(No Model.)

W. GORDON.

LAST.

No. 449,877. Patented Apr. 7, 1891.

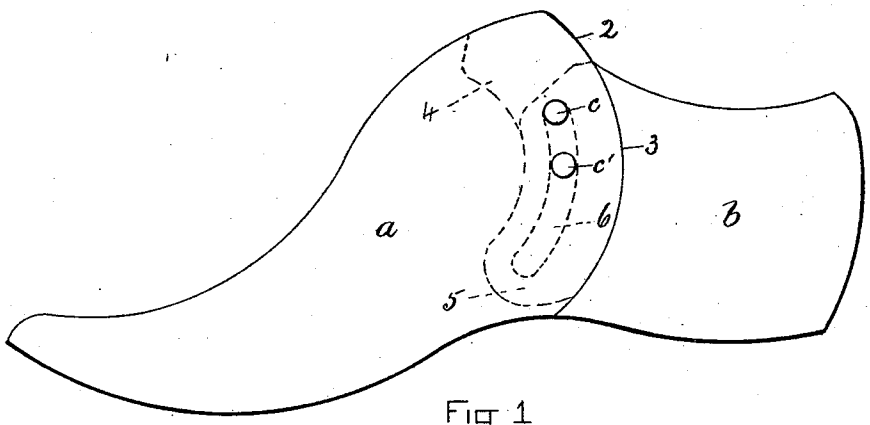


Fig 1

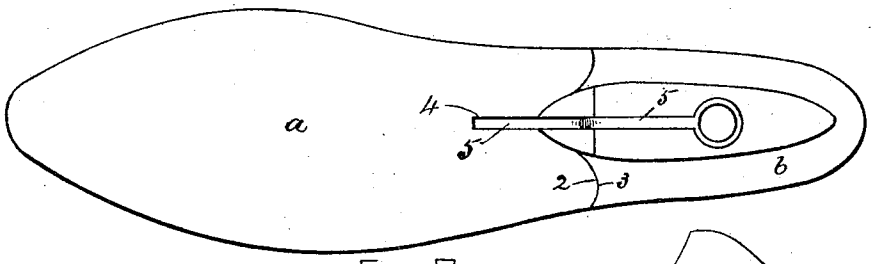


Fig 2

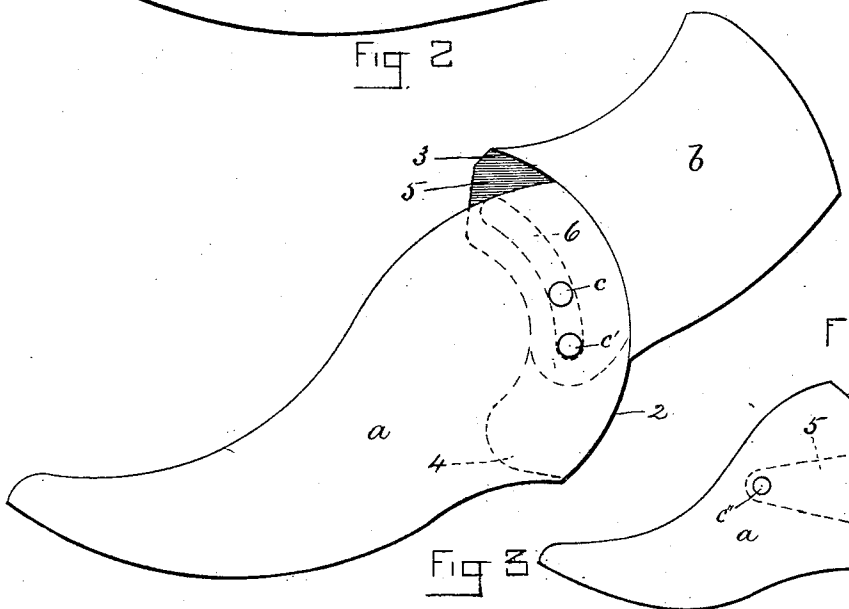


Fig 3

FIG-4-

Witnesses
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C. E. Bartlett

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Wm. Gordon
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM GORDON, OF BOSTON, ASSIGNOR OF ONE-HALF TO OLIVER A. MILLER, OF BROCKTON, MASSACHUSETTS.

LAST.

SPECIFICATION forming part of Letters Patent No. 449,877, dated April 7, 1891.

Application filed October 13, 1890. Serial No. 367,930. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM GORDON, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Lasts, of which the following is a specification.

This invention relates particularly to that class of lasts known as "relasting-lasts;" and it has for its object to provide a simple and efficient last of this class which shall have no detached or loose parts and which shall have a firm bearing on the inner surface of the boot or shoe and be easily inserted in and removed from a boot or shoe to which it may be applied.

To this end the invention consists in a last having a fore-part section provided with an outwardly-curved rear face and a heel-section provided with an inwardly-curved front face adapted to bear upon the rear face of the fore-part section, the two sections being so connected as to allow the heel-section to swing upon the fore-part section, all of which I will now proceed to describe.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a side view of my improved last. Fig. 2 represents a top view of the same. Fig. 3 represents a side view, showing the heel-section swung upwardly. Fig. 4 represents a side view of another form of my improved last.

The same letters and numerals of reference indicate the same parts in all of the figures.

In the drawings, *a* represents the fore-part and *b* the heel section. The rear face 2 of the fore-part section *a* is curved outwardly in the segment of a circle, and the front face 3 of the heel-section is curved inwardly to correspond to the curved face 2 of the rear side of the fore-part section, the said face 3 bearing upon the face 2, as shown. The heel-section is provided with a forwardly-projecting tongue 5 and the fore-part section is provided at its rear end with a forwardly-extending slot 4, which is adapted to receive the said tongue 5. The tongue 5 has a segmental slot 6, said slot 6 corresponding in curve to a segment of a circle of the same diameter as that of the seats or faces 2 3.

c c' represent pins which are inserted in the fore part and pass through the slot 6 in the tongue 5, thus engaging the fore-part section with the heel-section. The pins *c c'* are so arranged that when the last is in its normal position the pin *c* will be at one end of the slot 6, as shown in Fig. 1, while when the heel-section is swung upwardly the pin *c'* will be at the other end of the slot 6, as shown in Fig. 3. It will be seen that this construction gives the two sections of the last a firm bearing upon each other at their meeting ends, while at the same time it allows of the ready swinging upward of the heel-section to permit the removal of the last from the boot or shoe to which it is applied.

When the last is to be inserted in a boot or shoe, the heel-section is swung upwardly and the fore part is then inserted in the boot or shoe and pushed forward to place, and the heel-section is then swung down into the heel of the boot or shoe, the last then being in its operative position.

I am aware that lasts have been made which are pivoted or hinged together at their meeting ends so that the heel-section can be swung up on the fore-part section; but so far as I am aware all lasts of this kind have had to be provided with a separate third piece or wedge to give the heel-section a bearing upon the fore-part section when in its operative position. This separate piece or wedge is dispensed with in my improved last, the parts having a firm bearing upon each other by reason of their segmental meeting faces or seats in whatever position they may be placed. It will be obvious that this enables my improved last to be placed in a boot or shoe and made operative more readily than is the case with lasts of the kind referred to having blocks or wedges separate from the fore-part and heel sections.

In Fig. 4 I show a last embodying my invention, but of slightly different arrangement from that already described. This form is provided with the segmental seats or faces 2 3, the tongue 5 in the heel-section, and the slot 4 in the fore-part section, as in the form before described, the difference consisting in the form of the tongue 5 and the manner in which it is attached to the fore-part section. The tongue 5 is in this form extended forward somewhat farther than in the form shown

in Figs. 1, 2, and 3, and instead of having a segmental slot 6 it is provided with a hole at its forward end to receive the pin c'', the slot 4 in the fore-part section extending somewhat, of course, farther forward than in the first-described form of my improved last. The tongue is in this case attached to the fore-part section by a single pin c'', which passes through its forward end at a point which is the center of the circle of which the faces or seats 2 3 are segments. It will be seen that in this form the heel-section will swing on the pivot of the pin c''.

I do not limit myself to the precise forms of attachment of the two sections here shown and described, but may connect them in any other suitable manner.

It will be observed by reference to Figs. 1 and 4 that the heel-section is prevented from dropping below its operative position by the bearing of the tongue 5 on a stop which arrests the downward movement of the heel-section when the bottom of the heel-section registers with the bottom of the fore-part section. Said stop may be the pin c, arresting the upper end of the slot 6, or it may be the lower portion of the slot 4, arresting the lower edge of the tongue 5. The arrest of the downward movement of the sliding heel-section when its bottom registers with the bottom of the fore-part section is a matter of much importance, it being necessary that the continuity of the bottom of the last be unbroken when the last is in use.

I claim—

1. A last transversely divided into two sections, composed of a fore-part section provided with an outwardly-curved seat at its rear end and a heel-section connected to slide on the fore-part section and provided with an inwardly-curved seat 3, formed to bear upon the seat 2, and a pivot for hinging the two sections permanently to each other, the said seats being formed to give the heel-section a solid support when in its operative position and to permit said section to swing upward and forward from its operative position without being removed or disconnected from the fore-part section, as set forth.

2. In a last transversely divided into two sections, the combination of the fore-part section, having at its rear portion an outwardly-curved seat 2 and provided with a slot 4, extending forward from said seat, the heel-section having an inwardly-curved seat 3, formed to bear on the seat 2 and provided with a tongue 5, formed to enter said slot, and means for pivotally securing said tongue to the fore-part section within said slot, as set forth.

3. A last transversely divided into two sections and composed of a fore-part section and a heel-section movable on the fore-part section, one section having a slotted tongue and the other a slot or recess receiving said tongue, and a pin passing through the slot in said tongue, whereby the tongue is secured to the slotted section and permitted to move up and down independently, as set forth.

4. In a last transversely divided into two sections, the combination of a fore-part section having an outwardly-curved seat at its rear end, a heel-section having an inwardly-curved seat formed to bear on the seat of the fore-part section, a tongue on one section engaged with the other section and adapted to move in a slot in the latter to permit the upward and downward movement of the heel-section in the arc of a circle, and a stop arranged to co-operate with said tongue in limiting the downward movement of the heel-section, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 9th day of October, A. D. 1890.

WILLIAM GORDON.

Witnesses:
C. F. BROWN,
A. D. HARRISON.