

A. C. REID.

Lasts for Boots and Shoes.

No. 157,868.

Patented Dec. 15, 1874.

FIG. I.

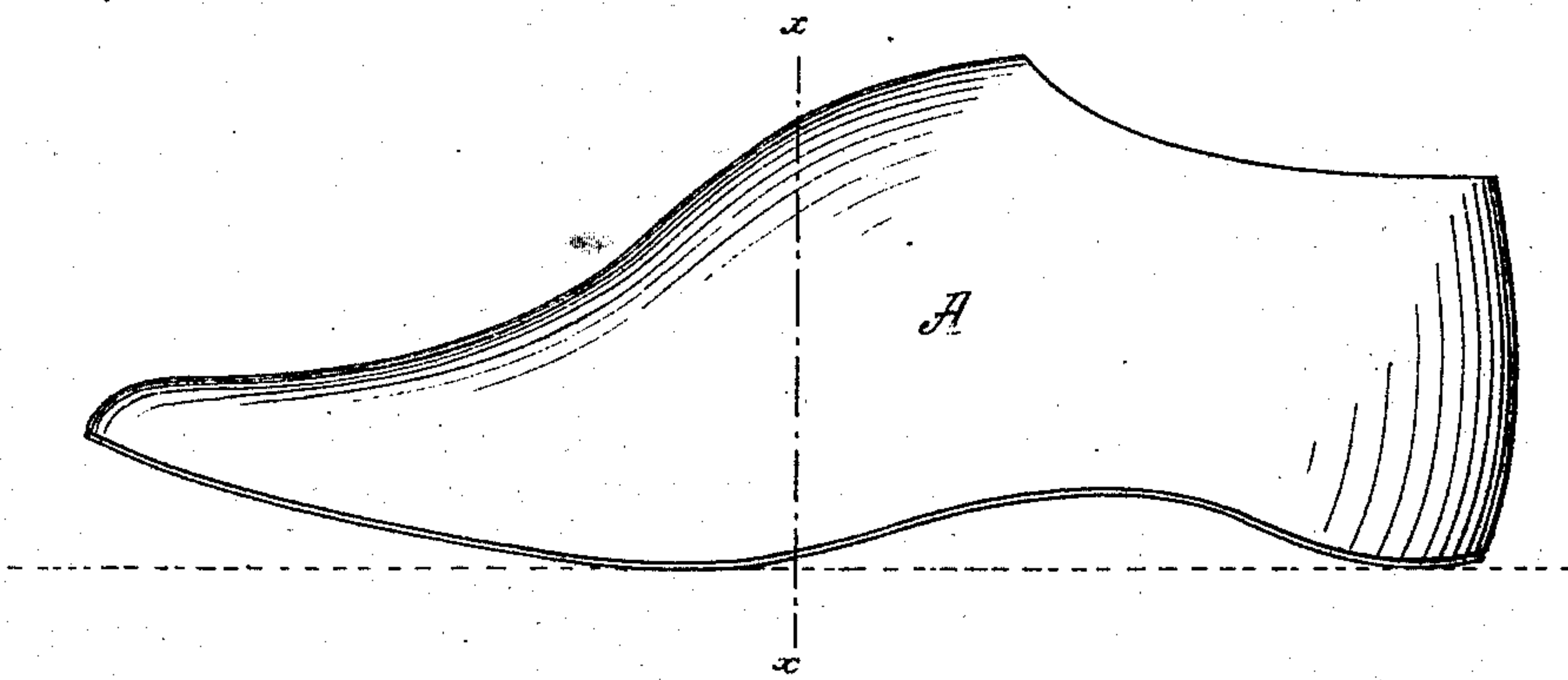


FIG. II.

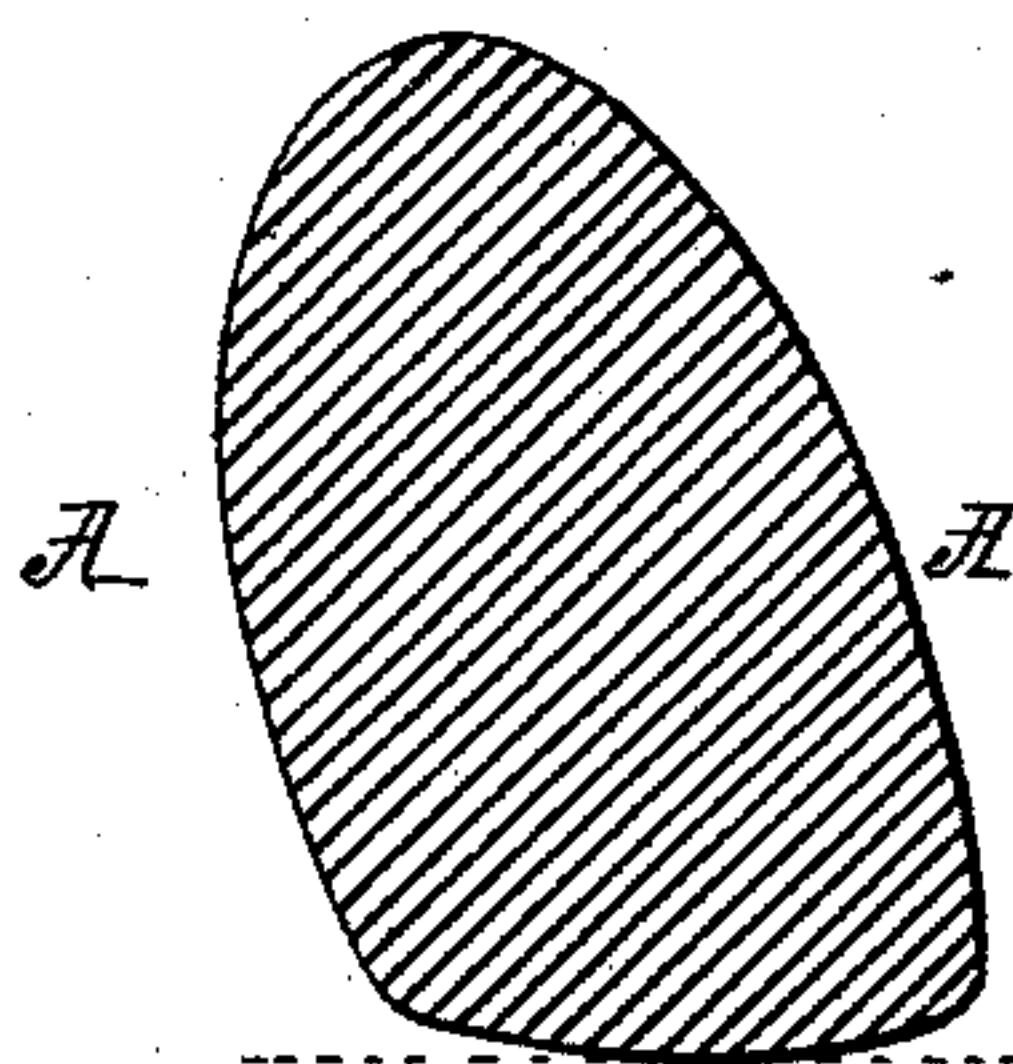
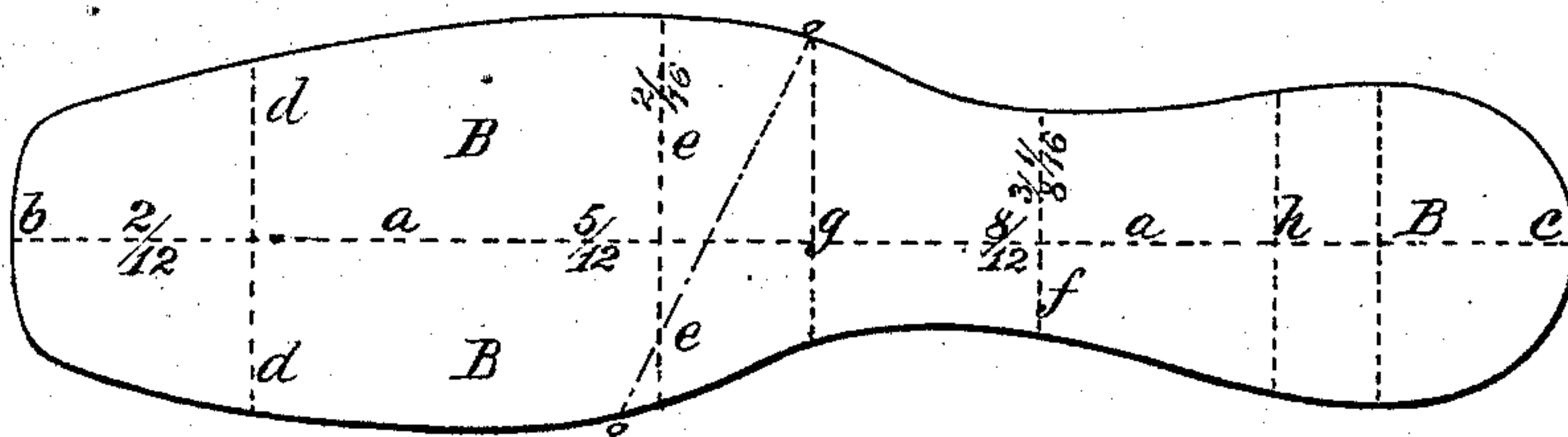


FIG. III.



WITNESSES:

*J. S. Coombs*  
*A. H. Norris.*

INVENTOR:

*Allen C. Reid.*  
*By James L. Norris,*  
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# UNITED STATES PATENT OFFICE.

ALLEN CHARLTON REID, OF NEW YORK, N. Y.

## IMPROVEMENT IN LASTS FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. **157,868**, dated December 15, 1874; application filed December 10, 1874.

*To all whom it may concern:*

Be it known that I, ALLEN CHARLTON REID, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Lasts for Boots and Shoes, of which the following is a specification:

The object of this invention is to produce a last by the use of which it is possible to manufacture boots and shoes which will conform with the shape of the wearer's foot without a previous "breaking in," and also to avoid the "running over" or bulging out at the outside, a result met with in the shoes and boots heretofore in use.

Experience has demonstrated the fact that shoes and boots made in the ordinary manner will swell or bulge out at the outer side; or, in other words, the upper at the outside of the shoe is pushed out over the sole when the weight of the wearer's foot is caused to bear upon the sole. This result is attributable to the fact that in ordinary shoes a "bunch" or enlargement is made at the inside of the sole, where it is least required, while, on the contrary, the outside of the upper is not large enough to receive the fleshy portion of the foot when the weight of the wearer rests upon the shoe. In consequence thereof the upper leather of the shoe is pressed out at the outside, so as to make room for the foot, which is conducive of the production of corns, bunions, and also of the premature tearing of the upper at the point of pressure.

It is proposed to remedy the defects above stated, and to produce a shoe or boot fitting well, in the first instance; and to this end the invention consists in the use of a last which is so shaped that a line drawn through the center of the same from the center of the toe to the center of the heel will cause the greater width of the sole to be at the outside of the ball of the foot, thus removing the customary bunch from the inside of the shoe and placing it back under the ball of the foot at the outside of the shoe, so that an outside enlargement on the outer edge of the ball portion at the commencement of the shank and correspondingly narrowed on the inner side, the outer and inner swells being thus diagonally across the last from each other.

By making a shoe upon a last shaped in accordance with the present invention ample space is provided at the outside of the shoe for containing the fleshy portion of the foot, and the length of the shank is also reduced.

In the accompanying drawing, Figure 1 is a side view of a last made according to my invention. Fig. 2 is a transverse section taken through the ball portion of the last. Fig. 3 is a bottom view of the last.

The upper or body portion of the last A is constructed in any approved manner, but its sole or lower portion differs materially from the lasts heretofore in use. The sole of the last is designated by the letter B, and in order to better illustrate the invention, longitudinal and transverse lines have been drawn upon the same to divide the last into different parts, viz., the toe, the ball, the shank, and the heel parts. A longitudinal line, *a*, drawn through the center of the sole from the center of the toe *b* to the center of the heel *c*, divides the sole portion into two parts, which are of equal width between the tip of the last and the transverse line *d*, comprising the toe portion. The outside space between the line *d* and the line *e*, at the ball portion, widens a little toward the line *e*. From the line *e* to the line *f*, at the center of the shank portion, the space on the outside of the last is made considerably wider than the inside space, just the opposite of which is found in the lasts heretofore in use. By widening the last on the outer side and locating this enlargement in juxtaposition to the ball portion, the bunch of the inside of the shoe is removed and placed where it is essential and practicable to form a basis in walking or standing—that is, on the outside of the shoe and under the ball of the foot—so as to receive the projecting or fleshy portion of the foot, whether the weight of the person be upon the same or not.

Thus it will be seen that the prime feature of my invention is to construct a last for boots and shoes with an outside enlargement on the outer side of the ball portion at the commencement of the shank, and correspondingly narrowed on the inner side, the outer and inner swells being thus diagonally across the last from each other, as illustrated in the line *o o* in Fig. 3.



A shoe made upon a last constructed according to the present invention will fit and wear easier than ordinary shoes, and possess also a shorter shank, the shank portion being located only between the points marked *g h* on the last, this shortening of the shank being due to the presence of the outside enlargement of the shoe.

In ordinary shoes the outside of the shoe soon bulges out or is turned down over the sole, thus causing the wear of this run-over portion, which necessitates patching of the shoe before the sole is worn out.

By providing the outside enlargement of the shoe all these objections are avoided, and the appearance and shape of the shoe enhanced.

What I claim is—

A last for boots and shoes having an outside enlargement on the outer side of the ball portion at the commencement of the shank, and correspondingly narrowed on the inner side, the outer and inner swells being thus diagonally across the last from each other, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand.

A. C. REID.

Witnesses:

JAMES L. NORRIS,  
JOS. L. COOMBS.