

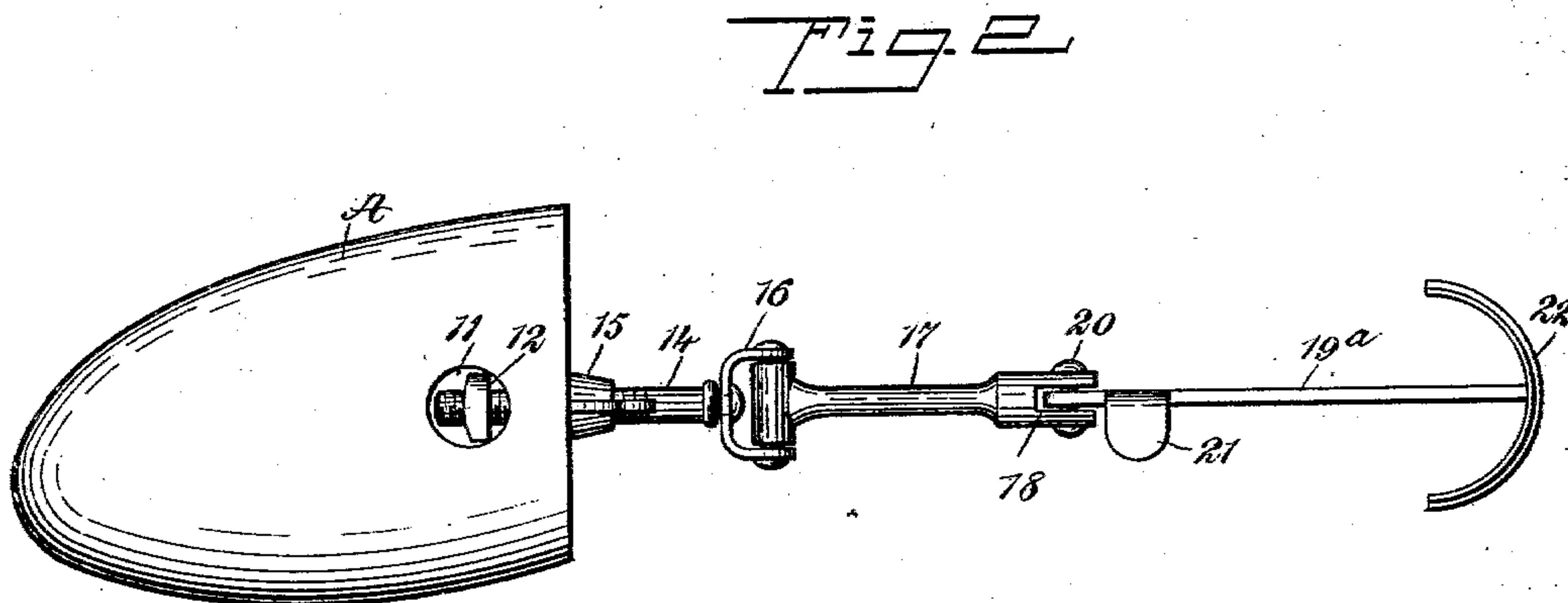
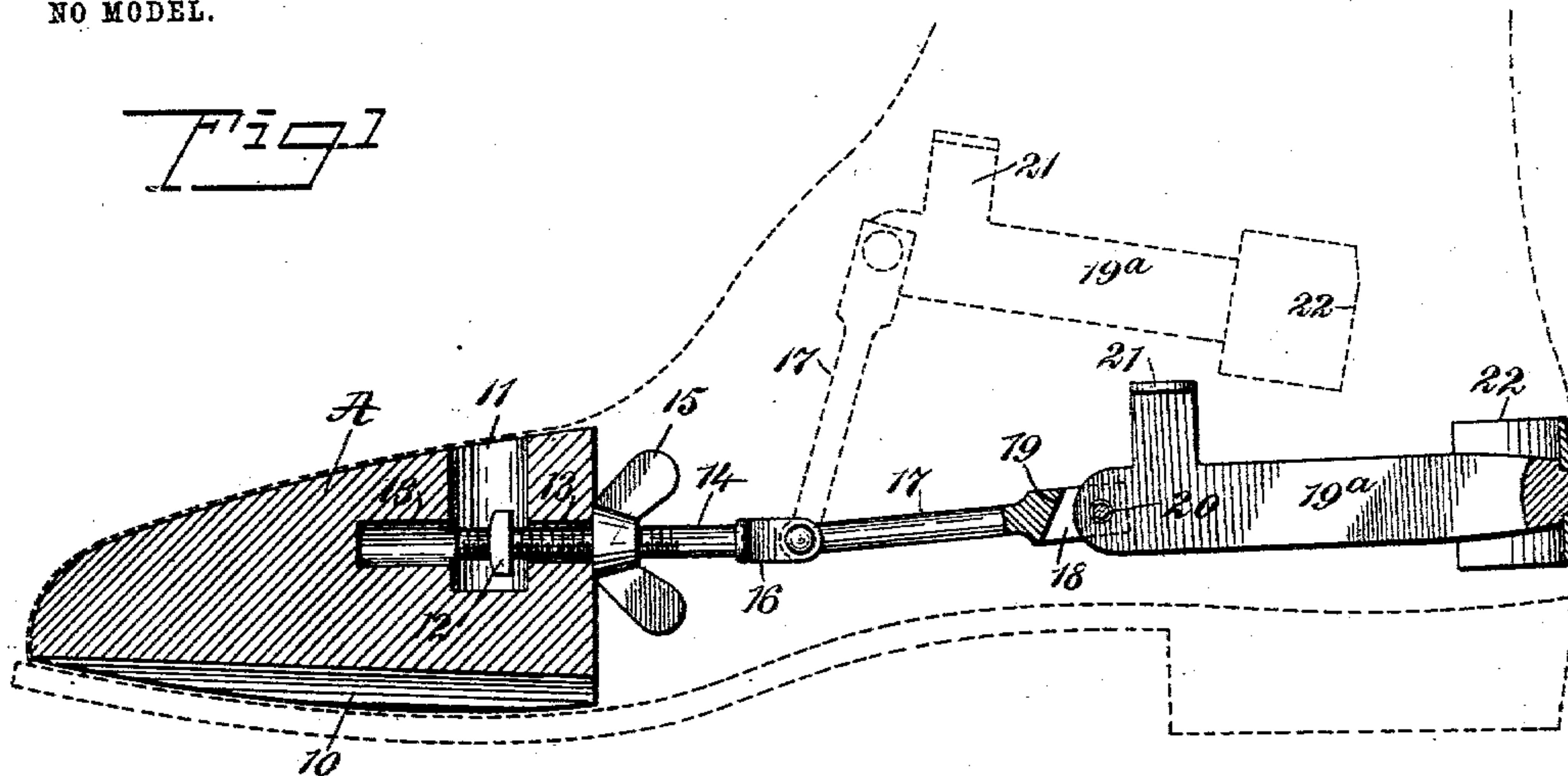
No. 720,916.

PATENTED FEB. 17, 1903.

M. HAYES.
SHOE TREE.

APPLICATION FILED APR. 2, 1902.

NO MODEL.



WITNESSES:

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UNITED STATES PATENT OFFICE.

MATTHEW HAYES, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO
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SHOE-TREE.

SPECIFICATION forming part of Letters Patent No. 720,916, dated February 17, 1903.

Application filed April 2, 1902. Serial No. 101,071. (No model.)

To all whom it may concern:

Be it known that I, MATTHEW HAYES, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Shoe-Tree, of which the following is a full, clear, and exact description.

My invention relates to means for use in boots and shoes, whereby to expand and reshape the same after wearing and prevent the boot or shoe from being crushed and wrinkled while not in use.

The purpose of the invention is to so construct the tree that it will be economic, simple, and easy of manipulation, it being possible to insert the tree quickly and conveniently in a boot or shoe and bring it in position to shape the same and as quickly and conveniently remove the tree.

Another purpose of the invention is to provide simple means for adjusting the tree in direction of its length and for maintaining the tree in its adjusted position.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both figures.

Figure 1 is a longitudinal section through the improved tree in operative position in a shoe and illustrating in dotted lines the position of the rear parts of the device when the device is to be introduced into the boot or shoe or when the device is to be removed therefrom, and Fig. 2 is a plan view of the device.

A represents a forming-block or fore-part last, the bottom surface of which last is preferably concaved, as shown at 10 in Fig. 1, so that the last will bear upon the insole of the shoe at its edges only. The last is provided with a vertical bore 11 near its rear end and about centrally located between its sides, and in the said bore 11 a nut 12 is held from turning. This nut is opposite horizontal bores 13, which extend from the rear end of the last to the vertical bore and beyond the forward wall of the said vertical bore, as is shown in

Fig. 1. The horizontal bores 13 are adapted to receive a threaded rod 14, which rod passes through the nut 12, and the said threaded rod carries a winged lock-nut 15 between the rear end of the fore-part last A and the rear end of the rod, as is shown in both Figs. 1 and 2. The screw-rod 14 is adjusted by the fingers and when in its adjusted position is held by the manipulation of the lock-nut 15, which is jammed against the rear end of the last A.

At the rear end of the screw-rod 14 a swivel 16 is located, and in this swivel the forward end of an intermediate rod 17 is pivoted, which intermediate rod 17 at its rear end is provided with a slot 18, the rear wall 19 whereof is downwardly inclined, as is shown in Fig. 1.

The forward end of a heel-bar 19^a is pivoted in the slot 18 of the intermediate rod or bar 17 through the medium of a swivel-pin 20, and this heel-bar 19^a is provided with an upwardly-extending preferably angular finger-piece 21, and at the rear end of the heel-bar 19^a a curved counter bar or block 22 is secured, adapted for engagement with the inner face of the counter-section of the boot or shoe.

Preferably the rods 14 17 and bar 19^a are made of metal, but the counter bar or block 22 may be made of wood, metal, or other suitable material, and its outer face may be covered with felt or other soft material if in practice it is found desirable.

When the tree is to be placed in a boot or shoe, the intermediate rod 17 is carried to the upper vertical position shown in dotted lines in Fig. 1, whereby the heel-bar 19^a is brought to the upper horizontal position, also shown in dotted lines in Fig. 1, and this position of the said parts enables the fore-part last A to be introduced into the toe portion of the boot or shoe. When the fore-part last A has been properly placed in the boot or shoe, the heel-bar 19^a is permitted to drop until the counter bar or block 22 rests upon the insole of the shoe at the heel-section thereof. Finally, the intermediate bar 17 is pressed downward, straightened out, and brought to a horizontal position, whereupon the last A is forced forward and the heel-bar 19^a is forced rearward, bringing the counter bar or block 22 in firm engagement with the counter of the shoe, thus preserving the shape of the shoe and abso-

lutely preventing it from wrinkling when not in use.

By loosening the wing-nut 15 and manipulating the screw-rod 14 the length of the device may be varied, and the extent to which the device may stretch the shoe may be thus regulated. When the device is to be removed from a boot or shoe, it is simply necessary to grasp the handle 21 and draw the heel-bar 19^a upward, whereupon the heel-bar and intermediate bar will assume the position they had when the device was placed in the boot or shoe, and the device may be readily drawn out from its stretching position.

15 Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a shoe-tree, the combination with a fore-part last, a nut secured therein, said last
20 being provided with a bore leading to the nut from its rear end, a screw-rod passed through the said bore and the said nut, a lock-nut carried by the said rod and adapted for engagement with the rear end of the fore-part last,
25 a heel-bar provided with a handle, a curved counter-bar carried by the rear end of the

heel-bar, and an intermediate bar pivotally connected with the screw-rod and heel-bar, for the purposes described.

2. In a shoe-tree, the combination with a
30 fore-part last, a nut secured in the said last, said last being provided with a bore extending from its rear to and beyond the said nut, a screw-rod passed through the said bore and through the said nut, a lock-nut located on
35 the said screw-rod and adapted for engagement with the rear surface of the last, and a swivel carried by the rear end of the screw-rod, of a heel-bar having an upwardly-extending handle near its forward end, a curved
40 counter-bar secured to the rear end of the heel-bar, and a connecting-bar pivotally attached to the said swivel and pivotally connected with the heel-bar, for the purposes set forth.

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

MATTHEW HAYES.

Witnesses:

SYLVESTER WINKLER,
PATRICK H. KEATING.