(No Model.)

J. REESON.

LAST.

No. 400,946. Patented Apr. 9, 1889.

FIG. 3.

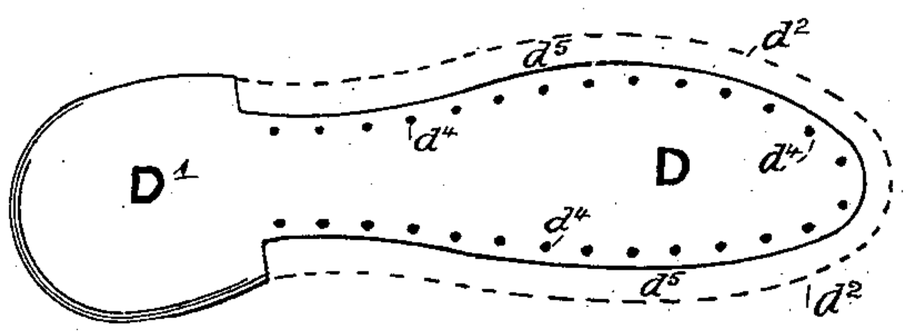


FIG. 8.

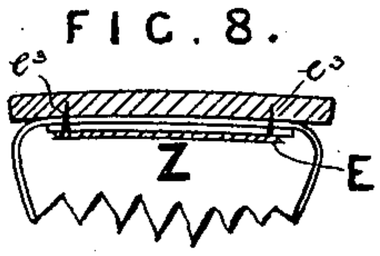


FIG. 4.

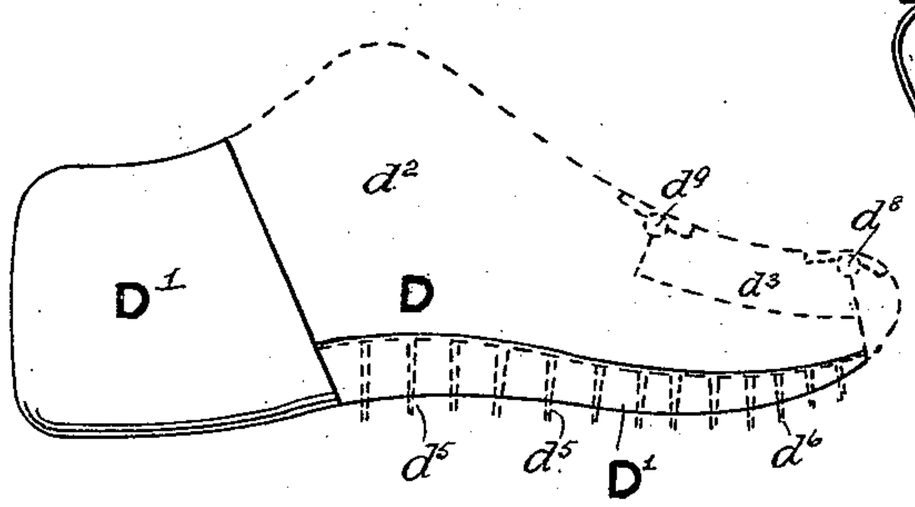


FIG. 6.

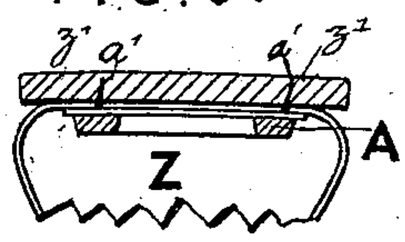


FIG. 10.

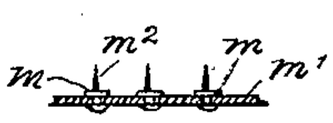


FIG. 9.

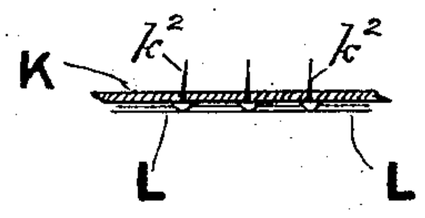


FIG. 1.

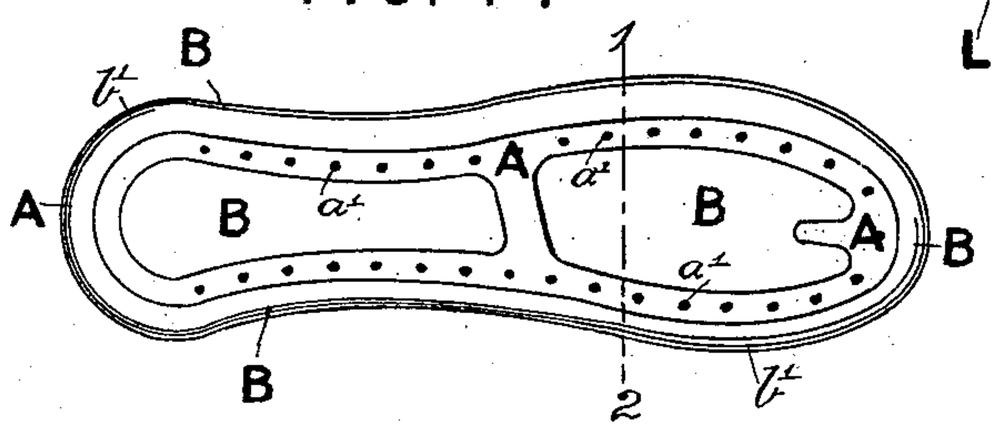


FIG. 7.

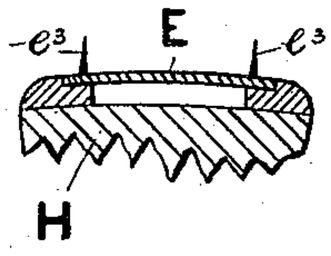


FIG. 5.

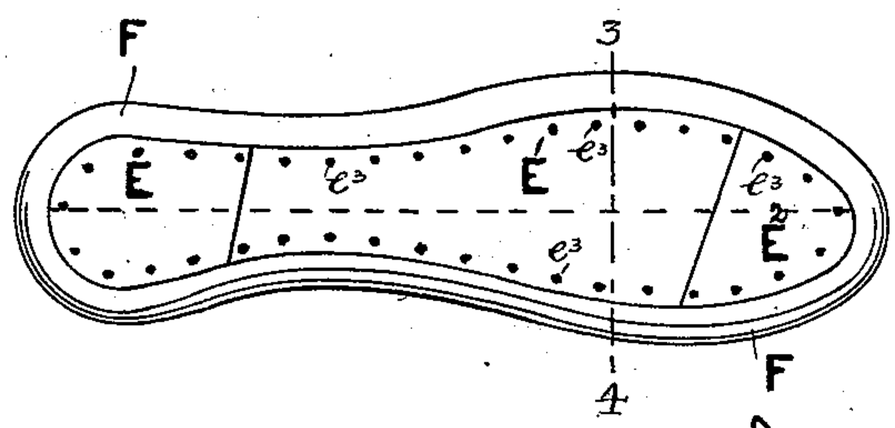
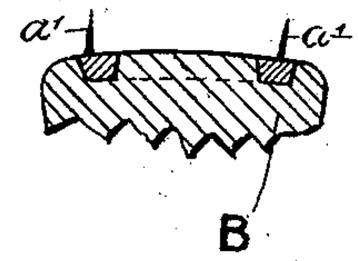


FIG. 2.



Witnesses.
Wm. H. Muzzy.
A. Zickler

Inventor
John Reeson
by Wm. H. Babcock
Attorney

UNITED STATES PATENT OFFICE.

JOHN REESON, OF GLADSTONE TERRACE, WELLINGBOROUGH ROAD, RUSHDEN, HIGHAM FERRERS, COUNTY OF NORTHAMPTON, ENGLAND.

LAST.

SPECIFICATION forming part of Letters Patent No. 400,946, dated April 9, 1889.

Application filed September 24, 1888. Serial No. 286,268. (No model.) Patented in England January 9, 1888, No. 337.

To all whom it may concern:

Be it known that I, JOHN REESON, of Gladstone Terrace, Wellingborough Road, Rushden, Higham Ferrers, in the county of Northampton, England, manufacturer, and a subject of the Queen of Great Britain, have invented certain new and useful Improvements in Lasts, (patented in Great Britain January 9, 1888, No. 337;) and I do hereby declare that the following is a sufficient description of the invention to enable those skilled in the art to which it appertains to carry the same into practical effect.

My invention has for its object improvements in lasts, by which I obviate the necessity for the use of insoles in the making up of boots and shoes, and also of driving iron points into the insole, where used in the case of machine-sewed boots, which latter has hitherto been usual, but most objectionable, as the perspiration of the foot and damp rusts the points, and consequently rots the insole, preventing it from wearing nearly so long. The points are perfectly useless after the boot is sewed, besides being most unpleasant to the wearer, and by omitting the use of an insole and of these iron points a great saving of expense would be effected both in time and points.

My invention consists of a part of the bottom of the last being loose from and sunk into the other part, the loose part being of such a shape as not to interfere with the arm of the machine, and provided with a number of spikes, which are either molded with it or screwed in. When the last is in the boot, the spikes enter the insole, or the upper only where no insole is used, and thereby effect the purpose for which the loose points were used, and at the same time cause the loose part to remain in the boot when the body of the last has been removed, the boot being then ready for the machine. After the boot has been sewed the portion of the last remaining in the boot is removed.

My invention applies equally to all classes of machine-sewed boots and shoes, and I may have a screw arrangement for facilitating the insertion or removal of the last.

In the accompanying drawings, Figure 1 represents the plan of the bottom of a last embodying my invention. Fig. 2 represents a cross-section on the line 1 2 of Fig. 1. Fig. 3 represents a plan view of a modification. Fig. 4 represents a side elevation of the same. Fig. 5 represents a plan view of another modification. Fig. 6 represents a cross-section through the sole, the upper, and removable piece A after the last has been withdrawn. Fig. 7 represents a cross-section on the line 3 4 of Fig. 5. Fig. 8 represents a similar view of the insole, upper, and removable piece after the last has been withdrawn. Figs. 9 and 10 represent a modification of the removable piece and its fastenings, the former figure showing them incomplete, the latter complete.

A designates a removable plate or piece, which is sunk into the main body of the last B, ready for use. The spikes a' are either screwed into or molded with the loose piece A, so that when in the boot they enter the insole and upper, or upper only where no insole is used, and, together with the piece A, remain there after the body B has been removed, as shown in Fig. 6. The spikes a' are embedded in the sole z' of the boot and pass through the lower part of the upper Z.

The loose piece A is so shaped that the piece b', Fig. 1, is left to allow of a free movement of the arm of the machine, which, if necessary, may be slightly altered, while at the same time it obviates the necessity of loose points, which would have to remain in the boot, while in my last, after the boot is completed, the whole are withdrawn.

A screw arrangement may be added to facilitate the insertion or removal.

In Figs. 3 and 4 the body of the last is divided into three pieces, D', d^2, and d^3, the piece D' being provided with a number of small holes, d^4, to admit of the spikes or points d^6, which come from the removable plate or frame D in the center of the last, so that instead of the spikes being taken out with the bottom of the last they would be withdrawn from the center in one or two portions, leaving the space d^5 for sewing, as before. To further facilitate the removal, I may attach a hinged piece of metal or other material at d^8 and d^9. This arrangement keeps the boot in shape during the process of sewing and gives it additional firmness for handling.

Fig. 5 is a similar plan to Fig. 1, but showing the spikes or points e^3 fixed to or forming part of a plate, which may be in any number of parts, E, E′, and E², and set in the movable rim F, which forms the outer edge of the body of the last H, as shown by Fig. 7, which is a section on the line 3 4. In this case the plates and spikes only remain in the boot, as shown by the section at Fig. 8, the other parts being removed previous to sewing.

Instead of being divided transversely into three parts, the plate E may be divided longitudinally, as shown by dotted line on Fig. 5.

Separate rivets, k^2, Fig. 9, may be used, in which case they would pass through holes formed in the loose piece or plate K, a second plate or piece, L, being provided to butt up against the heads k^2 and keep them stiff in their place; or they may be secured by means of the small nuts m, Fig. 10, m' being the plate, and m^2 the point.

I claim—

1. In combination with a last which has a recess in its bottom, a spiked plate set entirely into said recess, the edge of said plate being cut away, as at b', for the purpose set forth.

2. In combination with a last recessed in its bottom, a spiked plate set into said recess with downwardly-projecting spikes, the bottom of the last being provided with perforations, through which the points of said spikes protrude, said last being constructed in removable sections, exposing the spiked plate in the center, in order that the upper part of the last and the spiked plate may be removed before removing the bottom section of the last, substantially as set forth.

In testimony that I claim the foregoing as my own I affix my name in the presence of two witnesses.

JOHN REESON.

Witnesses:
LEWIS WM. GOOLD,
GEORGE PRICE.