

(No Model.)

G. A. REYNOLDS.
LAST FOR BOOTS OR SHOES.

No. 408,524.

Patented Aug. 6, 1889.

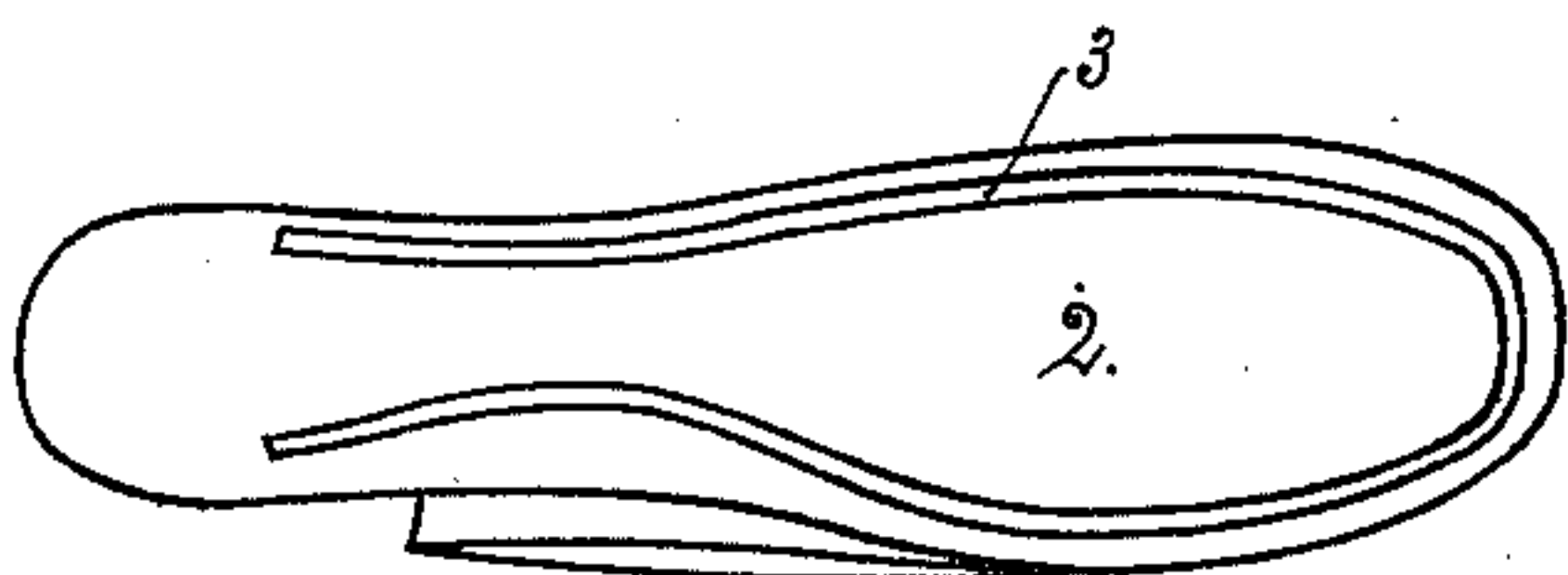
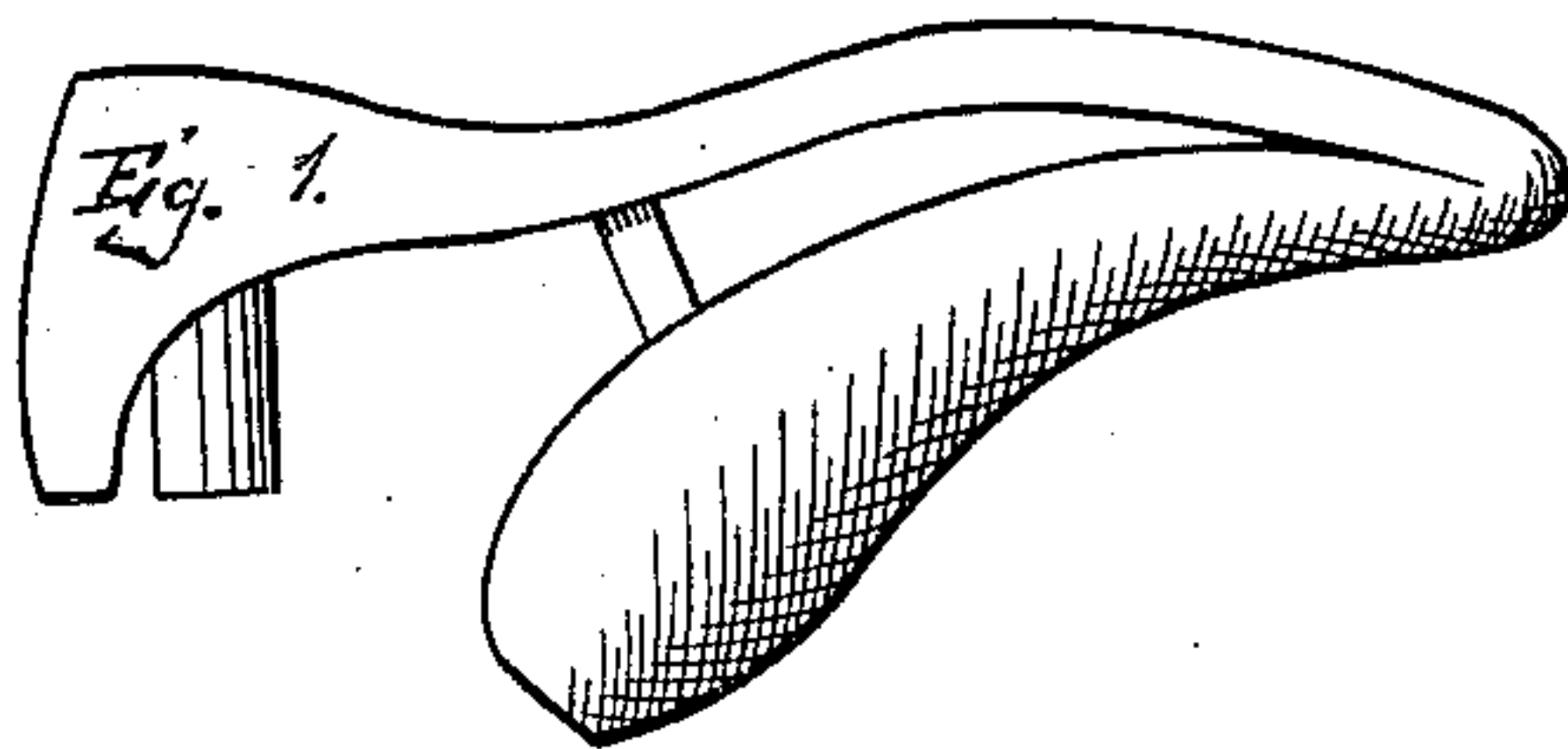


Fig. 2.

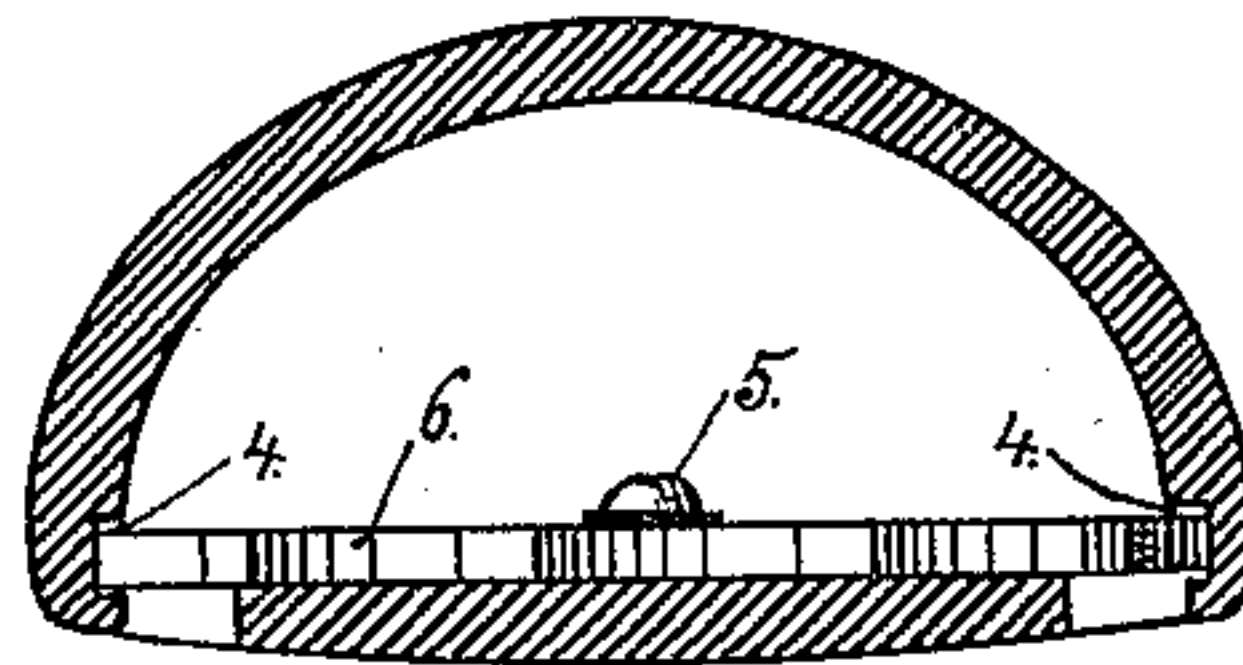


Fig. 4.

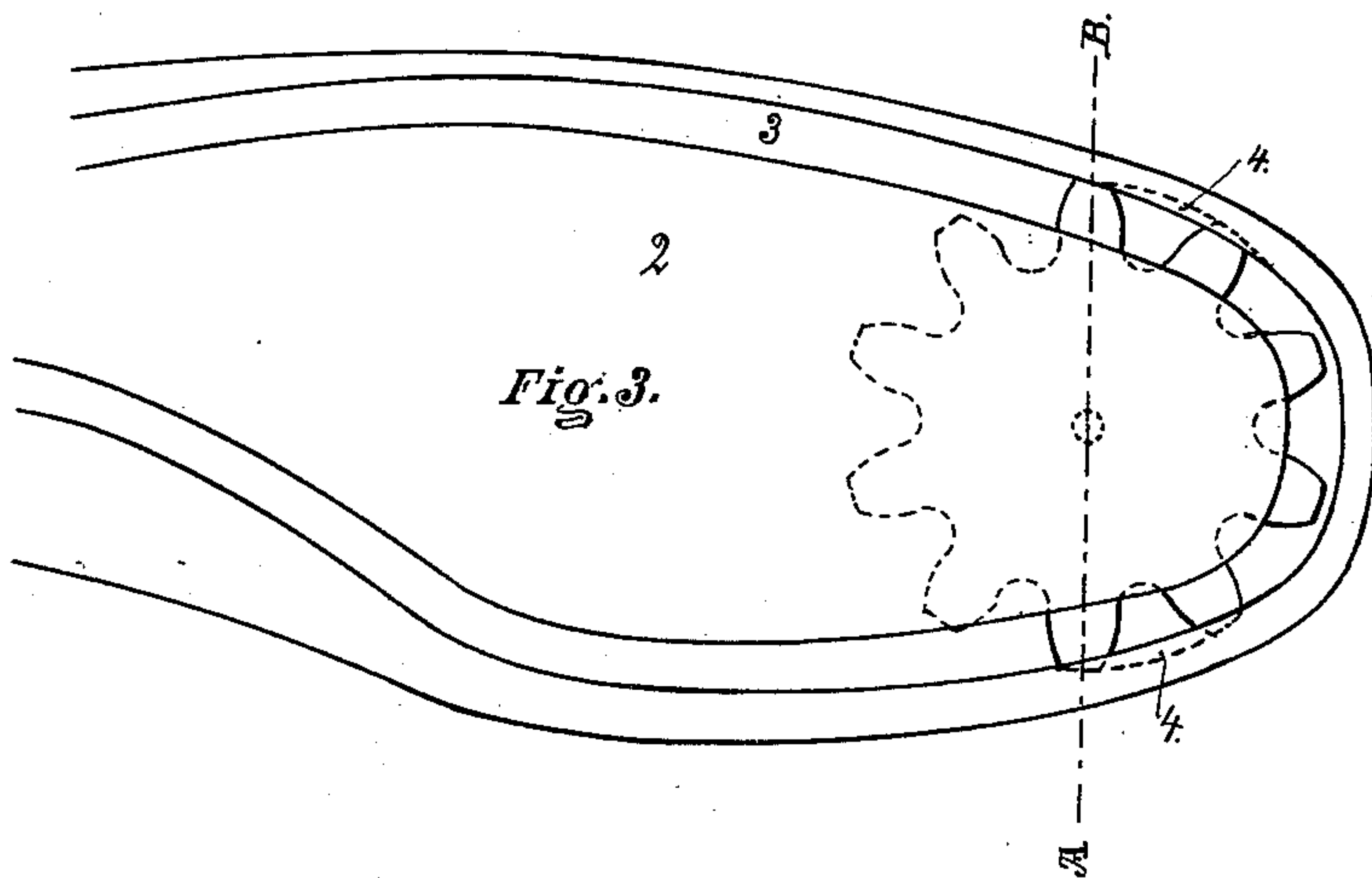


Fig. 3.

WITNESSES.

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UNITED STATES PATENT OFFICE.

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LAST FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 408,524, dated August 6, 1889.

Application filed March 3, 1888. Serial No. 266,047. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. REYNOLDS, a citizen of the United States, and a resident of the city of Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Shoe-Lasts; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention relates to an improvement in shoe-last.

It is the object of my invention to provide a last on which a shoe may be formed and sewed and the various operations in the process of manufacture completed on the same last.

In the drawings, Figure 1 shows a side view of my shell last. Fig. 2 shows the bottom of the same. Fig. 3 shows the toe portion of my last as shown in Fig. 2, on a larger scale, the figure being intended to show the working parts and substantially the arrangement. Fig. 4 shows my last substantially as it would appear, looking from the right, if that portion from the last to the right of line A B of Fig. 3 were removed, the shell-body and sole-piece being shown in the cross-section.

Like or similar figures indicate like or similar parts of the device, as shown in the several figures of the drawings.

In constructing a last on my improved plan I provide a hollow shell body 1, which may be constructed of one or more pieces, and having a sole-piece 2, which consists of a plate connected with the body of the last at the heel portion back of the points next to the heel, from which the stitching of the sole begins. The sole-piece 2 is constructed with reference to the shell so as to leave an open space or channel 3 between the sole-piece and shell surrounding the sole-piece 2, except at the point where it is connected with the body for supporting the toe portion of the sole-piece and holding it in the proper position so that it may be pressed or pounded upon and furnish a firm base. I provide a supporter 6, pivoted at 5 upon the inner side of

the sole-piece and adapted to engage the shell body 1 in notches or recesses 4 4 in the shell body. Supporter 6 is provided with projections or sprockets which engage in the recess 4.

My last is designed to be used during the process of sewing on the sole of a shoe substantially as follows: A shoe being formed on the last and the sole applied to the same preparatory to sewing the same on, the horn of a machine adapted to sew the soles onto shoes, as the McKay machine, is inserted into the hollow of the last and the end thereof into the channel 3 and up to the inside of the sole of the shoe. The machine is then operated, stitching on the sole, the end of the horn passing along the channel 3, and as it reaches the supporter 6 it rotates the same, the end of the horn passing along the channel and between the projections of the supporter 6. As the horn is passed forward along the channel the supporter is rotated until the horn has passed around the toe and left the supporter, leaving it in proper position for a repetition of the operation and the sole-piece in a firm position in relation to the shell of the last. If the machine should lose a stitch and it becomes necessary to back up after the end of the horn had engaged the supporter, it would be rotated backward and still perform its function.

The horn to be used with this device it would probably be found advantageous to vary in construction, so that the end would work in the channel in the last.

It is intended that the succeeding projection of the supporter shall engage the shell of the last before the preceding one has released its hold, thus avoiding all possibility of the support of the toe of the sole-piece in the shell being removed and allowing a displacement of the sole-piece.

It may be found desirable to use one or more supporters or shoulders in the shell for receiving the same.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a shell last, the combination of the shell body having recess 4, the sole-piece of less width than the bottom of the shell body and arranged substantially as described with reference thereto, leaving the slotted

opening into the interior of the last, except at the point where it is connected at the heel portion, and the supporter pivoted to the toe portion of the sole and having sprockets
5 spanning the opening between the sole-piece and shell and engaging the shell body.

2. The combination, in a last, of the shell body having recesses adjacent to the lower inner edge thereof, the sole-piece having a
10 slotted opening beginning at the breast of the heel and extending from the last to a point

near the heel opposite the place of beginning, and the pivoted sprocket-supporter on the toe portion of the sole-piece, substantially as set forth.

In witness whereof I have affixed my signature in presence of two witnesses.

GEORGE A. REYNOLDS.

Witnesses:

JOSIAH PERRY,

MILTON E. ROBINSON.