

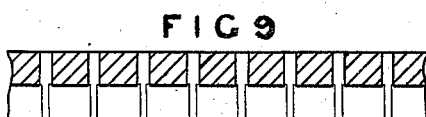
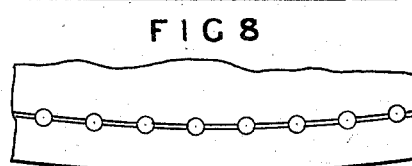
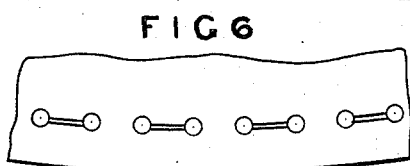
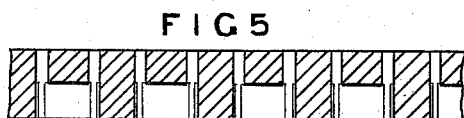
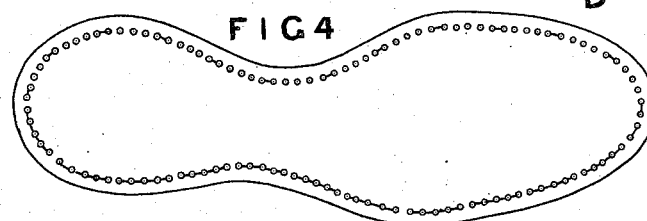
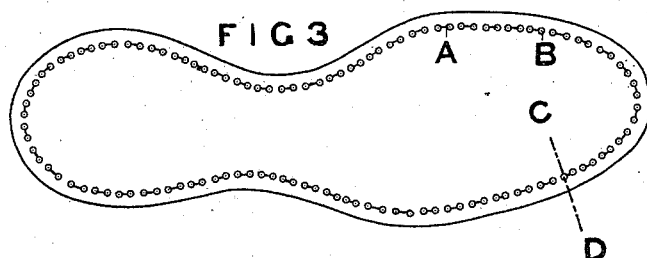
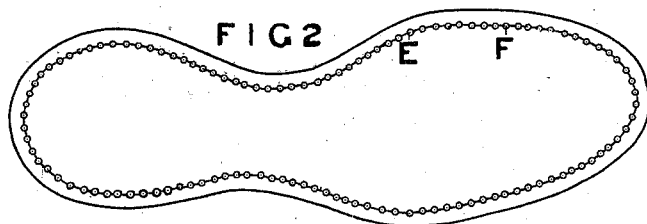
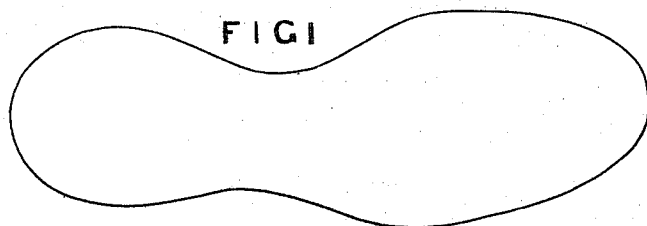
(No Model.)

J. BOOTH.

SOLE FOR BOOTS OR SHOES.

No. 385,402.

Patented July 3, 1888.



Witnesses,

William Victor Wyldes,
Walter D. Appleyard.

Inventor,

James Booth,
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UNITED STATES PATENT OFFICE.

JAMES BOOTH, OF BIRMINGHAM, COUNTY OF WARWICK, ENGLAND.

SOLE FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 385,402, dated July 3, 1888.

Application filed March 25, 1887. Serial No. 232,431. (No model.) Patented in England March 27, 1885, No. 3,905.

To all whom it may concern:

Be it known that I, JAMES BOOTH, a subject of Her Majesty the Queen of Great Britain, residing at 41 Paradise Street, Birmingham, in the county of Warwick, England, have invented new and useful Improvements in Soles for Boots, Shoes, and Slippers, of which the following is a specification, reference being had to the accompanying drawings.

This invention consists of the improvements in the soles of boots, shoes, slippers, and other feet-covering equivalents, hereinafter described.

I take an ordinary sole, made of leather or other suitable material, by preference one that has been machine-cut. I pierce stitch-holes through the sole near the edge, the distance from center to center of each hole corresponding with the length of the stitch. These stitch-holes will be pierced all round the edge of the sole—that is to say, about one-fourth of an inch (more or less) from the extreme or outside edge. On one side of the sole I in some cases provide a vertical indent, that forms one continuous cut, passing through each stitch-hole horizontally, but extending in depth vertically through a portion only of the material forming and constituting the sole.

Soles pierced in the manner described can be fastened onto the upper part of the boot, shoe, slipper, or other feet-covering equivalent, by passing a needle and thread through the stitch-holes in the sole, thence through the upper, thus forming stitches equal in length to the distance from center to center of each stitch-hole in the pierced sole.

The stitches on the outside of the sole—that is to say, the side that rests on the floor when in use—would pass into the vertical indents provided to receive them. It will be apparent that, the thread or other material forming the stitch being imbedded in the indent away from contact with the floor, I can use a thinner or more delicate thread to fasten the sole onto the upper than I could if the stitch were left lying flat on the outside surface of the sole, to be quickly worn away by continual contact with the floor.

Instead of making a plurality of vertical indents, forming in appearance one continuous cut all round the edge of the sole, I prefer in

some cases to leave breaks or parts uncut. For instance, I can join two holes by means of a vertical indent, and then leave the next space uncut or solid, and continue these alternate cuts uniformly all round the edge of the sole. The stitch on the outside would sink into the indent, and the stitch on the inside would occupy in length a space equivalent to the uncut part on the outside.

It will be readily understood that a sole provided with alternate indent-cuts would be stronger than a sole provided with a continuous indent-cut or the combination of a regular series of separate indent-cuts, forming when completed one continuous indent-cut.

Although I prefer to provide one indent-cut and then a space, and next a cut and again a space, and so on alternately all round the edge of the sole, yet I can, where desired, make one cut and then leave a solid space equal to twice the length of the cut, or of any convenient length. In like manner, conversely, I can, where desired, make the cut or indent twice the length of the solid space, or of any convenient length.

The inner side of the sole may be covered with felt, wool, or other suitable material.

In piercing and indenting the sole I prefer to use a punch formed to pierce two stitch-holes and cut one indent at one operation. The punch would be formed with the necessary punching-points and cutting-edge to pierce the stitch-holes and cut the vertical indent. The punch may be formed to cut several holes and vertical indents and be operated by hand, or it can be made and formed to fit in a press and cut the whole of the indents and pierce the whole of the stitch-holes at one stroke of the press.

I will now proceed to describe, in reference to the accompanying drawings, the various ways in which I purpose piercing the stitch-holes and cutting the vertical indents in the sole.

Figure 1 represents a blank sole. Fig. 2 represents a sole pierced with stitch-holes and also provided with one continuous cut or groove or scoop. Fig. 3 represents a sole pierced with stitch-holes and alternate vertical indents. Fig. 4 represents a sole, one part of which is provided with stitch-holes, to-

gether with one vertical cut and four solid spaces, the other part of the sole being provided, conversely, with four vertical cuts to one solid space. Fig. 5 is an enlarged section of Fig. 3 at A B. Fig. 6 is an enlarged plan of Fig. 3 at A B. Fig. 7 is a section of Fig. 3 at C D. Fig. 8 is an enlarged plan of Fig. 2 at E F. Fig. 9 is a section at E F.

The plan of Fig. 2, a portion of which is enlarged at Fig. 8, clearly indicates that the plurality of vertical cuts (one cut between each of the stitch-holes) produces the continuous cut represented all round and near the outside edge of Fig. 2, and further represented in section, on an enlarged scale, at Fig. 9.

The plan Fig. 3, enlarged at Fig. 6, and represented in section at Fig. 5, definitely points out the solid breaks.

The section Fig. 7 of Fig. 3 at C D clearly

shows the vertical indent beyond the stitch-hole.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is performed, I declare that what I claim is—

The herein-described shoe-sole, provided with marginal perforations and indentations connecting said perforations, as shown, whereby the sewing-thread is embedded within the sole, as set forth.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JAMES BOOTH.

Witnesses:

ALF. WM. TURNER,
WM. VICTOR WYLDEN.