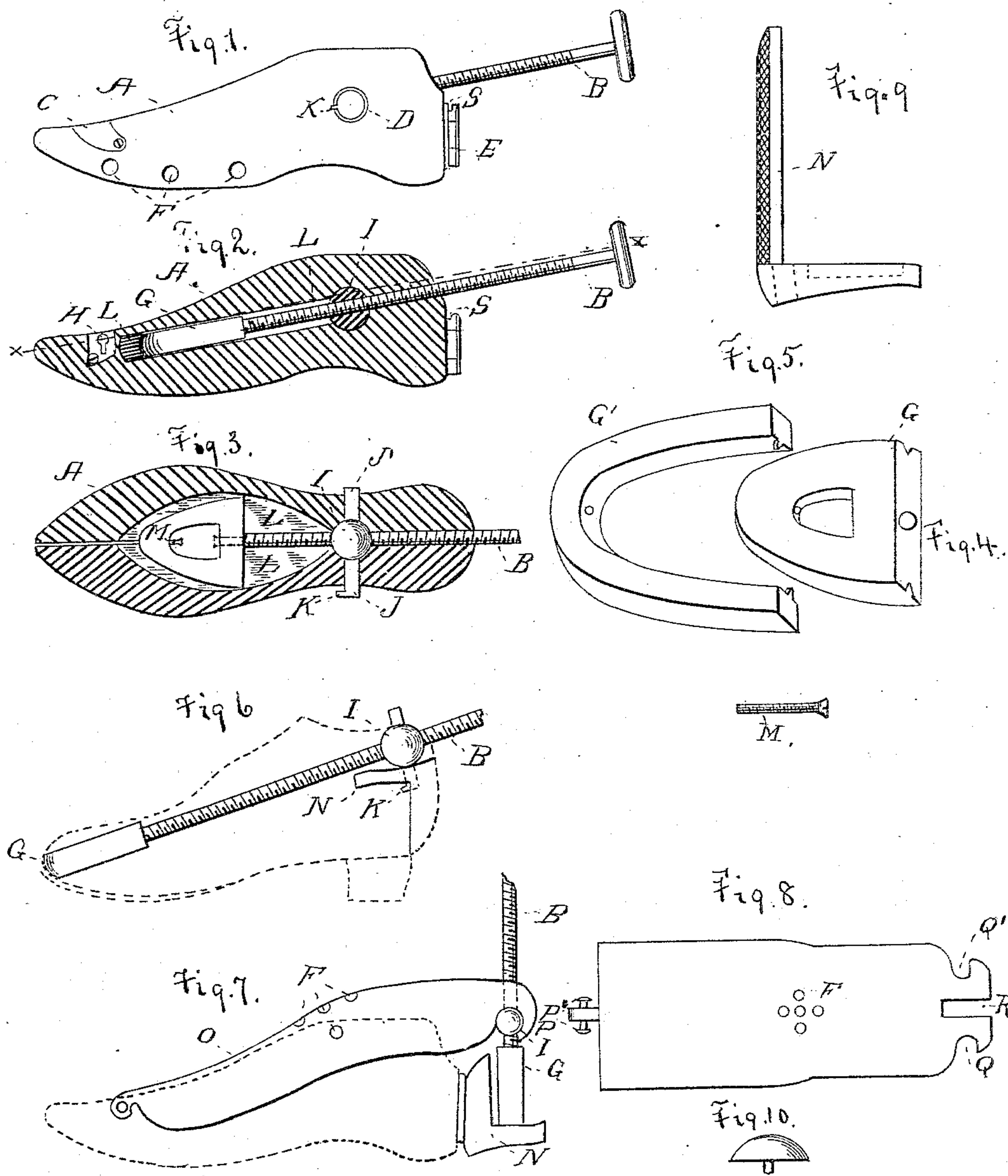


(No Model.)

W. JONES.  
SHOE STRETCHER.

No. 315,631.

Patented Apr. 14, 1885.



WITNESSES:  
Morris A. Clark  
Charles Raeder.

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# UNITED STATES PATENT OFFICE.

WILEY JONES, OF NORFOLK, VIRGINIA.

## SHOE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 315,631, dated April 14, 1885.

Application filed February 4, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, WILEY JONES, a citizen of the United States, residing at Norfolk, in the county of Norfolk and State of Virginia, have invented a new and useful Improvement in Shoe-Stretchers, of which the following is a description.

This invention has general reference to boot and shoe stretchers; and its object is the production of an implement capable of successively stretching a boot or shoe across the balls, at the instep, and in length, all by means of one last and its large operating-screw, in a manner as hereinafter first fully set forth and described, and then pointed out in the claims.

In the drawings, which serve to illustrate my invention more fully, and form a part of this specification, Figure 1 is a side elevation of my improved shoe-stretcher. Fig. 2 is a longitudinal sectional elevation of the same, showing the inner side of one half of the last. Fig. 3 is a sectional plan in the line *xx* of Fig. 2. Fig. 4 is a perspective view of the small wedge, G, seen in Figs. 3 and 2. Fig. 5 is a perspective of the larger wedge. Fig. 6 is a side view of a portion of the stretcher detached from the last and used for lengthening the shoe. Fig. 7 is a side view of the stretcher as used for stretching the instep, the outlines of the last being indicated by dotted lines. Fig. 8 is a view of the top of the instep-plate detached from the screw and last. Fig. 9 is the detachable compound bracket N. Fig. 10 is the detachable bunion-cap used in stretching cavities for bunions on the instep or sides of the shoe.

A in said drawings represents the wooden or metallic last of the stretcher. This last is divided by a vertical and longitudinal line into halves, connected by the hinge E, and along the inner side of each half runs an inclined groove, L and L, shallowing out toward the end and answering to the groove in the other half, as shown in Fig. 3. The screw B passes through a screw-threaded aperture in the nut I, from the sides of which nut, and at right angles to the screw, extend the arms or axles J and J', that work detachably in the bearings D, formed in each side of the last near the heel. On the end of the screw B is secured permanently the small wedge G.

To widen the shoe or boot, I turn the screw

and force the wedge G along the grooves L and L, Fig. 3, thereby expanding the last as the wedge approaches the end of the grooves.

Instead of the sharp-pointed wedge heretofore used, I employ one whose point is of semicircular form, which admits equally of its being used in the last and of its being taken from the last and pushed against the upper-leather lengthwise of the shoe to stretch a cavity conformable to the great toe of the foot, as clearly shown in Fig. 6. Simultaneously with this lengthwise pressure against the toe the metal compound bracket N, which, by means of its slotted aperture, is fitted over the axle or arm J, and held on by the spur K, pushes in the opposite direction by a reciprocating movement against the inside of the counter, and thereby lengthens the shoe.

To stretch a broader cavity in the toe lengthwise, I employ the larger wedge, Fig. 5, which also has a semicircular point, and is then fitted around the small wedge G, and secured thereto by the small screw M, operating through an orifice in the small wedge, also by the teeth fitting into their respective recesses at the opposite ends of the two wedges, as indicated in Figs. 4 and 5. I also employ my larger wedge in the last when it is desirable to stretch the shoe wider than can be done by the small wedge alone. To obtain this extra widening-power an extra and separate wooden last has been used heretofore.

To stretch the instep, I employ the metal plate O, resting detachably in the metal face-plate C, which contains an orifice or slot that receives the headed pins P and P' at toe of last. The instep-plate O is actuated at the heel end by the screw B, which, with its wedge G, rests in a cavity at the foot of the detachable compound bracket N, Fig. 7, which bracket is fitted into a slot at the top of the hinge E, the arms J and J' of the screw-threaded nut I being arranged to oscillate in the two slots Q and Q' of the instep-plate, and the screw B projecting upward through the middle slot, R, of the instep-plate. The apertures F (in Figs. 1, 7, and 8) are for the detachable bunion-cap, Fig. 10.

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

1. In a shoe and boot stretcher, the combi-



nation, with the divided last A, of the screw B and wedge G, provided with the additional screw M, all arranged substantially as shown and described.

5 2. The combination, in a shoe-stretcher having the last A, of the screw B and the grooves L and L with the larger wedge G', fitted detachably on the small wedge G, as and for the purposes described.

10 3. The combination, in a shoe-stretcher having the last A, with the screw B, the screw-threaded nut I, and its arms J and J, of a spur, K, on one of its arms, which spur passes through a slotted aperture in the corner of the  
15 compound bracket N, holding this bracket in place, as and for the purpose indicated.

4. The combination, in a shoe-stretcher having the last A, with the screw B and the arms J and J, of a compound bracket, N, fitting detachably on the spurred arm and held in position by the spur K, which compound bracket  
20 consists of a slotted aperture at its corner for receiving the arm J, with the spur K, and having a roughened surface at its back to prevent slipping from the counter of the shoe,  
25 also having a slot for catching upon the hinge E, and a cavity for receiving the point of the

wedge G, in the manner and for the purposes stated.

5. The combination, in a shoe-stretcher having the last A, of the hinge E and a slot at the top of this hinge to receive the compound bracket N, as and for the purpose described. 30

6. The combination, in a shoe-stretcher having the last A, of the hinge E and the screw B, with a metallic instep-plate, O, consisting at one end of an arm holding the headed pins P and P, and at the other end of the slots Q and Q and R for the reception of the screw and its arms J and J, as and for the purposes indicated. 35 40

7. The combination, in a shoe-stretcher having the last A, the screw B, and the grooves L and L, with a face-plate attached to each half of the last and containing an orifice or slot for gearing thereinto, of the headed pins P and P at the toe end of the instep-plate, all as shown and described substantially. 45

In testimony of which invention I hereunto set my hand.

WILEY JONES.

Witnesses:

RICHARD HENRY BAKER, Jr.,  
WESTWOOD ARMISTEAD TODD.