E. N. FOOTE.
FILLING FOR SOLES OF BOOTS AND SHOES.
No. 28,265. Patented May 15, 1860.

Fig. 1.

Fig. 2.

Witnesses

Annie E. Main
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To all whom it may concern:

Be it known that I, EUNICE N. FOOTE, of Saratoga Springs, in the county of Saratoga and State of New York, have invented an Improvement in Boots and Shoes; and I hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

My improvement had for its object, primarily, to prevent the squeaking of boots and shoes. This I have fully effected, and besides have obtained several other important advantages.

Between the inner and outer soles of boots and shoes, as commonly made, there is inserted what is termed the filling. It serves to fill up the cavity formed by sewing on the upper, and in sewed boots or shoes, the welt, around the edge of the inner sole. It rounds out the bottom, makes the protuberance required for the shank and shapes the under side of the boot or shoe. Considerable skill and good taste have heretofore been required for this proper construction.

This filling has heretofore been made of several pieces of leather—fastened together and to the inner sole by pegs passing through them and into the sole, and then cut and pared away until reduced to its proper shape. The bottom or outer sole has then been placed over it, and fastened by sewing or pegs. The squeaking is caused by the several pieces of leather rubbing against each other in walking; to wit: the surfaces of the inner sole of the several pieces composing the filling and of the outer sole.

My improvement relates to the filling. I make it, in one piece, of vulcanized india-rubber, pressed by dies or rollers into its proper shape for both the shank and the fore part. It is attached to the inner sole by rubber cement and then the bottom is put over it and sewed or pegged on in the usual manner. It is represented at F in the annexed drawings. In the perspective view, Figure 1, it is shown as placed a little above a boot partly made and ready to receive it in its place.

In the section through the fore part of the boot, Fig. 2, u, u, represents the upper; i the inner sole; w, w, the welt; F, the filling, and B the bottom or outer sole. As shown in the drawing it is made narrow, thick and somewhat angling at the shank and broader and thinner at the fore part. All around its edge is a lip or projection (seen best in the sectional drawing) made somewhat wider than is necessary for use and to be trimmed off and fitted to the boot or shoe in which it is placed. This enables fillings of the same size to be put in boots or shoes varying to some extent in shape or dimensions.

Although I have used vulcanized rubber and found it to answer the purpose perfectly and perhaps in some respects it is to be preferred, yet gutta-percha and probably some cheaper substance will be found to do nearly as well.

It will be observed that by this construction no two surfaces of leather are brought together on any part of the bottom of a boot or shoe that will admit of any motion on each other and thus the squeaking is entirely avoided. Besides it has several other advantages.

1st. The bottom is rendered water tight as effectually as if a sheet of rubber was inserted expressly for that purpose.

2d. The pegs which fasten the common filling are very liable to—indeed almost always do, work through the inner sole and become an annoyance and injury to the feet. No such difficulty can arise with the improved filling.

3d. The boot is rendered more durable. When the outer sole is worn through in a boot of the ordinary construction it has to be mended or discarded. With the improved filling it may be worn until not only the outer sole but also the filling is worn through. The common filling moreover is liable to become displaced when the boot is wet, and to be thrown out of shape and make the boot wear unequally. The improved filling will always retain its place and shape; and

4th. As the improved filling can be rolled or pressed into shape by machinery they can be made more rapidly and cheaply than the common filling, by hand—and a proper form and shape can be always secured without the exercise of skill in the boot maker.

I am aware that the bottom soles of boots and shoes have heretofore been made of gutta-percha and of India-rubber cemented to their places and that leather bottom soles have been cemented on so as to avoid the necessity of sewing or pegging them—that sheets of rubber, gutta-percha, oiled silk—cloth soaked in pitch, &c., have
been inserted within the bottom sole to exclude moisture, and that rubber heels and rubber shanks and metallic springs within the shanks have, from time to time, been made. These, of course, I do not claim. And it is manifest that none of them resemble, nor would they effect the object contemplated, by my improvement.

What therefore I do claim as my invention and desire to secure by Letters Patent is—

The filling of boots and shoes made and inserted substantially as I have described and for the purposes set forth.

EUNICE N. FOOTE.

Witnesses:

MARY NEWTON FOOTE,

ANNE E. MAIN.