

(No Model.)

A. SEAVER.

WELTED BOOT OR SHOE AND METHOD OF MAKING THE SAME.

No. 467,743.

Patented Jan. 26, 1892.

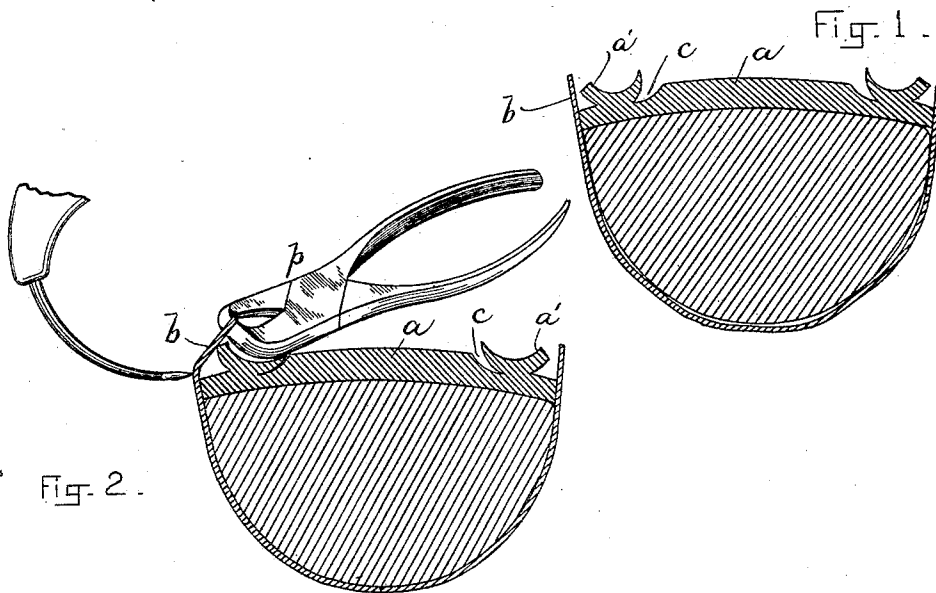


Fig. 2.

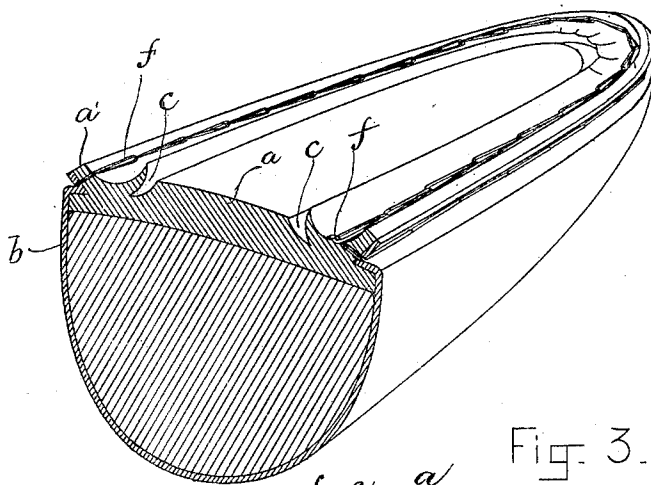


Fig. 3.

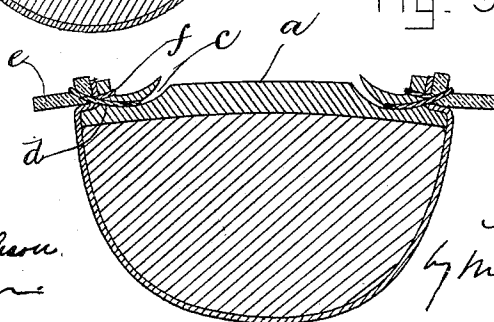


Fig. 4.

WITNESSES:

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UNITED STATES PATENT OFFICE.

AUGUSTUS SEAVER, OF BOSTON, MASSACHUSETTS.

WELTED BOOT OR SHOE AND METHOD OF MAKING THE SAME.

SPECIFICATION forming part of Letters Patent No. 467,743, dated January 26, 1892.

Application filed October 5, 1891. Serial No. 407,790. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTUS SEAVER, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Welled Boots or Shoes and the Art of Making the Same, of which the following is a specification.

This invention relates to boots and shoes made by the so-called "Goodyear welt process," which involves the attachment of the upper to the inner sole and the attachment of a welt to both the upper and inner sole by stitches passed through the welt, the upper, and a portion of the inner sole, the upper being interposed between the welt and inner sole, so that the three are united by the same stitches.

The invention has special reference to the attachment of the upper to the inner sole prior to the application of the welt and the formation of the stitches that connect the welt, upper, and inner sole.

In making Goodyear welt boots and shoes it is customary to place the inner sole upon the bottom of a last and draw the upper over the last, so as to cause it to closely fit the last and to attach the edge of the upper to a flange or lip made by channeling the edge of the inner sole and turning up the flap formed by the channeling operation, the upper being usually drawn to place by pinchers held by the operator and attached to the flange or lip of the inner sole at different points, the operator securing each portion of the edge of the upper to the flange of the inner sole as soon as said portion is drawn to place. Heretofore the upper has been attached to the flange of the inner sole by means of lasting-tacks forced into the outer side of the upper and through the flange of the inner sole. These tacks must be removed before the welt can be applied and attached to the upper and inner sole, their form being such that if they were allowed to remain after the application of the welt and during the operation of stitching the welt to the upper and inner sole they would cause breakage of the needle and generally bad and imperfect work. Hence said lasting-tacks are necessarily temporary fastenings-

In order that the upper may not separate too readily from the flange of the inner sole when the said lasting-tacks are removed preparatory to the stitching operation, it is necessary to allow the lasted upper and inner sole to remain for a considerable time—say twenty-four hours or more—after the upper has been temporarily secured by the tacks to the flange of the inner sole, in order that the upper may become sufficiently set or fixed in the form imparted to it by the lasting operation to warrant the withdrawal of the tacks in advance of the point where the needle penetrates the upper and inner sole in attaching the welt thereto, it being well-known to those skilled in the art that if the tacks were withdrawn immediately after the securing of the upper to the inner sole thereby the upper would separate to such an extent from the flange of the inner sole as to prevent the possibility of uniting the welt, upper, and inner sole by stitches in the usual manner. The employment of tacks, therefore, as the means for securing the upper to the inner sole during the lasting operation in the manufacture of welled boots and shoes involves an undesirable loss of time and increases the expense of manufacture.

My invention has for its object to enable the upper of a welled boot or shoe to be attached to the inner sole during the lasting operation in such manner that the operation of securing the welt to the upper and inner sole can be proceeded with immediately after the lasting operation and without the necessity of waiting for the upper to become fixed or set in the shape imparted to it by the lasting operation.

The invention also has for its object to provide a welled boot or shoe in which the upper shall be more securely attached to the inner sole than heretofore.

To these ends the invention consists, first, in an improved method of making welled boots and shoes, the same consisting in permanently attaching the upper to the flange of the inner sole by stitches during the lasting operation, and then securing the welt to the upper and inner sole by stitches in the

usual manner, the stitches that unite the upper to the inner sole constituting permanent fastenings which do not interfere with the stitches that unite the welt to the upper and inner sole, so that the operation of stitching the welt to the upper and inner sole may be proceeded with immediately after the lasting operation and without waiting for the upper to set, the two independent lines of stitching increasing the firmness of the connection between the upper and inner sole, so that the boot or shoe is more durable than one in which the connection between the upper and inner sole made during the lasting operation is effected by temporary fastenings, which are necessarily removed before the connection of the welt, upper, and inner sole.

The invention also consists in a welted boot or shoe in which the upper is attached to the inner sole by two independent lines of stitching, one connecting the upper with the flange of the inner sole, the other being the usual stitches that connect the welt with the upper and inner sole.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a transverse section of a last and an inner sole and an upper thereon, said parts being shown in the position they occupy just before the attachment of the upper to the inner sole. Fig. 2 represents a similar view showing the operation of drawing the edge of the upper inwardly over the last to prepare for the operation of stitching the upper to the inner sole, said figure showing the needle which attaches the upper to the inner sole. Fig. 3 represents a perspective view of a portion of the upper, last, and inner sole after the operation of stitching the upper to the flange of the inner sole. Fig. 4 represents a sectional view of the last, the inner sole, and the upper, showing the welt attached to the upper and inner sole.

The same letters of reference indicate the same parts in all the figures.

In the drawings, *a* represents the inner sole of a Goodyear welt boot or shoe, the same having its edge cut or channeled to form a lip or flange *a'*, which is turned outwardly from the outer surface of the inner sole, the outer side of said lip constituting a shoulder, against which the upper *b* is drawn during the lasting operation. A channel *c* is also cut in the outer face of the inner sole for the reception of the usual stitches *d*, that connect the welt *e* with the upper and inner sole. The inner sole above described does not differ from the ordinary form of inner sole used in Goodyear welted work.

In carrying out my invention I draw the edge of the upper inwardly over the bottom of the inner sole, as indicated in Fig. 2, by means of pinchers held by the operator, or in any other suitable way, and secure the upper to the lip or flange *a'* by means of stitches *f*,

which may be formed by a sewing-machine or in any other suitable way, said stitches preferably extending continuously along the flange *a'* and constituting a permanent connection between the upper and inner sole. These stitches are substituted for the lasting-tacks which have heretofore invariably been employed to secure the edge of the upper to the lip of the inner sole, and they constitute a fastening or connection which in no way interferes with the operation of securing the welt to the upper and inner sole by the stitches *d*.

It will be understood that the upper is drawn closely to place upon the last ahead of the point where the stitches *f* are formed, the upper being suitably manipulated to cause it to fit snugly upon the last and to be retained in close contact with the last by the stitches *f*.

After the lasting operation above described the lasted upper and inner sole are ready for the welt *e*, which is applied as indicated in Fig. 4 and connected to the upper and inner sole by the stitches *d*, the operation of securing the welt being performed in the usual manner and of itself forming no part of my invention.

It will be observed that the stitches *f*, that connect the upper to the inner sole, constitute a fastening which holds the upper in place prior to the attachment of the welt and does not require to be removed to enable the welt to be attached. On the contrary, the stitches *f* assist the welt-attaching stitches *d* in securing the upper to the inner sole and enable the operation of securing the welt to the upper and inner sole to be proceeded with immediately after the lasting operation. I am therefore enabled to entirely dispense with the use of tacks in lasting the upper of a welted shoe, said tacks being objectionable for various reasons, and also to avoid the delay incidental to the use of tacks, as before mentioned.

I am aware that the upper of a boot or shoe has been secured during the lasting operation by means of cords or threads disposed in loops; but in all such cases the edge of the upper has been drawn down flat upon the outer face of the inner sole preparatory to uniting the upper inner sole and outer sole by stitches or other fastenings passing through all three parts. I am the first, however, so far as I am aware, to unite the upper and inner sole of a welted boot or shoe by means of stitches passing through the upper and the lip of the inner sole.

I claim—

1. That improvement in the art of making welted boots or shoes which consists in mounting a channeled insole on a last, drawing the upper over and securing its edges to the lip of the inner sole by stitches during the operation of lasting, and then securing

the welt to the upper and inner sole thus connected by an independent line of stitches, as set forth.

5 2. A welted boot or shoe in which the upper is secured to the lip of the inner sole by a line of stitches, the upper and inner sole being secured together by an independent line of stitches, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of 10 two subscribing witnesses, this 24th day of September, A. D. 1891.

AUGUSTUS SEAVER.

Witnesses:

HORACE BROWN,
B. A. MCSHANE.