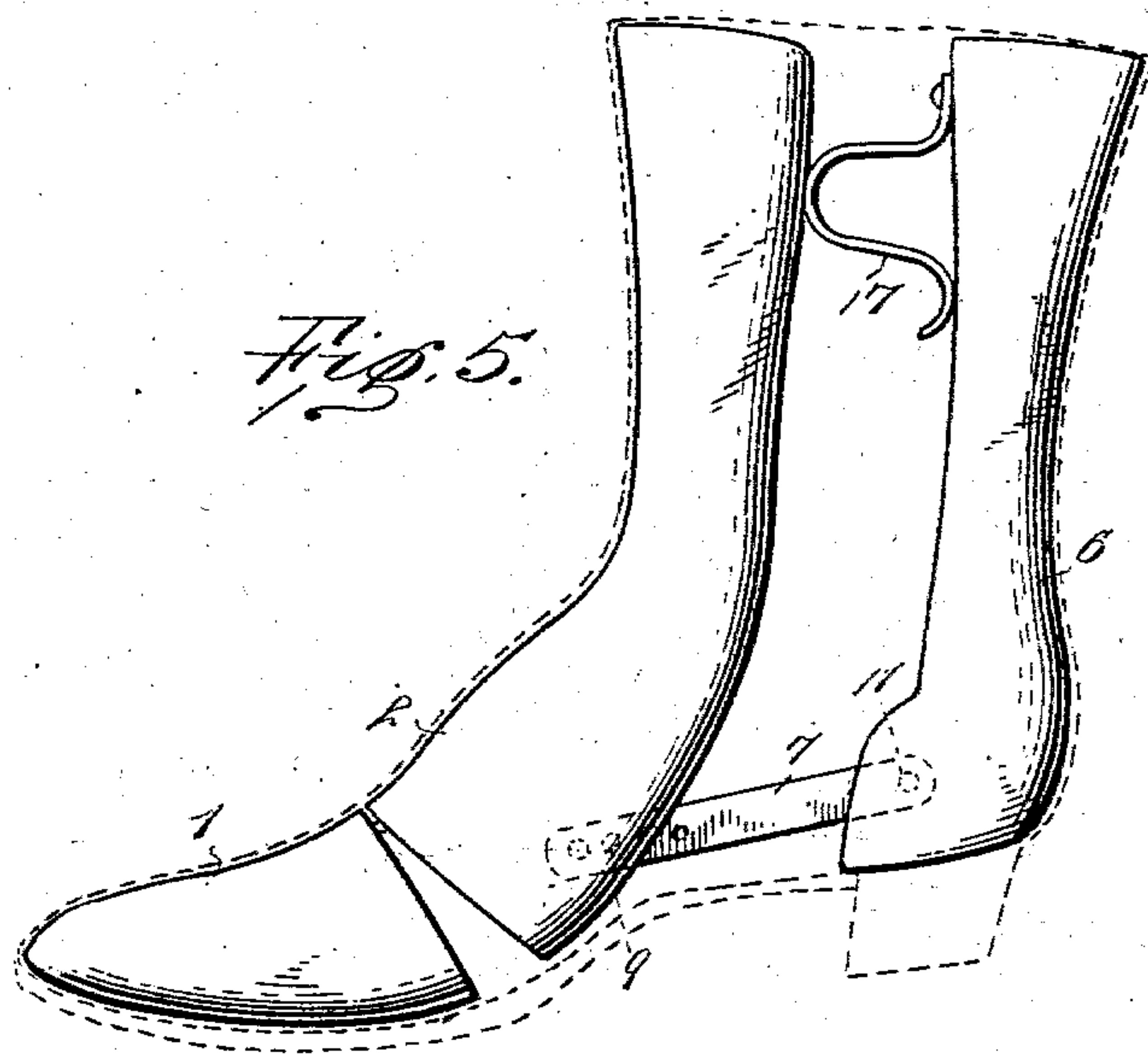
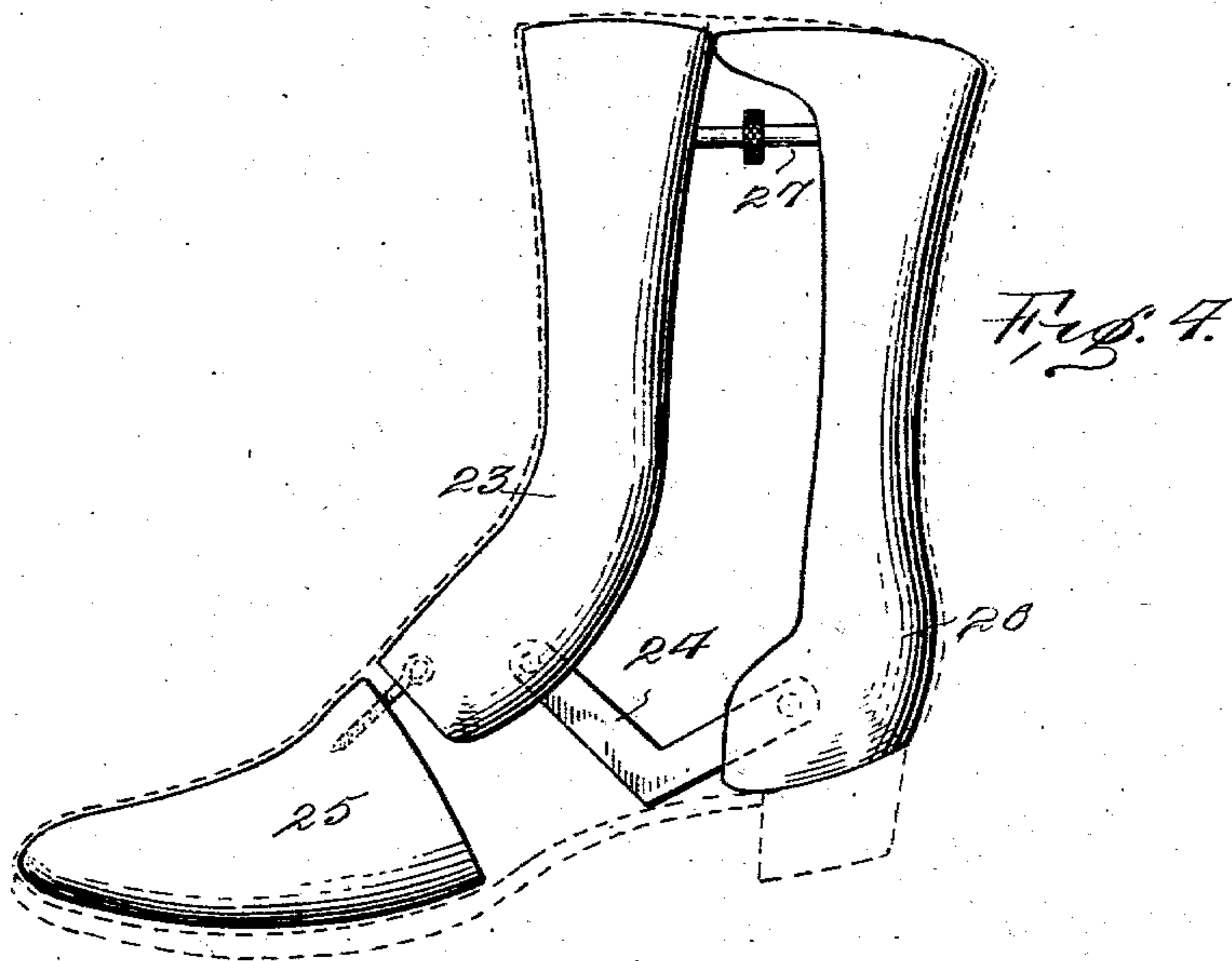
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# UNITED STATES PATENT OFFICE.

ANDREW PERRY REDIFER, OF NARBERTH, PENNSYLVANIA.

## SHOE-TREE.

SPECIFICATION forming part of Letters Patent No. 730,475, dated June 9, 1903.

Application filed November 13, 1901. Serial No. 82,144. (No model.)

*To all whom it may concern:*

Be it known that I, ANDREW PERRY REDIFER, a citizen of the United States, residing at Narberth, in the county of Montgomery and State of Pennsylvania, have invented a new and useful Shoe-Tree, of which the following is a specification.

The invention relates to improvements in shoe-trees.

The object of the present invention is to improve the construction of shoe-trees and to provide a simple, inexpensive, and efficient one designed for keeping shoes in shape when not in use and adapted to fill out the entire shoe from the toe to the top.

A further object of the invention is to provide a shoe-tree of this character capable of ready adjustment to enable it to properly fit the shoe and adapted to collapse to enable it to be conveniently introduced into a shoe.

Furthermore, the invention has for its object to provide a shoe-tree of this character in which all the parts will be connected together, so that there will be no liability of the same becoming lost or mislaid when the shoe-tree is not in use.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a shoe-tree constructed in accordance with this invention. Fig. 2 is a side elevation of the same, partly in section, the outline of the shoe being illustrated in dotted lines. Fig. 3 is a side elevation of a shoe-tree, illustrating a modification of the invention. Fig. 4 is a side elevation of another modification of the invention. Fig. 5 is a similar view of another form of the invention. Fig. 6 is a detail view of the lower end of the upper or shin section of the tree.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a lower front or toe section conforming to the configuration of the front portion of a shoe and adapted to fill the same and adjustably and pivotally connected with an upper front or shin section 2, by means of a screw-eye 3 or other suitable connection.

The screw-eye is provided with a threaded shank, which is embedded in the inner end of the lower front or toe section of the tree and is adapted to be screwed into the same or partially unscrewed therefrom to vary the distance between the adjacent ends of the front sections of the tree. The eye of the screw-eye is arranged in a narrow upper slot 4 of the lower end of the upper front or shin section, and it is secured to the latter by a transverse pin 5, forming a pintle and adapted to permit the upper or shin section to have a pivotal movement on the lower front section to enable the front of the tree to conform to the configuration of the front of the shoe. The upper front or shin section, which is adapted to fill out the instep of the shoe and the front portion of the top of the same, is adjustably connected at its lower end with a rear section 6 by a link 7, and its lower end is rounded at the bottom and is supported upon the insole of the shoe, whereby when the upper front or shin section is forced forward by the means hereinafter described it will fill out the front of the shoe and take out all of the wrinkles thereof. The link 7, which is provided at its front portion with a series of perforations 8, is pivoted by a pin or key 9 in a lower slot or bifurcation 10 of the lower end of the upper front or shin section of the tree. The rear end of the link is pivoted by a pin 11 in a slot or bifurcation 12 of the lower end of the rear section of the tree, and by adjusting the link the distance between the front and rear sections may be varied to adapt the tree to shoes of different sizes, and also to take up any looseness after the shoe has become stretched.

The front face of the upper front or shin section of the tree conforms to the configuration of the corresponding portions of a shoe, and the rear face of the rear section conforms to the configuration of the back of the shoe. The side faces of these sections of the tree are rounded to fit the sides of a shoe, and the tree may be varied in configuration to fit different styles of shoes.

The upper ends of the sections 2 and 6 are adjustably connected by a screw 13, provided between its ends with a head or enlargement and having a smooth front portion 14 and a threaded rear portion 15. The smooth front



portion fits in a bearing of the upper or shin section or against any portion of the rear face of the same, and the threaded portion 15 extends into a threaded perforation 16 of the rear section, whereby the screw is adapted to be rotated to force the sections apart to expand the tree within a shoe. The screw is adapted to be readily adjusted to permit the parts to be collapsed for removing it from a shoe and for placing it therein. Instead of employing a screw any other adjustable device may be interposed between the front and rear sections for permitting the parts to be collapsed when the tree is inserted in a shoe and for expanding the tree after it is introduced into the said shoe, and in Fig. 5 of the drawings is illustrated a shoe having a spring 17 arranged between the front and rear sections. The spring, which is approximately U-shaped, is secured at one end to the rear section, and the other end is free to enable it to be partially collapsed.

In Fig. 3 of the drawings is illustrated a slight modification of the invention, in which the link 18 is pivoted to the lower front or toe section instead of to the upper or shin section. The upper or shin section 19 is located above the link and is hinged to the lower front or toe section by a screw-eye 20. An adjusting-screw 21 is interposed between the upper portion of the shin-section and the upper portion of the rear section 22. The lower end of the upper or shin section is located above and is out of contact with the insole of the shoe when the tree is placed therein.

In Fig. 4 of the drawings is illustrated a tree in which the upper or shin section 23 is indirectly supported upon the insole by a link 24, which is approximately L-shaped. The link 24, which may be adjustably connected to either of the parts, rests at its angle upon the insole of the shoe, and the lower front or toe section 25 is hinged by a screw-eye or other suitable device to the upper or shin section. The rear section 26 is connected with the rear end of the link and is engaged at the top by an adjusting-screw 27.

It will be seen that the shoe-tree is exceed-

ingly simple and inexpensive in construction, that it is capable of filling out an entire shoe from the toe to top, and that it is collapsible to enable it to be conveniently introduced into and removed from a shoe. Also it will be clear that it is capable of ready adjustment to engage a shoe properly to take out all of the wrinkles and that the parts are all connected, so that they cannot become lost or misplaced when the tree is not in use.

What I claim is—

1. A shoe-tree comprising a front or toe section, an upright rear section extending from the top to the bottom of the tree and arranged to rest upon the sole of a shoe, and an upright front or shin section interposed between the front or toe section and the rear section and pivotally and adjustably connected with the former and movably connected with the latter, substantially as described.

2. A shoe-tree comprising a toe-section, an upright rear section arranged to rest upon the sole of a shoe, an upright shin-section interposed between the said sections and pivotally and adjustably connected with the toe-section to vary the length of the front portion of the tree without affecting the adjustment at the rear portion of the same, a link pivotally and adjustably connected with the lower ends of the shin and rear sections, and a movable device interposed between the upper ends of the shin and rear sections.

3. A shoe-tree comprising a toe-section, an upright rear section, an upper or shin section arranged to rest directly upon the sole of a shoe and adjustably connected with the rear section and pivotally and adjustably connected with the toe-section to permit the front portion of the shoe to be varied in length without affecting the adjustment at the rear portion of the same, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ANDREW PERRY REDIFER.

Witnesses:

EVERETT W. DEWEES,  
FRANK REDIFER.