No. 842,478. PATENTED JAN. 29, 1907.

H. F. LOEWER.

METHOD OF MANUFACTURING LASTS.

APPLICATION FILED JULY 26, 1905.

FIG. 1.

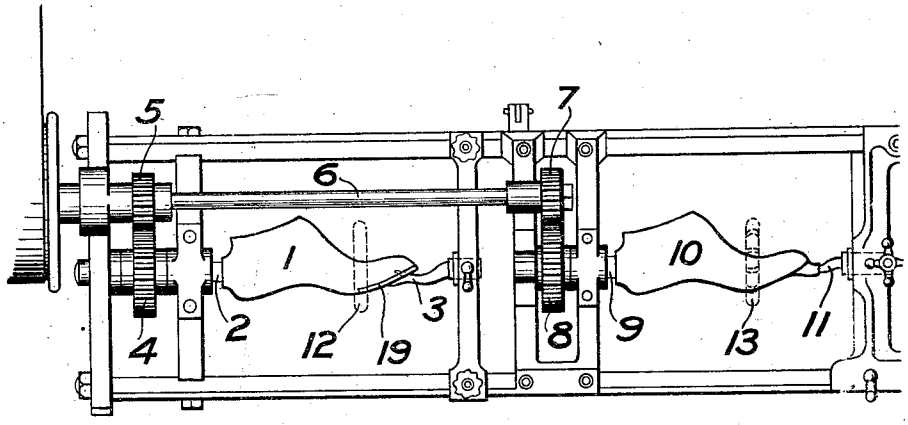


FIG. 2.

FIG. 3.

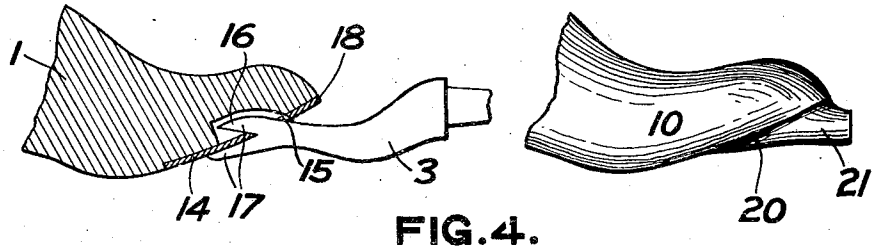
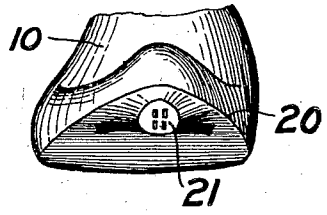


FIG. 4.



WITNESSES:

Clarence W. Carroll

L. Thorn.

INVENTOR:

Henry F. Loewer

by Osgood & Davis

his Attys

UNITED STATES PATENT OFFICE.

HENRY F. LOEWER, OF ROCHESTER, NEW YORK.

METHOD OF MANUFACTURING LASTS.

No. 842,478. Specification of Letters Patent. Patented Jan. 29, 1907.

Application filed July 26, 1905. Serial No. 271,387.

To all whom it may concern:

Be it known that I, HENRY F. LOEWER, a citizen of the United States, and a resident of Rochester, in the county of Monroe and State of New York have invented certain new and useful Improvements in Methods of Manufacturing Lasts, of which the following is a specification.

This invention relates to the method of manufacturing lasts hereinafter described and claimed.

In the drawings, Figure 1 is a plan view of parts of a last-lathe, illustrating the method of the present invention. Fig. 2 is a longitudinal section through the toe of the form used in said last-lathe, showing the means of centering the same. Fig. 3 is an elevation of the toe of a last made according to this method, and Fig. 4 is a front view of the same.

In the usual last-lathe a form 1, made of wood or metal, is fastened between two centers 2 and 3 and is revolved in any suitable manner, such as by the gear 4, driven by the pinion 5 on the shaft 6. The shaft 6 carries another pinion 7, which drives a gear 8, fastened to one of the centers 9 for the last-block 10. The other center 11 for said last-block is held in the usual way by the frame of the machine. A guide-wheel 12 runs upon the surface of the rotating form 1 and in the manner well known determines the position of the cutter 13, which shapes the last-block 10.

Heretofore in turned last-blocks the center 11 has been set opposite the projected end of the toe of the last-block and the center 3 of the form 1 had a similar position with reference thereto, while in the present method the center 3 engages the form so far away from the edge of the bottom of the last-form that the guide-roller may engage both sides of the angle forming the edge of the bottom, and the cutter produces the like form in the last-block, showing the complete shape of the last at the toe, and the unnecessary portions of the last as it comes from the last-machine may be trimmed off by unskilled labor rapidly and with certainty. The heel end of the last-block and of the form are held in the usual manner. The form 1 at the toe has a plate 14, Fig. 2, fitting upon the bottom of the last from the toe back toward the ball, and in this plate is a perforation 15, having above it a hollow or socket 16 in the form itself. The center 3 projects into the hole 15 and engages the rear edge of said perforation in any suitable manner, such as by the forked end 17. The perforation 15 is at a suitable distance back from the tip 18 and from the bottom edge 20 of the toe of the form. The form is thus centered by the center 3, which is out of line with the tip of the toe, and therefore permits the guide-wheel 12 to run over the edge 19 of the form completely around the toe. The effect of this in the last-block is that when the turning operation is complete the edge 20 of the bottom of the block is visible completely around the toe, as shown in Figs. 3 and 4, and the block or projection 21 may be sawed off by a circular saw and then by rasps, files, or sandpaper-machine the bottom of the last may be smoothed in accordance with said edge 20.

Heretofore the projection or waste center piece has projected from the tip of the toe of the last, and it has required skilful labor to finish the toe of the last, and particularly to finish the toes of two lasts, right and left, so that they shall be identical. By the present method of manufacture, however, the complete form of the last is automatically produced in the lathe, and the trimming of the last to its final form is reduced to a simple operation, not requiring skilled labor.

What I claim is—

1. The method of manufacturing lasts in a last-lathe, consisting in first, connecting the lathe center with the last-form at the toe at a point below the point of the toe but with the center of rotation passing through the point of the toe; second, centering the last-block; third, cutting so far toward the center of rotation that the toe of the last is wholly above the projection supported by the lathe center, whereby the cutter cuts around and forms the whole bottom edge of the last; and lastly, trimming off all the material beneath and up to said bottom.

2. The method of manufacturing lasts in a last-lathe, consisting in first, connecting the lathe center with the last-form at the toe at a point below the point of the toe but with the center of rotation passing through the point of the toe, whereby the lathe center engages the last-form eccentricallly to the center of

rotation; second, centering the last-block; third, cutting so far toward the center of rotation that the guide-roller of the last-lathe may engage both sides of the angle forming the edge of the bottom including the toe, whereby the cutter cuts around and forms the whole bottom edge of the last, and leaves a projection at the toe eccentric to the center of rotation; and lastly, trimming off all the material beneath and up to said bottom edge.

HENRY F. LOEWER.

Witnesses:
D. GURNEE,
L. THON.