

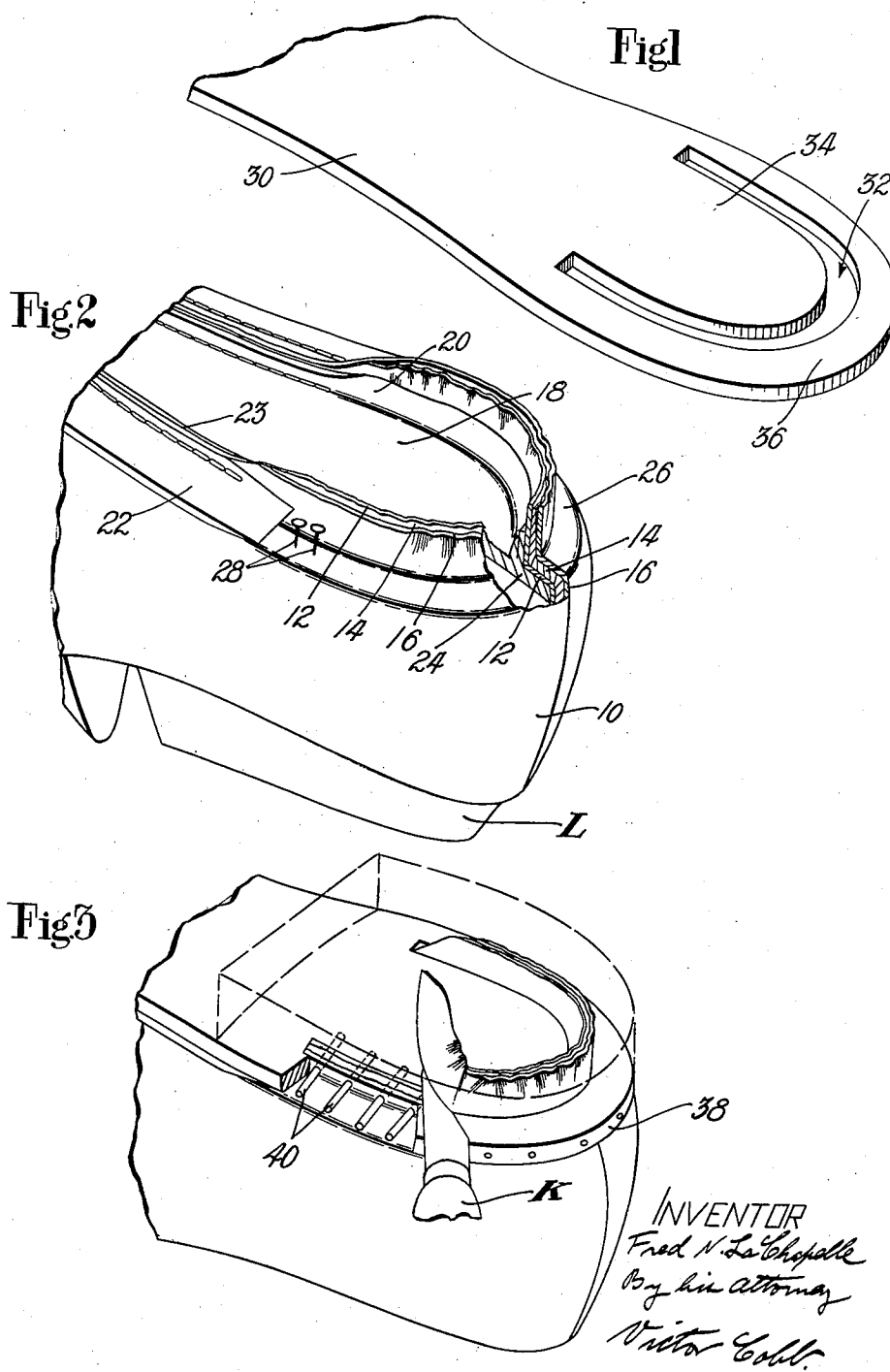
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SHOE AND METHOD OF MAKING SAME

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SHOE AND METHOD OF MAKING SAME

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This invention relates to improvement in shoes and in methods of shoemaking and is herein illustrated and described in its application to the heel end of a shoe.

It has long been a goal among shoe manufacturers to find a practicable method of shoemaking wherein all the metal could be eliminated from the heel seat so that there would be no possibility of lasting tacks or other metal parts causing irregularities on the inside of the shoe bottom. The majority of constructions which have been suggested or developed with this end in view have, however, turned out to be unsatisfactory for commercial use.

It is, therefore, an object of the invention to provide an improved shoe having a simply but solidly constructed heel end which may be made without the use of metallic fastenings or other metal parts. It is a further object of the invention to provide a simple and inexpensive method of manufacturing the improved shoe.

With these objects in view, the invention contemplates a shoe in which the margin of the upper, at least at the heel end, is secured to a marginal rib which extends all the way around the heel end of the insole, on its upper engaging face. The outsole embodied in the shoe has in its heel end a U-shaped slot of such form that the rib and the margin of the upper fit into it tightly. Fastenings driven into the outsole through its edge surface secure the upper and rib in the outsole slot. The invention further provides an improved method of making the shoe whereby, without the use of any permanent metal parts it may be tightly lasted about the heel end and will be solidly constructed so that it can stand up properly under wear.

The invention will be better understood when considered in relation to the accompanying drawing, in which—

Fig. 1 is a perspective view of the heel end of the outsole;

Fig. 2 is a perspective view of the heel end of a shoe ready to receive the outsole, a section being broken away to show the arrangement of the various parts; and

Fig. 3 illustrates the trimming of the surplus from the upstanding rib and lasting margin after the outsole has been attached.

The invention is illustrated herein as embodied in a welted shoe but it may equally well be applied to almost any other type of construction. As illustrated in the drawing, an upper indicated generally at 10 is assembled in the usual manner with a lining 12, and a counter 14 interposed

between the lining and the outer layer 16 of the upper. The insole 18 which is to be incorporated in the shoe has on its attaching face an upstanding rib 20 positioned a short distance in from the edge of the sole. This rib is preferably integral with the insole, and in such case it may advantageously be formed by the lips of two channels, these lips being brought together and cemented in upstanding position. In a welted shoe, this rib will normally extend about the entire periphery of the sole, and will be used forward of the heel breast line as a sewing rib to which a welt 22 is attached. In other types of shoes, the rib need extend only around the margin at the heel end of the insole.

The upper 10 is assembled with the insole over a last L, being secured to the insole about the forepart and along the shank in any of the customary ways, and after the welt 22 has been attached, the insole 18 is trimmed along the forepart and shank in the usual manner leaving the rib at the heel end untrimmed. The heel portion of the upper is then lasted in over the feather 24 of the insole and against the untrimmed rib 20, care being taken that the lasting margin 26 of the upper is down tight against the feather 24. Preferably, this part of the upper is held in position by cement so that no metal will be in the finished heel seat but tacks 28 may be employed to hold it while the cement is setting.

The outsole 30 to be used in the shoe is provided with a U- or horseshoe-shaped slot 32 cut entirely through the thickness of the outsole at the heel end and of such a size and shape that the portion of the rib 20 and the upper 10 not cut away during the insole trimming will fit into it tightly. Attaching of the shank and forepart of the outsole is effected in the usual way by any suitable means, such as stitching or cement. This having been completed, the heel end of the sole is beaten down solidly against the shoe bottom so that the tongue 34 which forms the body of the outsole inwardly of the slot 32 is in firm contact with the insole and the rim 36 outwardly of the slot is tight against that portion of the lasting margin 26 which overlies the feather 24 of the insole at the heel seat portion of the shoe. To secure the heel end of the outsole in this position a number of holes are punched in the edge face 38 of the heel end of the outsole and into these holes fiber pegs 40 are driven. These pegs are so located that they lie substantially parallel to the surface of the outsole and extend inwardly through the rim

36 of the outsole, the outer layer 16 of the upper, the counter, and the lining and into the tongue 34 which forms the major portion of the heel end of the outsole. It is to be noted that in place of the pegs 40 nails or tacks with small heads may be used as fastening means, but in such case the shoe will not have the metalless heel seat considered so desirable.

After the heel end of the sole has been properly fastened in place, those portions of the upstanding rib and of the lasting margin of the upper which project through the slot may be trimmed off flush with the outsole by any convenient means illustrated as the knife K. The shoe is then ready for heel attaching and such other further operations as may be found desirable to produce the finished shoe. It will be found that a shoe embodying the above described construction is strong and able to undergo severe wear without weakening. The use of pegs of paper, fiber, wood, or similar material eliminates all metal from the heel seat and these pegs driven into the edge surface of the outsole form a rugged fastening means which will hold the outsole tightly against the upper and the periphery of the insole.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. A shoe comprising a sole member having an open marginal slot formed therein adjacent to its edge and extending entirely through the thickness of said sole member, an insole, an upper having a lasting margin overlying the margin of said insole and extending into said slot, and fastenings extending in a plane substantially parallel to the surface of the sole member from the edge face thereof through the upper into the body of the sole member inwardly of the slot.

2. A shoe comprising an upper, a sole member having a peripheral slot in its heel end, an insole, an upper overlying the margin of said insole and extending through said slot, and fastenings driven into the edge face of said sole member and extending in a plane substantially parallel to the surface of a sole member through the upper into the body of the sole inwardly of the slot.

3. A shoe comprising an upper, an outsole having a peripheral slot in its heel end, an insole having on its heel end a lasting rib to which the upper is secured, and fastenings securing the rib and upper in the outsole slot.

4. A shoe comprising an insole having about its heel end and adjacent to its periphery an integral rib, an upper secured to said rib, an outsole having in its heel end a peripheral slot into which the rib and upper extend, and fastenings securing the outsole to the rib and upper.

5. A shoe comprising an insole having a lasting rib about its heel end, an upper secured to said rib, an outsole having in its heel end a slot into which the rib and upper fit, and fastenings extending in a plane substantially parallel to the surface of the sole from the edge face of said sole through the rib and the upper into the body of the sole inwardly of the slot.

6. A shoe comprising an insole having an integral lasting rib about the periphery of its attaching face at the heel end thereof, an upper

secured to said rib, an outsole having in its heel end a peripheral slot into which the rib and lasting margin are tightly fitted, and pegs driven inwardly from the edge face of the sole through the lasting rib and the upper into the body of the sole inwardly of the slot.

7. That improvement in methods of shoe-making which comprises assembling an upper with an insole, providing a sole member having therein a peripheral slot extending through the thickness of said sole member, inserting the lasting margin of said upper in said slot, and driving fastenings into the edge face of said sole member and through the lasting margin of the upper into the body of the sole inwardly of the slot, thereby securing the upper to the sole member.

8. That improvement in methods of shoe-making which comprises providing an insole having a lasting rib about its heel end, securing an upper in overlapped relation to said insole at the forepart and shank thereof, attaching to the shoe an outsole having in its heel end a slot into which the upper and lasting rib are inserted, and securing the rib and the upper in the slot of the outsole.

9. That improvement in methods of shoe-making which comprises providing an insole having a peripheral lasting rib about the heel end of its attaching face, lasting a margin of an upper to said rib, attaching to the lasted assembly an outsole having a slot in its heel end, positioning the rib and lasting margin in said slot, and permanently securing the rib and lasting margin therein.

10. That improvement in methods of shoe-making which comprises providing an insole having a lasting rib adjacent to and about its entire periphery, securing an upper to the rib in overlapped relation to the insole, fastening a welt to the rib, attaching to the lasted assembly an outsole having in its heel end a slot into which the rib and the margin of the upper fit tightly, and permanently fastening the rib and lasting margin in the slot of the outsole.

11. That improvement in methods of shoe-making which comprises providing an insole having an integral rib about its heel end, securing an upper in overlapped relation to said insole at the forepart and shank thereof, attaching to the insole and upper an outsole having in its heel end a slot for receiving the rib and the margin of the upper, and securing the rib and lasting margin in the slot of the outsole by driving fastenings into the edge face of the outsole and through the rib and the lasting margin into the body of the sole inwardly of the slot.

12. That improvement in methods of shoe-making which comprises providing an insole having about its heel end and adjacent to the periphery thereof a lasting rib, securing the lasting margin of an upper to the rib, attaching to the lasted assembly an outsole having in its heel end a peripheral slot, inserting the lasting rib and the margin of the upper into said slot, and permanently securing the rib and lasting margin to the outsole by driving pegs from the edge surface of the sole through the rib and lasting margin into the body of the sole inwardly of the slot.

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