

No. 840,008.

PATENTED JAN. 1, 1907.

W. L. C. NILES.
SHOE TREE.

APPLICATION FILED JAN. 5, 1906.

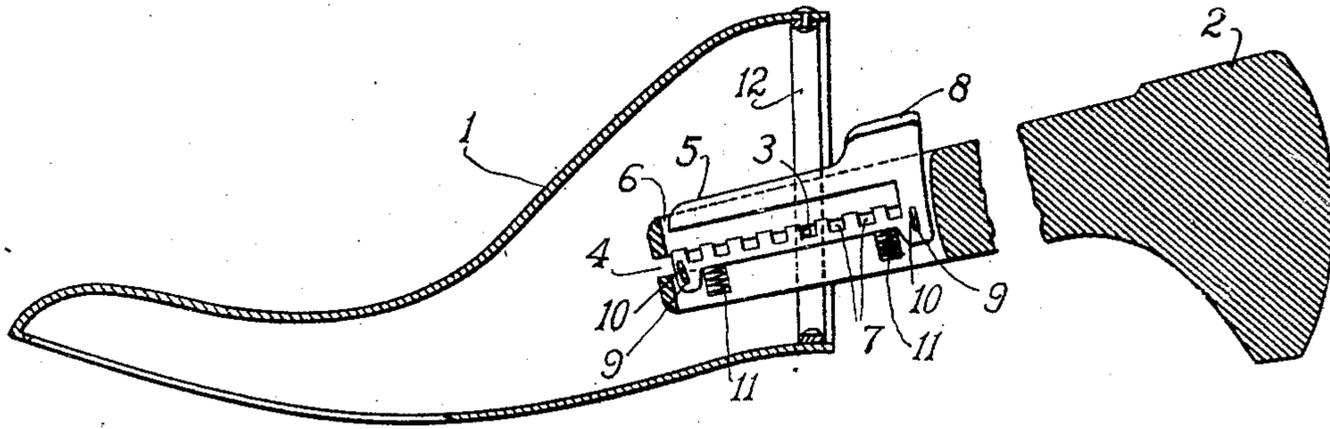


FIG. 1.

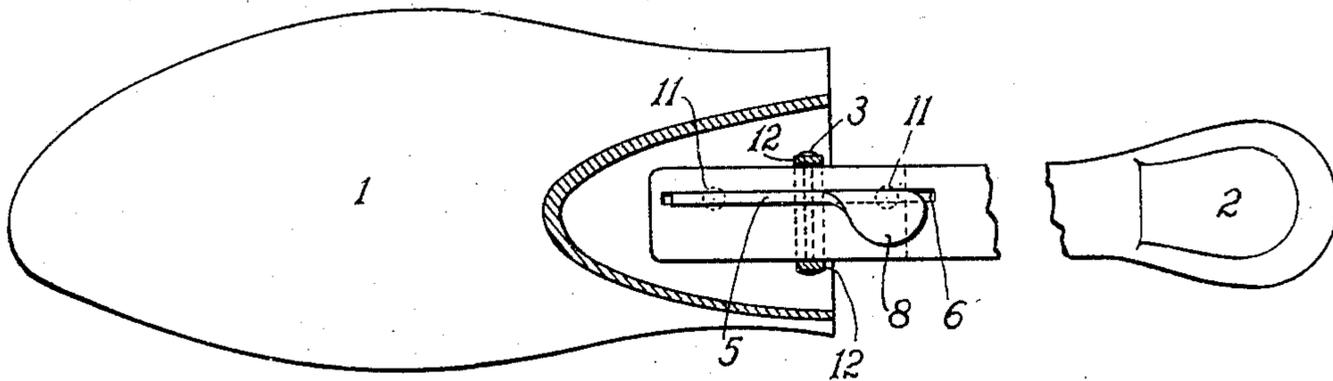


FIG. 2.

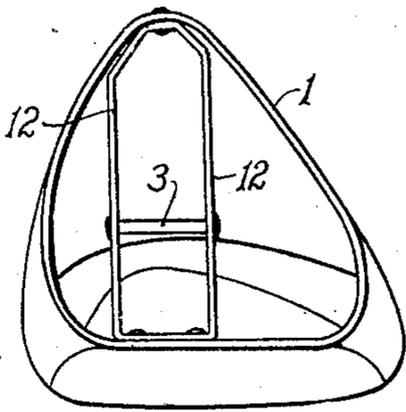


FIG. 4.

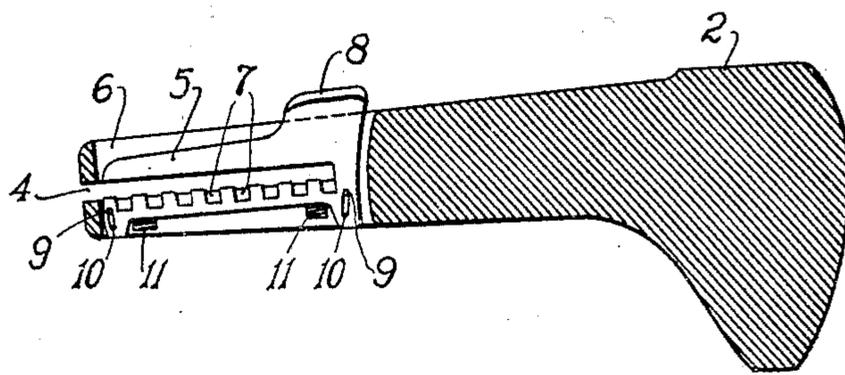


FIG. 3.

WITNESSES

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SHOE-TREE.

No. 840,008.

Specification of Letters Patent.

Patented Jan. 1, 1907.

Application filed January 5, 1906. Serial No. 294,690.

To all whom it may concern:

Be it known that I, WALTER L. C. NILES, a citizen of the United States, residing at Lynn, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Shoe-Trees; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in shoe-trees.

One object of the invention is to produce a shoe-tree having improved means for adjusting the length of the tree, these means being convenient and accessible, so that the tree may be quickly adjusted in the act of inserting it into a shoe, as is frequently necessary where the same tree is used in shoes of different shapes, even though the shoes are of the same size.

Another object of the invention is to produce a shoe-tree which is at once light in weight and strong in construction.

The invention consists in a shoe-tree constructed substantially like the improved shoe-tree hereinafter described, as defined in the claims.

In the drawings, Figure 1 is a vertical longitudinal section of a shoe-tree constructed in accordance with the present invention. Fig. 2 is a plan view showing the fore part of the tree in section. Fig. 3 is a vertical longitudinal section of the heel part of the tree, showing the locking-plate in lowered position; and Fig. 4 is a rear view of the fore part of the tree.

The illustrated embodiment of the invention comprises a fore part 1 and a heel part 2, pivotally connected by a pivot-pin 3, so as to form a toggle, as is common in shoe-trees. The pivot-pin 3 engages a horizontal slot 4 in the shank of the heel part and is engaged and held by a locking-plate 5, located in a vertical slot 6 in the shank. To provide for adjustment of the length of the tree, the locking-plate is provided with several recesses 7, which may engage the pivot-pin and is arranged to be depressed in the slot 6, so as to disengage the pivot-pin, a lug 8, extending from the top of the plate, being provided for this purpose and being located in position to be conveniently pressed by the thumb. The locking-plate is held in place and its movements are limited by pins 9, passing through

slots 10 in the ends of the locking-plate. Springs 11, pressing against the lower edge of the locking-plate, tend to hold it up in engagement with the pivot-pin. In the act of inserting the tree, if it be found to be incorrectly adjusted, the lug 8 may be pressed downwardly and forwardly, so as to lower the locking-plate clear of the horizontal slot, and the pivot-pin may then be moved to a new position in the slot before the locking-plate is released.

To secure lightness in the shoe-tree, the fore part 1 is made of a hollow shell of sheet material. The pivot-pin 3 is mounted in two parallel vertical bars 12, formed by a single strip of metal bent into the form of an elongated frame and riveted at the top and bottom to the body of the fore part. The hollow fore part affords a recess for the shank of the heel part when the tree is adjusted for short shoes, as shown in the drawings.

The present invention is not limited to the details of construction of the illustrated embodiment, but may be embodied in other forms, broadly defined in the claims.

I claim—

1. A shoe-tree, having, in combination, a fore part, a heel part, and means for adjustably connecting said parts, comprising a transverse pin fixed to one part and a manually-movable locking-plate connected with the other part and provided with a plurality of recesses for engaging said pin, substantially as described.

2. A shoe-tree, having, in combination, a fore part and a heel part, one of said members being provided with a transverse pin and the other with a horizontal slot engaging said pin, and a manually-movable locking-plate provided with a plurality of recesses for engaging and retaining the pin, substantially as described.

3. A shoe-tree, having, in combination, a fore part provided with a transverse pivot-pin, a heel part having a horizontal slot engaging the pivot-pin, a serrated locking-plate movably mounted in a vertical slot in the heel part, pins engaging vertical slots in the ends of the locking-plate to limit its movements, and a spring acting normally to press the locking-plate into engagement with the pivot-pin, the locking-plate being manually movable to release the pin, substantially as described.

4. A shoe-tree, having, in combination, a

hollow fore part of sheet material open at the rear, a frame comprising two parallel vertical bars fixed at top and bottom in the open rear end of the fore part, a horizontal pivot-pin
5 fixed to and between the vertical bars, and a heel part pivoted on the pivot-pin, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WALTER L. C. NILES.

Witnesses:

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