

N. Jones,

Last.

No. 106,591.

Patented Aug. 23. 1870.

Fig. 1.

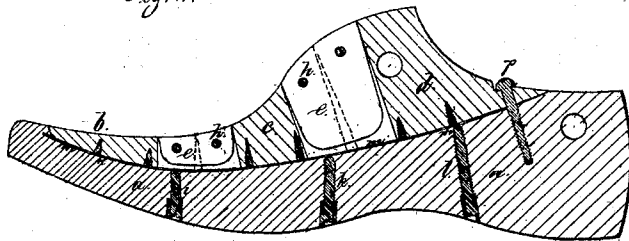


Fig. 2.

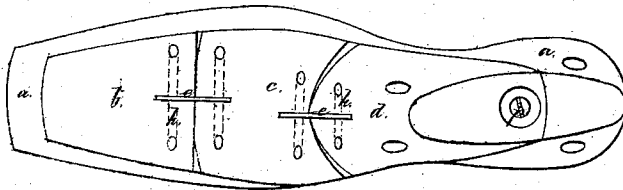
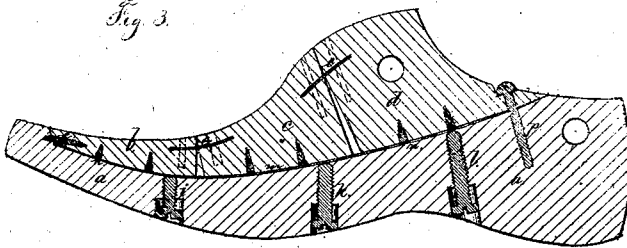


Fig. 3.



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NATHANIEL JONES, OF SYRACUSE, NEW YORK.

IMPROVEMENT IN LASTS.

Specification forming part of Letters Patent No. 166,591, dated August 23, 1870.

To all whom it may concern:

Be it known that I, NATHANIEL JONES, of Syracuse, Onondaga county, State of New York, have invented a certain new and useful Improvement in Lasts for Boots and Shoes; and the following is hereby declared to be a correct description of the same.

The object of my improvement is to provide a last that can be adjusted or varied in the shape of the instep and top of the foot, so as to accommodate the different circumferential measurements of feet of the same length and dispense wholly with the use of filling-pieces of leather to aid in giving the shape to the last; and said improvement consists in a last in which the upper or block portion of the same is made in sections connected to each other by joints, so that the sections can be adjusted to obtain the desired shape and measurement of the last, and the said sections are adjusted by screws passing through the main or body portion of the last.

This invention allows the main or body portion of the last to be made of one piece, so as to be solid and firm for the nailing on of the sole, whereas the lasts heretofore made with longitudinal divisions so as to be spread laterally are not solid for resisting the hammering in applying the sole to the upper.

In the drawings, Figure 1 is a vertical longitudinal section of my improved last, and Fig. 2 is a plan of the same. Fig. 3 is a vertical longitudinal section of a modification of the same.

a is the main or body portion of the last, and, with the upper or sectional portion, may correspond in length and general shape to any of the given sizes of boots and shoes. This upper or block portion I form in sections, and I have shown the same as made in three pieces, *b c d*; but I do not limit myself in this respect, as the same might be formed in two or more sections. I connect these sections *b, c, and d* to each other by joints, and I have shown the plates *e e* and pins *h h*, so that the said sections can move or swing as they are raised by one or more of the screws, *i, k, l, or p*, and the space between the sections is such as to allow of the required movement upon the said pins *h h* as the sections are raised or low-

ered to conform accurately to the required circumferential measurement.

The sections may be connected at the bottom portion by a plate, *m*, and this plate is to be attached to one of the sections by screws, or otherwise. The other sections are to be provided with screws or pins, taking the slots *n* in said plate to keep the said sections in their proper positions.

The screws *i k l*, for adjusting the different sections, pass through the main body *a* of the last, and are to be so located that they will act upon the ends of the sections, as shown, to raise or lower the same and vary the measurement at the particular part required.

The screw *p*, applied at the upper and end portion of the section *d* and entering the body *a*, is used for adjusting said section *d* so that this end of the section *d* may be raised from the body *a*, and the other sections may or may not be also varied by their respective screws.

These lasts are to be made of a length corresponding to the given sizes employed in the trade, and from the foregoing it will be understood that the measurements around the different parts *b c d* can be varied at pleasure and with great nicety of adjustment by simply turning one or more of the screws *i, k, l, or p*.

My improved last, constructed as aforesaid, can be adapted to the shape of almost all feet, and a boot or shoe can be made upon the same without the usual filling-pieces of leather applied upon other lasts to give the particular shape at the desired points.

In Fig. 3 I have shown the body *a* and sections *b, c, and d* the same as in Figs. 1 and 2; but I have connected the same to each other by a spring-plate that is permanently attached to two adjoining sections, and the spring or bend of the metal of the plate will allow of a movement of the sections similar to that in Figs. 1 and 2.

The sides of the sections *b c d* might be fitted with thin plates of sheet metal to cover up the opening between the sections and the main body *a* of the last, and the toe part of the body *a* might have a cap of sheet metal to set over the end of the section *b* to allow the end to be slightly raised by the screw *p*.

I do not claim a last in which the instep-sec-

tion is adjustable by screws and a slotted metal plate connects the same with the toe portion of the last, as this is not reliable in use, because the metal plate is liable to be bent by the stretching and hammering.

I claim as my invention—

The instep-block, divided laterally into two or more rigid sections united to each other by

the yielding joints and adjusted in the manner and for the purposes set forth.

Signed by me this 9th day of April, A. D. 1870.

NATHANIEL JONES.

Witnesses:

CHAS. H. SMITH,
GEO. T. PINCKNEY.