

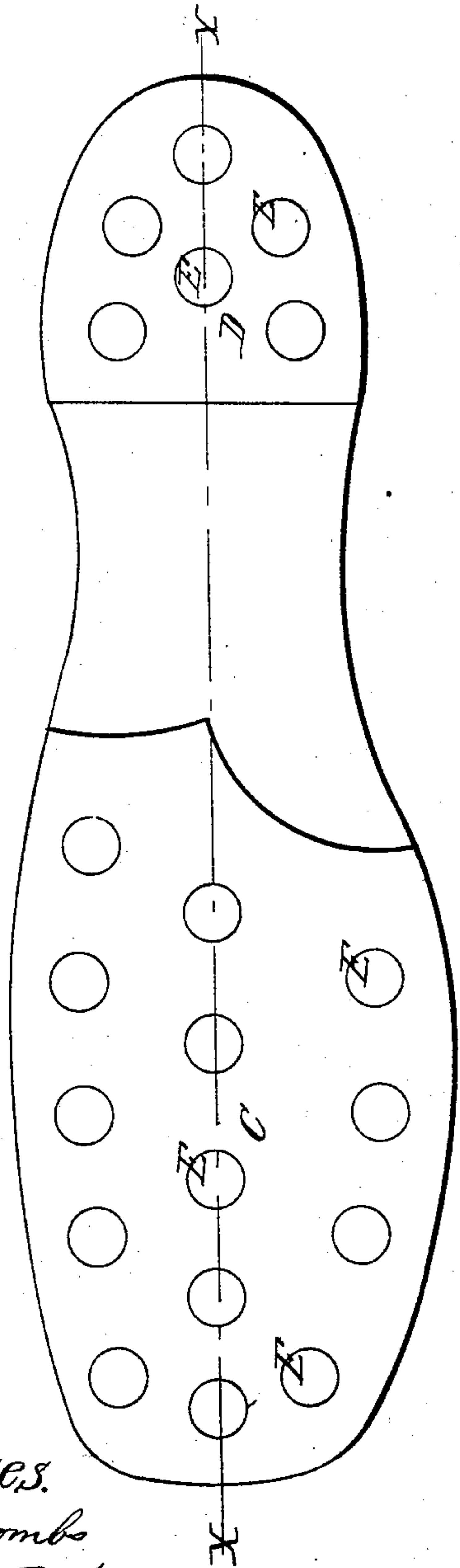
*M. M. Pettes,*

*Shoe Sole.*

*N<sup>o</sup> 33,540.*

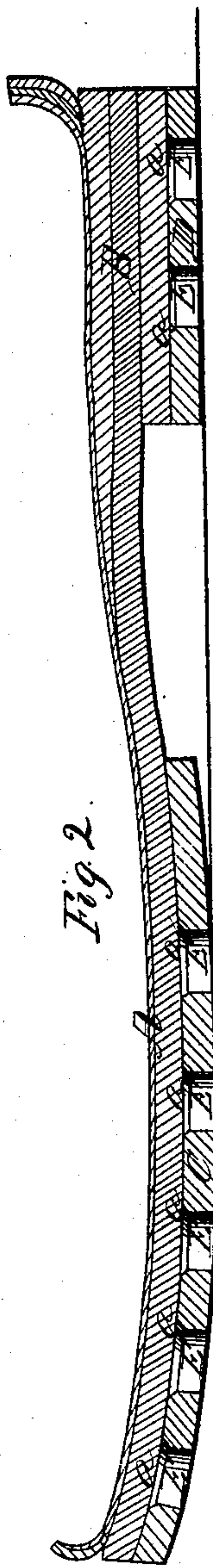
*Patented Oct. 22, 1861.*

*Fig. 1.*



*Witnesses.*  
*W. C. Combs*  
*Wm. Tusch*

*Fig. 2.*



*Inventor.*  
*Moses M. Pettes*  
*per Munn & Co*  
*attorneys*

# UNITED STATES PATENT OFFICE.

MOSES M. PETTES, OF WEST CONCORD, VERMONT.

## IMPROVEMENT IN BOOTS AND SHOES.

Specification forming part of Letters Patent No. 33,540, dated October 22, 1861.

*To all whom it may concern:*

Be it known that I, MOSES M. PETTES, of West Concord, in the county of Essex and State of Vermont, have invented a new and useful Improvement in Boots and Shoes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a view of the sole of a boot or shoe provided with my invention; Fig. 2, a longitudinal section of the same, taken in the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

This invention relates to a certain means employed for securing metal heads in the soles and heels of boots and shoes for the purpose of rendering the same durable, the invention effectually preventing the casual detachment of the heads from the soles and heels, and admitting of more efficient heads being used than hitherto, ones that will be capable of sustaining much greater wear.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the main portion of the sole, and B the main portion of the heel, of a boot or shoe. These portions of the sole and heel are constructed in the usual way, and therefore do not require a minute description.

C represents the face or outer part or layer of the sole, and D the outer layer or face of the heel. These outer parts C D are of leather, and each part is perforated with circular holes at suitable distances apart to receive metal heads E.

The heads E are of cylindrical form, each having a flange *a* at one end. These flanges are simply annular beveled projections which extend all around the heads, as shown clearly in Fig. 2. The heads E are of cast-iron, the flanges *a* being cast with the main part, and they may be cast with a chill. The heads should be equal in length to the thickness of the parts C D, and said heads are inserted in the parts C D, the flanges *a* being at the inner sides of said parts, as shown clearly in Fig. 2.

The parts C D, when the metal heads E are inserted in them, are secured to the main portions A B of the sole and heel by the usual process of sewing or pegging, and it will be seen that when said parts C D are secured to the main portions A B of the sole and heel the metal heads E will be firmly secured in the sole, as the flanges *a* effectually prevent the heads E slipping out from the parts C D, and it will also be seen that the heads E may be worn entirely through or entirely up to the flanges *a* and still be retained in proper position. The under sides of the flanges *a* are beveled, and consequently they are allowed to countersink themselves into the inner surfaces of the parts C D, as the latter are secured to the main portions A B. The heads E, therefore, arranged as shown, are far more efficient than the ordinary metal nails which are driven in the soles and heels, or the metal plates which are attached thereto, as the heads E may be made of far greater thickness and still not increase the thickness of the sole and heel, whereas the ordinary nails and plates increase the thickness of the soles and heels and render them clumsy and cumbersome.

I am aware that screw-shaped pins have before been used upon the bottoms of boots and shoes. These I disclaim. I consider them inferior to mine because they are expensive in construction, as a thread must be formed upon them, and in use they are apt to drop out because by repeated upward pressure the screw-threads break away the sides of the aperture in the leather on which the pins depend for security, but in my improvement all the upward pressure is resisted by the upper part of the head.

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

The arrangement of the flanged metallic heads E between the soles A B C D in the manner herein shown and described.

MOSES M. PETTES.

Witnesses:

DAVID HIBBARD,  
WM. B. MAY.