2 Sheets—Sheet 1.

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Lasting Boots and Shoes.

No. 205,837. **Patented July 9, 1878.**

Fig. 1.

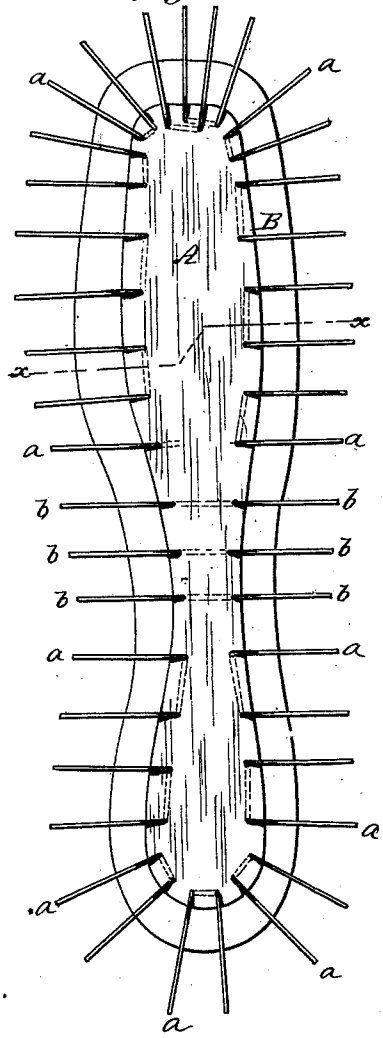


Fig. 2.

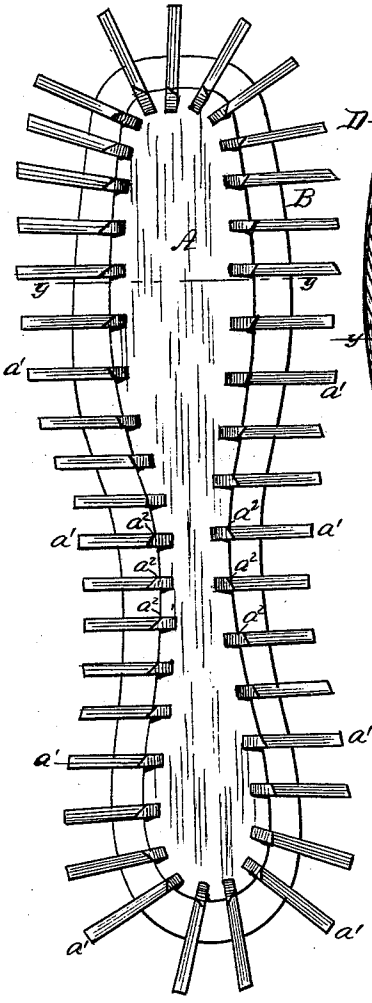


Fig. 3.

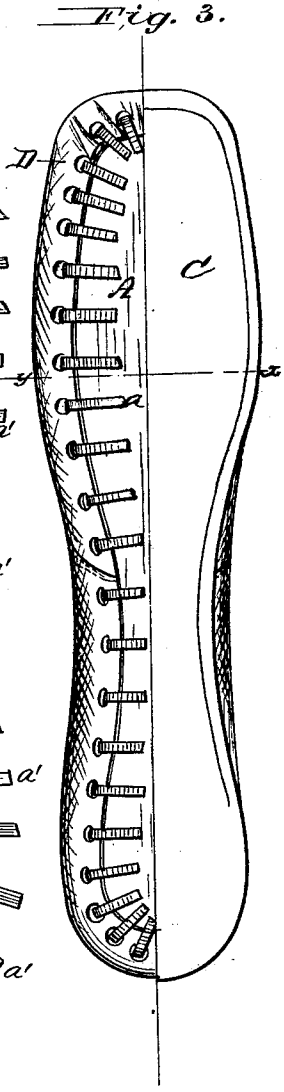


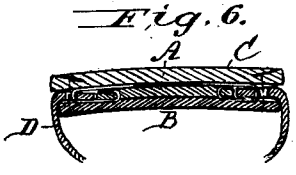


Fig. 4.



Fig. 5.

Fig. 6.



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Lasting Boots and Shoes.

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Fig. 7.

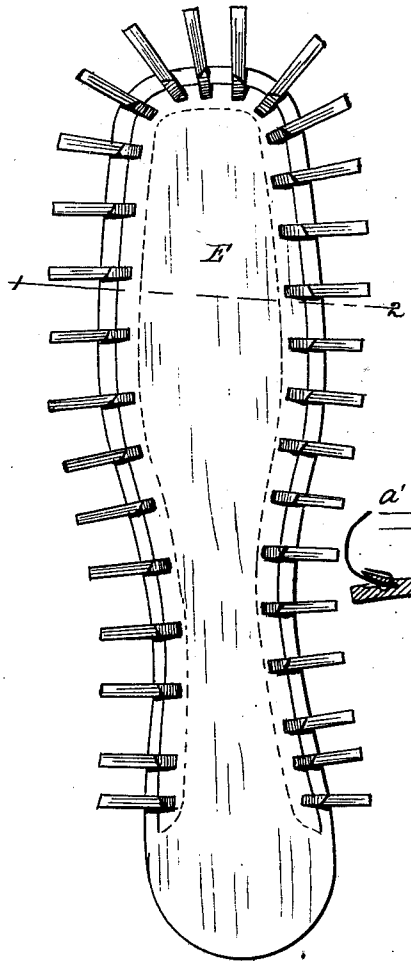


Fig. 8.



Fig. 9.

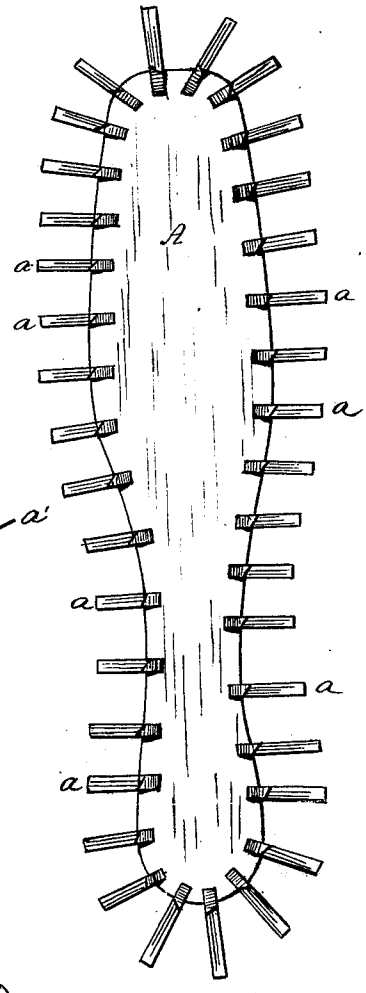
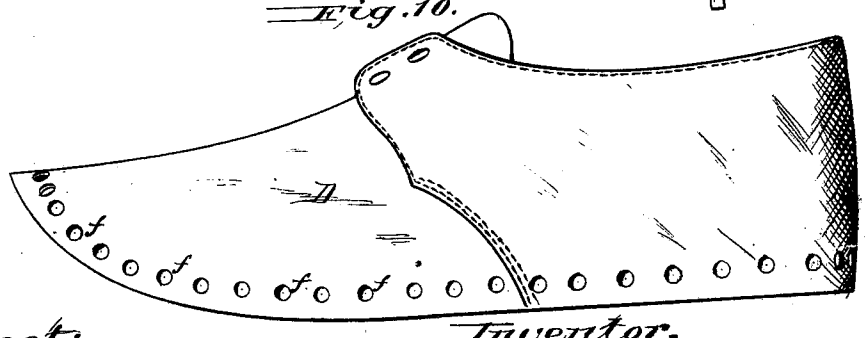


Fig. 10.



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IMPROVEMENT IN LASTING BOOTS AND SHOES.

Specification forming part of Letters Patent No. **205,837**, dated July 9, 1878; application filed June 28, 1878.

To all whom it may concern:

Be it known that I, AMOS F. CHASE, of Lynn, county of Essex, and State of Massachusetts, have invented certain new and useful Improvements in Lasting Boots and Shoes; and I hereby declare the following to be a full and exact description thereof, such as will enable others skilled in the art to make and use the said invention, reference being had to the drawings, which form a part of this specification.

My invention will first be fully described, and then more particularly pointed out in the claims annexed.

Referring to the drawings, Figures 1 and 2 are plan views, showing the insole of an ordinary boot or shoe with a "lasting-strip" attached in any suitable manner with metallic threads or ribbons, attached to the latter in the manner hereinafter described. Fig. 3 is a view of the bottom or sole of a boot or shoe lasted according to my invention, with half of the outer sole cut away longitudinally and removed. Figs. 4, 5, and 6 are views, in cross-sections, of Figs. 1, 2, and 3, respectively, taken upon the lines *x x*, *y y*, and *y x*, respectively, the latter, however, showing a full outer sole. Fig. 7 is a view of an insole, channeled within its periphery, and having the metallic lasting threads or ribbons hooked into the strip which covers the channel. Fig. 8 is a transverse section of Fig. 7 upon the line 1 2. Fig. 9 shows the single lasting-strip (illustrated in Fig. 1) as attached to the insole, with the metallic lasting-ribbons attached; and Fig. 10 illustrates the upper, prepared for lasting to the insole, with perforations formed near its edge to receive the metallic lasting threads or ribbons.

A represents what may be termed the "lasting-strip." It is made of leather or any suitable material of proper thickness, and pasted or otherwise attached to the insole B. Through the edges of the lasting-strip, and at suitable distances apart, are passed metallic threads or flat metallic ribbons, the ends thereof being allowed to project some distance beyond the edge of the insole B. These threads may be formed of common wire, as shown in Fig. 1, in which case I prefer to form them in the shape of the letter **U**, the two arms projecting outwardly beyond the edge of the sole, while the bent portion lies against the under surface of the lasting-strip A. It may be desirable, however, to pass those in the shank directly through from side to side, as shown at *b b b*, Fig. 1.

When the flat strips or ribbons are used, one end is passed through the lasting-piece and simply bent over, as shown in Fig. 2 at a^2. The inner sole thus prepared is ready to receive the upper, which is of the usual shape, as shown in Fig. 10, with perforations *f* cut in its edge to receive the metallic threads or ribbons hooked into the insole. The latter being placed upon the last, and the metallic threads or ribbons being inserted into the perforations in the upper, the operator seizes the free ends of the metallic threads and draws them in succession toward the central portion of the sole, drawing the edge of the upper over the outer edge of the insole, and snugly against the periphery of the lasting-strip. The ends of the metallic threads or ribbons are then laid down flat upon the outer surface of the lasting-strip, the bend of the metal firmly holding the upper in position, as seen in Fig. 3, and in the sectional view, Fig. 6. The shoe is now ready to receive the outer sole, which may be secured in the usual manner.

Instead of attaching the threads or ribbons *a* or a^1, Figs. 1 and 2, to the lasting-strip A, I may secure them to the ordinary insole E, Fig. 7, by channeling the sole and hooking the metallic ribbons into the strip which covers the channel, as seen in the sectional view, Fig. 8.

It is evident, also, that the metallic ribbons or threads may be hooked into or otherwise secured to the lasting-strip already described before the latter is attached to the sole, as shown in Fig. 9.

This portion of the shoe thus prepared may be manufactured and sold as a separate article of manufacture, it being only necessary to paste, sew, or otherwise attach it to the insole of the shoe to prepare the latter for lasting.

It is also evident that instead of forming perforations in the upper, as in Fig. 10, a series of straight narrow cuts may be made near the edge to receive the ribbons *a*.

When a serge or cloth upper is used, it is not necessary to perforate the upper, as the metallic thread passes easily through the material, and by cutting the flat metallic ribbons

to a point at their free ends they may be driven through the upper with equal ease.

An objection to the use of metallic fastenings in lasting shoes heretofore has been that such fastenings project inwardly, and where the construction of the shoe is such that they cannot be removed after sewing they will, in the course of time, work their way through and annoy the wearer.

With my improvement, the body of the metal is laid flat upon the surface of the insole, and hence can never work through. The position of the hooks or fastenings is not so important, and they may be given a greater or less bend or inclination, so that it is sufficient to hold.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The improvement in lasting boots or shoes consisting in uniting the upper to the insole or lasting-strip by connections of independent strips of metal, having the body laid flat and the ends hooked into the respective parts to be secured together, substantially as shown and described.

2. The improvement in lasting boots or shoes consisting in first applying to an insole or lasting-strip threads or ribbons of metal, projecting radially, and then assembling the parts upon the last and passing the free ends of said metallic pieces through the edge of the upper and securing them, substantially as described.

3. As a new article of manufacture, an insole or lasting-strip provided with threads or ribbons of metal, projecting radially therefrom, substantially as described.

4. As a new article of manufacture, the insole or lasting-strip having threads or ribbons of metal attached thereto by one end, and the free ends radiating from the perimeter.

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