H. WATERS.

LAST.

APPLICATION FILED AUG. 18, 1910.

1,010,546. Patented Dec. 5, 1911.

Fig. 1.

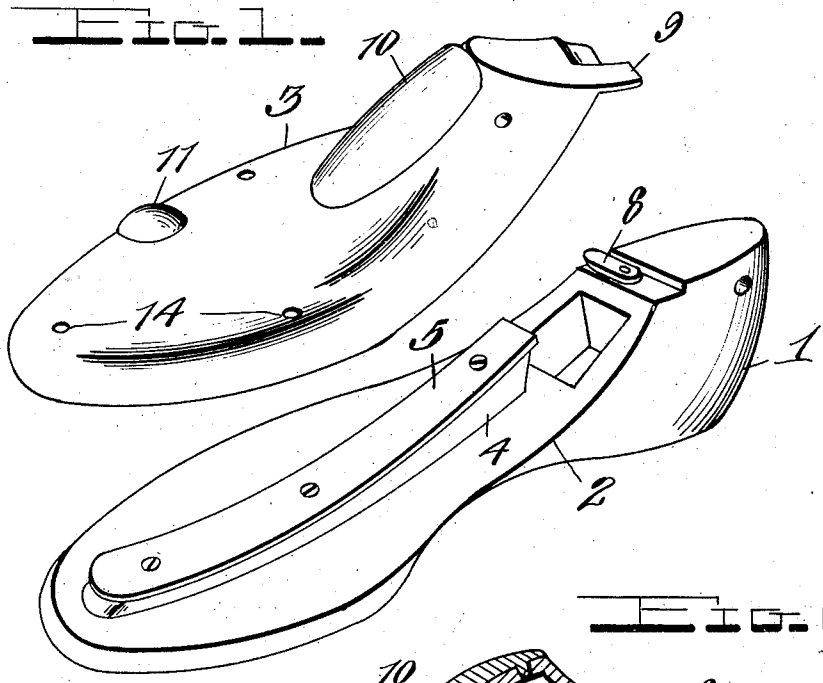


Fig. 2.

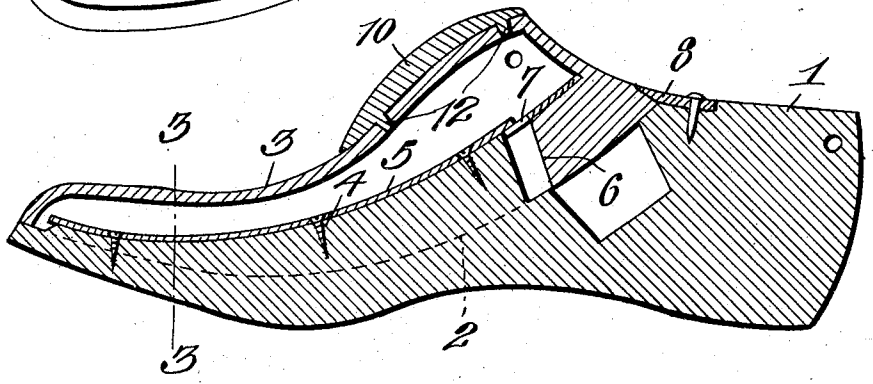


Fig. 4.

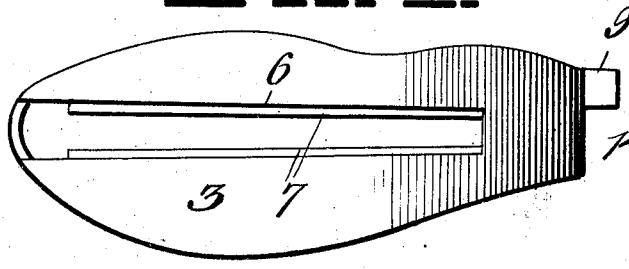
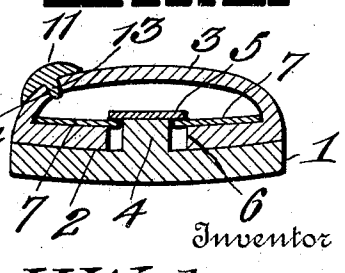


Fig. 3.



Witnesses

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LAST.

1,010,546. Specification of Letters Patent. Patented Dec. 5, 1911.

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To all whom it may concern:

Be it known that I, HENRY WATERS, a citizen of the United States, residing at Bisbee, in the county of Cochise and Territory of Arizona, have invented certain new and useful Improvements in Lasts; and I do 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 lasts.

One object of the invention is to provide a shoe last having improved means whereby instep blocks of different styles may be readily engaged with and held in position on the last, thus necessitating but one last for a number of different styles of blocks.

With the foregoing and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts, as will be more fully described and particularly pointed out in the appended claim.

In the accompanying drawings: Figure 1 is a plan view showing the parts of the last separated; Fig. 2 is a vertical longitudinal section of the last with the parts assembled; Fig. 3 is a vertical cross sectional view of the same on the line 3—3 of Fig. 2; Fig. 4 is a bottom plan view of the instep block of the last.

Referring more particularly to the drawings, 1 denotes the last which is cut away on the upper side of the toe and instep portion to form a seat 2 for the detachable instep blocks 3 which are detachably engaged with and secured thereto in a manner hereinafter described. On the seat 2 formed by cutting away the upper portion of the last is arranged a central longitudinally disposed upwardly projecting rib 4 which extends from the toe end of the last to a point opposite the instep thereof. The upper edge of the rib 4 is formed on a curve and the rib gradually increases in thickness from the toe end to the instep end thereof as shown, and also increases gradually in width from the instep end to the toe end thereof thus providing a wedge shaped construction. On the upper curved edge of the rib 4 is secured a block fastening plate 5, the width of which gradually increases from the inner or instep end thereof to the toe end. The plate 5 is of such width that the side edges thereof project beyond the opposite sides of the rib and form flanges, the purpose of which will be hereinafter more fully described.

The instep blocks 3 may be of any desired shape and are here shown as being extended to form the upper portion of the toe of the last. The instep blocks 3 are preferably hollow and in the lower side of the blocks is formed a longitudinally extending centrally disposed slot 6, the width of which gradually increases from the instep end thereof toward the toe end. The thickness of the material forming the lower side of the block 3 increases from the toe end to the instep end of the block, so that the thickness of the walls of the slot 6 correspond with the thickness of the rib 4 on the last, so that when the instep block is engaged with the seat 2 of the last the flanges formed by the projecting side edges of the plate 5 will lap over and engage the inner surface of the bottom of the block when the latter is forced down in position on the seat 2 thereby securely holding the block in place on the last. Arranged on the inner surface of the bottom of the block are wear plates 7 which are engaged by the projecting edges or flanges of the plate 5, thus preventing the inner surface of the bottom of the block from being worn by friction of the projecting edges of the plate 5. The difference in the width of the inner and outer ends of the slot 6 causes the wedge shaped rib 4 to fit snugly in the slot and cause the walls of the rib and slot to bind together when the blocks are pushed down in position on the last.

Referring particularly to Figs. 1 and 3, of the drawings, it will be clearly seen that the fastening plate 5 is centrally positioned upon the rib 4, and secured thereto by screws or other fastening devices whereby the opposite longitudinal projecting edges of said plate will yieldingly and frictionally engage with the wear plates 7 when the instep block 3 is placed in proper position upon the last 1 whereby the said instep block is prevented from accidentally changing its relative position in respect to the last.

The heel portion of the last is preferably recessed on its inner side at the end of the rib 4 and on the upper side of the heel portion adjacent the inner end of the seat 2 formed thereon is a pivoted catch 8 which is preferably in the form of a plate or button the lower edge of which at its free

end is beveled to facilitate the engagement of the plate or button with the adjacent upper end of the block 3, thereby securely fastening the block when in place on the last. On the upper end of the block is formed a rearwardly projecting stop lug 9 which is adapted to engage the upper side of the heel portion of the last.

In order to provide means for stretching the instep and upper portion of the toe of the shoe at different points to cause the instep or portions of the toe to conform to the irregularities of the foot, or for the accommodation of bunions, I provide stretching devices 10 and 11. The stretching device 10 is in the form of an oblong shaped plate or block which is formed of leather or other suitable material and is rounded on its outer surface and formed on its inner side with a curvature or concavity which conforms with the shape of the upper portion of the instep block with which the same is engaged. The stretching plate or block 10 is provided at its opposite ends with downwardly projecting fastening pins 12 which are adapted to be engaged with apertures formed in the upper portion of the instep block as shown. The bunion stretching device comprises a convex disk or block which may be of circular or other suitable form and which is provided with a centrally disposed inwardly extending fastening pin 13 which is adapted to be engaged with one of a series of apertures 14 formed in the upper side of the toe portion of the block whereby the stretching device 11 is adapted to be arranged at different positions for stretching the shoe at the desired point or whereby two or more bunion stretching devices may be arranged on the block.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as defined in the appended claim.

Having thus described my invention what I claim is:

A last comprising a body portion provided with a longitudinal rib terminating at a suitable distance from the toe portion of said body, a retaining plate secured to the rib and having its longitudinal edges projecting beyond the opposite sides of the rib, a hollow detachable instep block, the base of which is slotted longitudinally and of greater width than the rib, and plates secured to the inner surface of the base portion of the instep block, the edges of which project beyond the slot formed therein, and adapted for yielding engagement with the plate carried by the rib, whereby the parts are held in frictional engagement.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

HENRY WATERS.

Witnesses:
JOHN SMITH,
HENRY J. HARRIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."