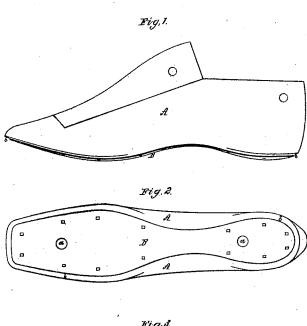
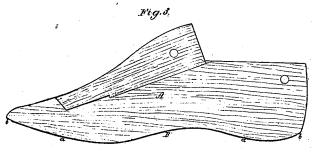
## C.S. Tuninack, Last.

NO. 109,399.

Patented Nov. 22.1870.





Njtnesses S. V. Ispes G. Comm



by his attorney

N. H. Welg

## United States Patent Office.

## CHARLES STORY DUNBRACK, OF SWAMPSCOTT, MASSACHUSETTS.

Letters Patent No. 109,399, dated November 22, 1870.

## IMPROVEMENT IN LASTS.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents may come:

Be it known that I, CHARLES STORY DUNBRACK, of Swampscott, of the county of Essex and State of Massachusetts, have invented a new and useful Improvement in the Manufacture of Lasts for Boots or Shoes; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 is a side elevation; Figure 2, a bottom view;

Figure 3, a longitudinal section; and

Figure 4, a transverse section of a last provided

with my invention.

The last is intended for use with an insole corresponding in size with the metallic plate fixed to the bottom or sole of the wooden portion of the last, such metallic plate serving not only as a gauge to determine the position of the insole, but as a means of effecting the clinching of the tacks used in lasting the vamp to the insole. The said metallic plate is arranged concentrically with the bottom or sole of the wooden part or body of the last, and there is a narrow space all around the periphery of the plate and between such and the periphery of the sole of the body.

In the drawing—

A denotes the wooden last or body of the usual form, and

B represents the metallic gauge and clinching-plate

affixed to the sole of part A.

The gauge-plate B may be let into the sole of the last and may be even therewith, or be made to project a short distance therefrom

Two or more holes, a a, may be formed through the

gauge-plate, to enable the insole to be secured to the last by tacks driven through the insole and such holes, and into the wooden body of the last.

The space around the periphery of the gauge-plate and between such and the edge of the sole of the

wooden body A is as shown at b.

The insole employed with such a last is to be less in width, as well as less in length, than the outer sole, the same being so that the vamp, after having been lasted on the insole, may be stitched to the outer sole by sewing going through the two and around the periphery of, but not through, the insole, a shoe made in such manner being the subject of, or described in, an application for a patent recently filed or to be filed by me.

I am aware that it is not new to apply or affix to the sole of a wooden last a metallic plate of even size with such sole, and therefore I make no claim thereto. My last differs thereform in having the metallic plate arranged concentrically with the sole of the last, and so that there may be a narrow space all around such plate and the periphery of the said sole. Therefore,

I claim as my invention, and as a new or improved

manufacture-

A wooden last A, a metallic gauge and clinchingplate B, fixed to the bottom of such last, with a space b, as described, around such plate and between its periphery and that of the sole of the said wooden last, all being substantially as and for the purpose as hereinbofore set forth.

CHARLES STORY DUNBRACK.

Witnesses:

R. H. EDDY,

J. R. Snow.