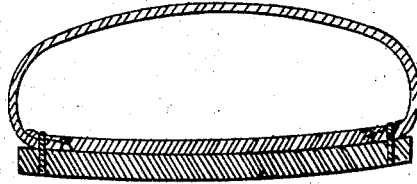


*L. R. Blake.*  
*Boot & Shoe.*

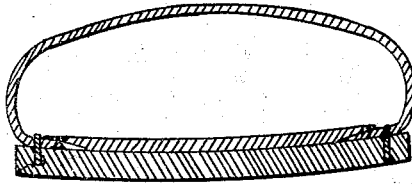
*N<sup>o</sup> 47696.*

*Patented May 16. 1865*

*Fig 2*



*Fig 1*



*Witnesses*

*T. Gould*  
*Albert F. Hall*

*Inventor*

*Lyman R. Blake*  
*By his Atty*  
*W. B. Crosby*

# UNITED STATES PATENT OFFICE.

LYMAN R. BLAKE, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN CONSTRUCTING BOOTS AND SHOES.

Specification forming part of Letters Patent No. 47,696, dated May 16, 1865.

*To all whom it may concern:*

Be it known that I, LYMAN R. BLAKE, of Boston, county of Suffolk, and State of Massachusetts, have invented an Improvement in Constructing Boots and Shoes; 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 practice it.

In the manufacture of boots and shoes it is a desideratum to so employ an inner sole that the union of the vamp with the outer or wearing sole shall not depend upon the inner sole, and so that the inner sole has no function other than that of means for temporarily securing the vamp in proper position to receive the outer sole, and of filling to make a suitable surface for the foot to rest upon. In boots and shoes previously made, employing an inner sole to which the vamp was secured or lasted, this sole also performed an important part in maintaining the integrity of the structure, inasmuch as that the union of the vamp with the outer or wearing sole depended as much upon the inner sole as upon the other parts.

To so construct a boot or shoe that the inner sole shall have no other function than the temporary one of means for lasting and the permanent one of filling is the object of my invention, which consists in constructing a boot or shoe with the outer sole and vamp united by stitches or other connecting device or devices passing directly through them from the outside to the inside of the article; the inner sole being made so much narrower and shorter than the outer or wearing sole that the connections which are employed to unite the vamp and outer sole shall not pass into the inner sole.

Figure 1 is a cross section of a boot or shoe constructed in accordance with the process which constitutes my invention; and Fig. 2 is a similar view of the now well-known construction described in the United States Patent No. 29,562, dated August 14, 1860.

In Fig. 1 it will be seen that the size of the inner sole is such as to fall short of the device which unites the vamp and outer or wearing sole, while in Fig. 2 the inner sole is of such size that the seam passes through it.

In Fig. 2 the integrity of the shoe depends

upon the inner sole as much as upon the vamp and outer sole; hence it is needed that the inner sole should be of leather, or other equivalent material, and of good quality, for if in wear the inner sole gives way or is cut through by the stitches then the seam is loosened and the stitches either cut or rip.

In the construction shown in Fig. 1 less stock is required for the inner sole, and it may be made of very cheap material, the waste from paper-box factories answering as well as leather, while its cost is a mere trifle.

In Fig. 1 the whole inner sole may be removed, and yet the form and integrity of the shoe will be uninjured, and the place of the inner sole may be supplied by any suitable loose material.

In both figures the lasting-tacks are shown as passing through the vamp and as clinched in the inner sole.

In Fig. 1 the inner sole may serve the mere temporary purpose of "lasting" only, being made of leather or other suitable stout material, which, after the vamp and sole are properly fastened together, may be forcibly torn out and used again and again for the purpose of lasting. After the temporary inner sole is thus removed the shoe must be placed on a metal-bottomed last and hammered or rolled on the surface of the sole to clinch or embed into its inner surface such of the lasting-tacks as do not tear out of the vamp in the removal of the inner sole. This removal of the inner sole is not difficult, the only bond of union between it and the vamp being a few slight lasting-tacks, and its removal does not in the least impair the integrity of the structure of the shoe, which remains as perfect as before the inner sole was removed.

In Fig. 2, where the inner sole forms an integral part of the structure, it could only be torn out with the greatest difficulty, and when removed the stitches uniting the vamp and sole would all be loose and the shoe would be in a worthless condition.

In Fig. 1 the connecting device is shown on one side as extending to the outer surface, and on the other side as driven from the outer surface and beyond the plane thereof into a channel, the flap of which is turned over to close the channel and present a finished outer surface.

It will be obvious that in this process of

constructing the shoe with a temporarily employed inner sole stitches may be used to connect together the vamp and outer sole, or that pegs or nails may form the medium of connection—in either case the process and result being the same, namely, the employment of a narrow inner sole for the purpose of lasting, the stitches, pegs or nails passing from the outer surface of the sole through the sole and vamp, but not through or into the inner sole, which may be removed when the shoe is finished.

Letters Patent of the United States No. 44,369 were granted to me September 27, 1864,

for a sewed shoe made by this process as a new article of manufacture.

I claim neither a permanent inner sole nor a mere filling.

What I claim is—

The new process of constructing a shoe, substantially as set forth.

In witness whereof I have hereunto set my hand this 8th day of October, A. D. 1864.

LYMAN B. BLAKE.

Witnesses:

FRANCIS GOULD,  
GEORGE N. HOLMES.