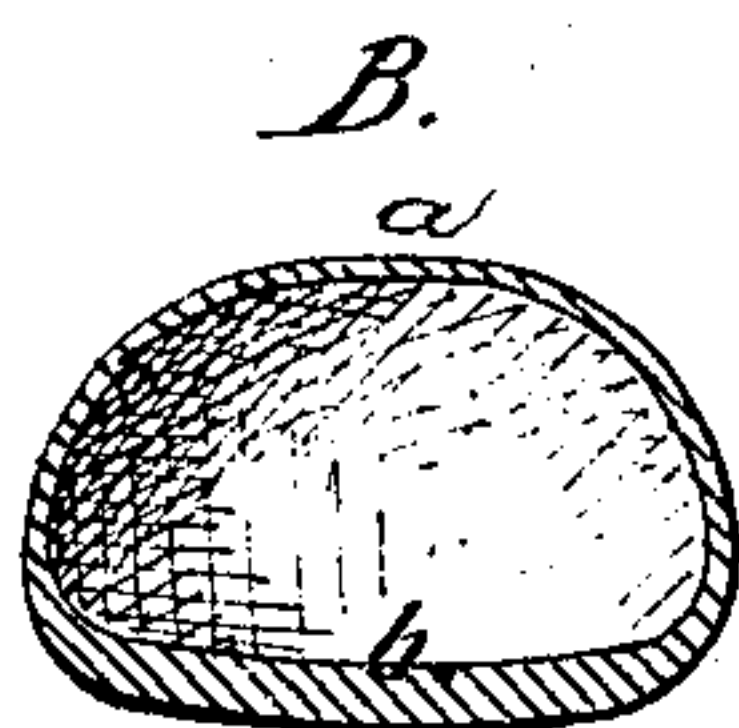
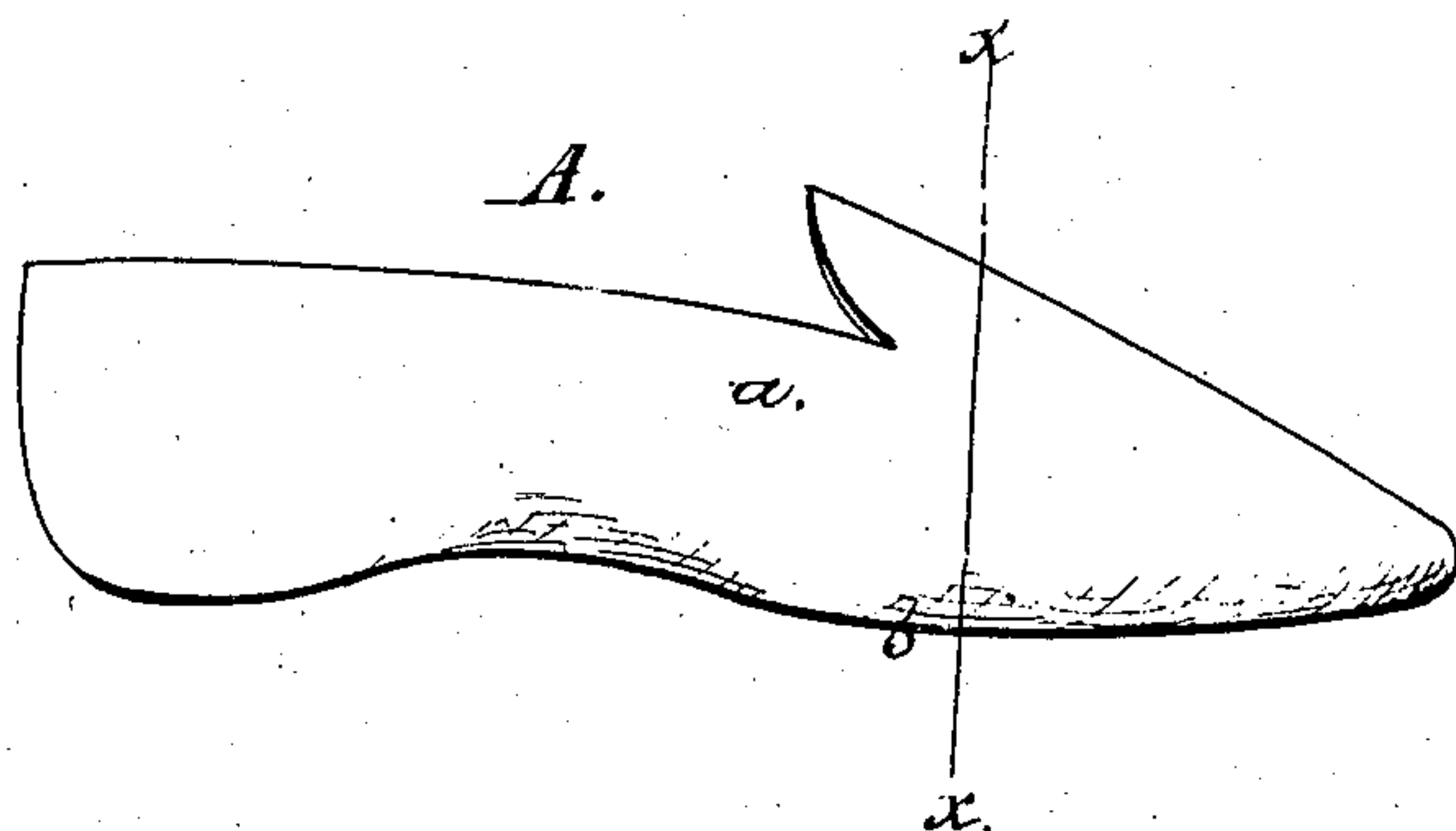


*C. W. Palmer*

*Rubber Shoe*

*Nº 87,063.*

*Patented Feb 16, 1869.*



*Witnesses:*  
*M. W. Frothingham*  
*C. Warren Brown*

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*Attorneys*

# United States Patent Office.

CHARLES W. PALMER, OF LYNN, MASSACHUSETTS.

Letters Patent No. 87,063, dated February 16, 1869.

## IMPROVED SEAMLESS SHOE.

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

To all whom it may concern:

Be it known that I, CHARLES W. PALMER, of Lynn, in the county of Essex, and State of Massachusetts, have invented an Improved Shoe; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practise it.

There have lately been introduced into common use, slippers made wholly of fibrous material, the uppers being formed of cloth or felt, and the soles of similar material, stitched to the uppers.

My invention has reference to this class of shoes, but instead of making the upper and sole in parts, stitched together, I form the upper, or upper and sole, in one piece, without any seam, by the process of felting; and

My invention consists in a felt shoe, the upper, or upper and sole of which are made in one piece, without seam, when the shoe is made of such increased thickness at the sole as shall adapt the sole to the greater wear it has to undergo.

The drawings represent a shoe embodying my invention—

A showing the same in side view, and

B, a cross-section on the line *xx*.

*a* denotes the upper, and *b*, the sole of the shoe.

The wool to form the shoe, is first made into a bat, as in forming hats, and by proper pressure, rolling, and stretching, this bat is brought to the form of the shoe, the edges of the bat being felted together to bring the article into the hollow form of a shoe. By these means the shoe is made without any stitching whatever, and without any seam, making, for a felt slipper or shoe, a much stronger, cheaper, and more easily-worn shoe, than can be made by stitching a sole to an upper.

In making the bat, the parts entering into the formation of the sole, are felted much thicker than the "upper" part, as without such increased thickness at the sole, the shoe would be of but little value for wear, for the thinness and flexibility of the sole, if of uniform thickness with the upper, would cause it to wear through very quickly.

I am aware that it is not new to make, of felt, seamless garments of all kinds, and I therefore do not claim a felt shoe broadly.

What I claim as a new article of manufacture, is—  
The improved shoe, as herein shown and described.

C. W. PALMER.

Witnesses:

J. B. CROSBY,

FRANCIS GOULD.