No. 747,642. PATENTED DEC. 22, 1903.

G. E. ROLLINS.

WELTING FOR WELT BOOTS OR SHOES.

APPLICATION FILED DEC. 12, 1902.

NO MODEL.

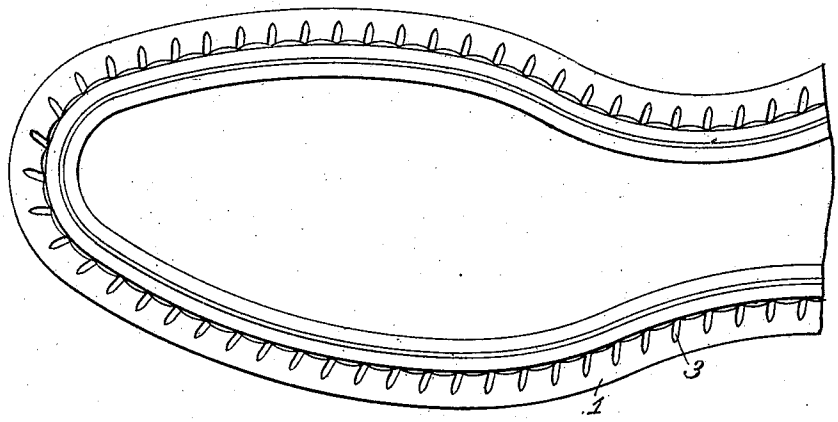


Fig. 1.

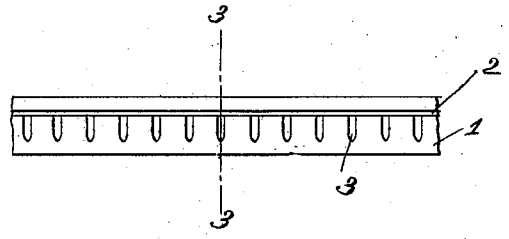


Fig. 2.

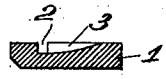


Fig. 3.

Witnesses
Edwin F. Sammeth.
Alfred H. Hildreth

Inventor
George E. Rollins
by his attorneys
Phillips Van Everen & Fish

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 747,642. Patented December 22, 1903.

UNITED STATES PATENT OFFICE.

GEORGE E. ROLLINS, OF EAST BRIDGEWATER, MASSACHUSETTS.

WELTING FOR WELT BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 747,642, dated December 22, 1903.

Application filed December 12, 1902. Serial No. 134,910. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. ROLLINS, a citizen of the United States, residing at East Bridgewater, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Welting for Welt Boots or Shoes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to welting for use in the manufacture of welt boots or shoes.

Welting such as is now generally used in the manufacture of welt boots and shoes consists of straight and narrow strips of welt material provided upon the surface which is lowermost in the completed shoe with a longitudinal groove near one edge to receive the stitches of the inseam by which the strip of welting is to be attached to a boot or shoe. When a strip of welting is sewed to a boot or shoe, it does not stand out flat in substantially the plane of the insole, but on account of the strain put upon the portion of the welt outside of the inseam in bending the welt around the curves of the insole, and especially at the toe portion thereof, the portion of the welt outside of the inseam tends to stand at an angle to the plane of the insole. In order to cause the welt to stand out flat in the desired plane, it is customary to subject the welt after having been secured to the upper and insole of a shoe to a beating-out operation, certain portions of the welt, and particularly the portion of the toe of the shoe, being subjected to the welt-beating-out operation a number of times. To allow the welt to be more easily beaten out, a series of slits are sometimes formed in the under surface of the welt, these slits extending partially through the welt and appearing upon the under surface and outer edge of the welt. This operation is ordinarily performed by means of a hand-knife and is termed in the art "slashing the welt." So far as I am advised as to the state of the art the slits have always been formed in the outer edge of the welt in order to allow this portion of the welt to stretch during the beating-out operation. These slits impair the strength of that portion of the welt which receives the stitches of the outseam and since they appear upon the outer edge of the welt render the operation of finishing the edge of the welt in the completed shoe more difficult, as that portion of the welt in which the slits are made must either be trimmed off or the slits must be obliterated during the operation of dressing and burnishing the edge of the welt.

Among the objects of my invention is to produce a strip of welting for use in the manufacture of welt boots and shoes which can be readily beaten out flat, so as to lie in the desired plane without subjecting it to the usual welt-slashing operation or otherwise forming in the strip of welting either before or after it is attached to the upper and insole of a shoe slits which appear upon the under surface and outer edge of the strip.

Another object of my invention is to provide a strip of welting for use in the manufacture of welt boots and shoes by which the stitches of the inseam will be so received as to form a flexible seam—that is, a seam which will allow the welt to be readily beaten out flat during the welt-beating-out operation.

Still another object of my invention is to provide a strip of welting for use in the manufacture of welt boots and shoes by which the stitches of the inseam will be received so as to form a tight flat seam, and more particularly a strip of welting which will receive the chain of an inseam formed by a chain-stitch shoe-sewing machine.

With these objects in view my invention consists in providing a strip of welting having the usual longitudinal groove near its inner edge with a series of substantially transverse incisions beginning at the longitudinal groove and extending toward the outer edge of the strip. In sewing a strip of welting provided with such incisions to the insole and upper of a boot or shoe that portion of the welt between the longitudinal groove and the inner edge of the strip readily conforms to the shape of the sole. During the beating-out operation the strain to which the strip is subjected tends to compress that portion of the strip lying between the outer edge and the longitudinal groove, and as this portion is provided with incisions it is readily compressed and the welt is beaten out flat without difficulty. This feature of my inven-

tion, broadly considered, contemplates any suitable form of incision. Preferably, however, the incisions will be in the form of grooves, a portion of the material of the strip being removed, as when the incisions are so formed the welt-strip is more readily beaten out flat and the thickness of the welt is not increased by the beating-out operation; also, preferably the grooves will be spaced apart distances corresponding substantially to the lengths of the stitches of the seam by which the strip is to be attached to a boot or shoe, as when they are so spaced they are adapted to receive the loops of the chain-stitches, whereby the seam is rendered flexible and does not tend to pull the strip out of position after having been beaten out flat. Moreover, the grooves by receiving the loops of the chain-stitches conduce to the production of a tight flat seam.

My invention will be clearly understood from the accompanying drawings, in which—

Figure 1 illustrates a strip of welting embodying the preferred form of my invention sewed to the upper and insole of a boot or shoe. Fig. 2 is a plan view of a portion of the welt-strip before being sewed to the boot or shoe, and Fig. 3 is a cross-section of the welt-strip on line 3 3 of Fig. 2.

1 indicates a strip of welt material provided near one edge with the usual inseam-stitch-receiving groove 2. The transverse incisions are indicated at 3 and, as shown, extend from the stitch-receiving groove 2 toward the edge of the strip which is outermost when the strip is in position in the completed shoe. These incisions are preferably in the form of grooves, as shown, and are made by removing a portion of the welt-strip by any suitable tool. These incisions are also preferably spaced apart distances corresponding to the lengths of the stitches of the inseam by which the strip of welting is to be secured to the upper and insole of a boot or shoe. When the strip of welting is sewed to the upper and insole of a boot or shoe, the loops of the chain-stitches, if the chain is laid upon the welt, as is desirable for various reasons well recognized by those skilled in the art, are received in the grooves 3 and a tight flat seam is produced, which allows the projecting edges of the upper, the welt, and the channel flap or lip of the insole to be trimmed off close to the surface of the insole.

During the sewing operation the portion of the welt-strip inside of the stitch-receiving groove 2 readily conforms to the curves of the edge of the inseam. In order to cause the welt-strip to lie in the desired plane, it is subjected to the usual beating-out operation, and during such operation the portion of the welt between the stitch-receiving groove and the outer edge in which the grooves 3 have been formed is readily compressed, the grooves allowing the material to be compressed sufficiently to cause the welt-strip to be flattened out without increasing the thickness of the welt. The welt-strip is as easily and quickly beaten out flat as a welt-strip provided with slits which appear upon the under surface and outer edge of the strip. The incisions do not appear upon the outer edge of the welt-strip and impair its appearance, as do the slits which it has heretofore been customary to form in the welt-strip, nor is that portion of the welt-strip which receives the stitches of the out-seam weakened. By reason of the loops of the chain-stitches being received in grooves in the welt-strip a flexible seam is produced which does not tend to pull the strip out of position after having been beaten out flat by the welt-beating operation.

Another important advantage secured by forming transverse incisions in the welt-strip extending from the longitudinal groove toward the outer edge is that thereby the welt-strip can be readily beaten out flat without bringing any strain upon the inseam and when the shoe is worn the welt is allowed to bend without compressing or distorting the layers of material through which the stitches of the inseam pass. The breaking of the inseam during the wearing of the shoe is thus avoided, which breaking has been a serious objection in welt-shoes provided with welts as heretofore constructed. Also any liability of the stitches of the inseam becoming exposed on the outer surface of the shoe during the welt-beating operation or when the shoe is worn is prevented.

Having thus indicated the nature and scope of my invention and having specifically described a preferred form thereof, I claim as new and desire to secure by Letters Patent—

1. As an article of manufacture, a strip of welting for use in the manufacture of welt-shoes consisting of a strip of welt material provided with a longitudinal groove near its inner edge to receive the stitches of the inseam and with a series of transverse incisions beginning at the longitudinal groove and extending toward the outer edge of the strip, substantially as described.

2. As an article of manufacture, a strip of welting for use in the manufacture of welt-shoes consisting of a strip of welt material provided with a longitudinal groove near its inner edge to receive the stitches of the inseam and with a series of transverse grooves beginning at the longitudinal groove and extending toward the outer edge of the strip and spaced apart distances corresponding substantially to the lengths of the stitches of the inseam by which the strip of welting is to be secured to a shoe, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE E. ROLLINS.

Witnesses:
FRED O. FISH,
HORACE VAN EVEREN.