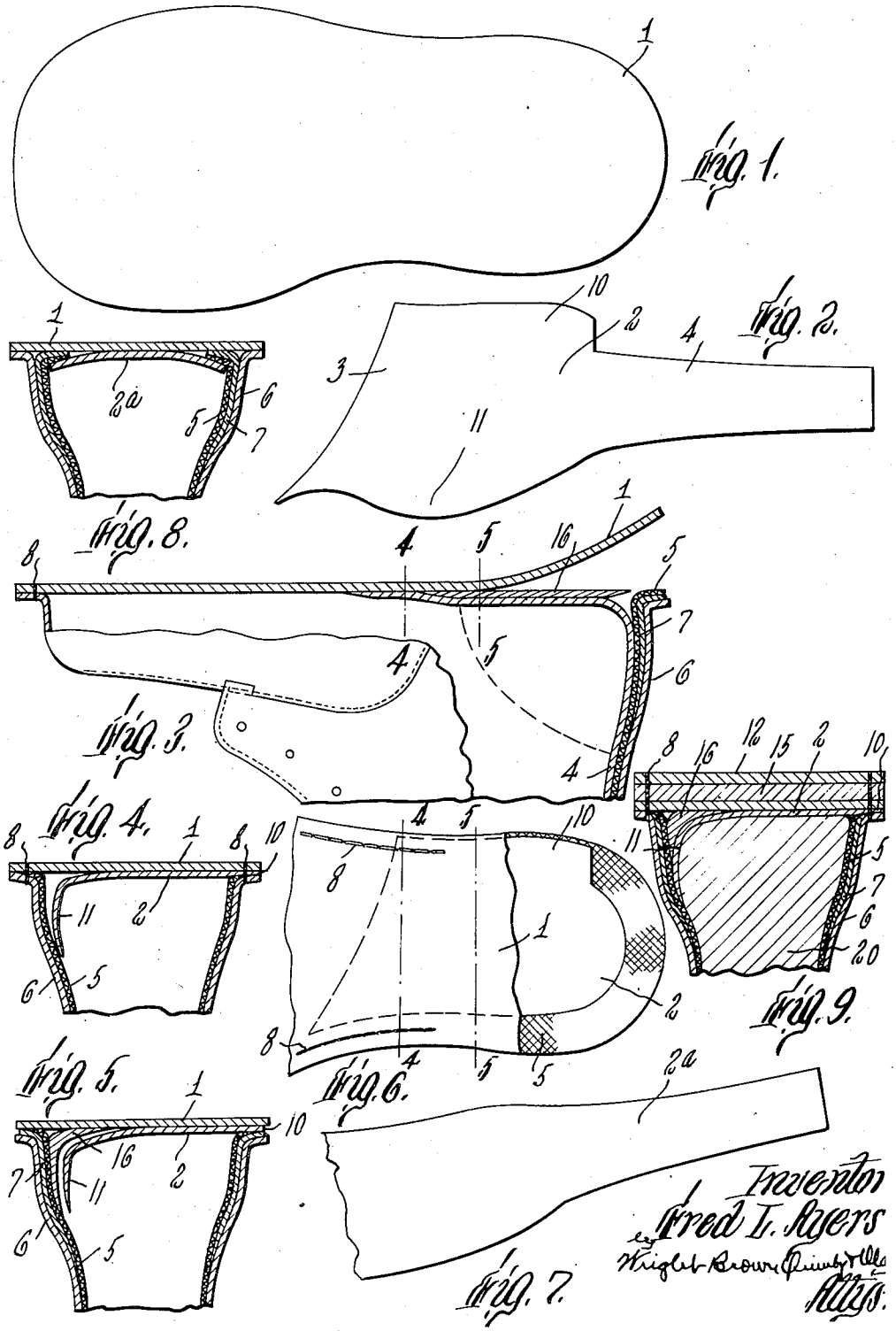
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SHOE AND METHOD OF MAKING THE SAME

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SHOE AND METHOD OF MAKING THE SAME

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9 Claims. (Cl. 36—8.5)

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This invention relates to shoes and to their manufacture, and more particularly to children's shoes, and has for an object to provide a method and construction facilitating the application of various orthopedic parts in accordance with specific requirements, and particularly while embodying a desired continuous inner tread and an inner heel end face which merge in a smooth contour. More particularly the method and construction provide for additional stiffening or support for one side of the heel or shank, usually such being desired on the inner side of the heel or shank portion.

For a complete understanding of this invention, reference may be had to the accompanying drawings in which

Figure 1 is a plan view of an innersole member.

Figure 2 is a similar view of a second innersole part provided with a lateral extension or "cookie" and an integral inside backstay.

Figure 3 is a view partly in side elevation and partly in central longitudinal section showing a shoe in inverted position partly assembled and slip lasted and the last removed and with a heel wedge inserted and the heel end of the lower innersole member lifted.

Figures 4 and 5 are detail sectional views on lines 4—4 and 5—5, respectively, of Figures 3 and 6.

Figure 6 is a fragmentary top plan view partly broken away of the structure shown in Figure 2.

Figure 7 is a fragmentary plan view of a member which is a modification of the member shown in Figure 2.

Figure 8 is a view similar to Figure 5 but employing the member of Figure 7.

Figure 9 is a fragmentary sectional view on about the section line 5—5 of Figure 3, but showing the completed shoe mounted on a special last.

Referring to the drawings, at 1 in Figure 1 is shown a flexible sole-shaped blank which forms a part of the shoe innersole. In Figure 2 and at 2 is shown an upper innersole layer or lamination which comprises at least a shank and heel portion 3 having an integral rear extension 4 which forms an inner backstay in the completed shoe. The portion 4 is stitched into the shoe upper in backstay relation, as shown in Figure 3, and the upper, which may comprise a lining 5, and outer 6, and at the heel portion, a counter stiffener 7, is secured to the innersole about at least its forepart and shank at the sole margin by lines of stitching as shown at 8 in

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Figures 3, 4 and 6, at least the outer being outturned and so attached.

At one side, commonly at the outside of the shoe, the innersole member 4 is provided with a widened portion 10 which extends substantially to the outer edge of the innersole blank 1 and is partly secured by the line of stitching 8 on that side of the shoe to the upper materials comprising the lining and outer. At the opposite edge, which is usually on the inside of the shoe, a curved extension 11 is illustrated, this being adapted to form an upward extension within the upper of the shoe and commonly referred to in the art as a "cookie." This is positioned at the desired point longitudinally of the shoe, often in the shank portion, and it may also extend into the heel portion. This side edge of the upper innersole member 2 is unattached at this stage of the manufacture, as shown best in Figures 4 and 5. In Figure 5, a portion of the counter-stiffener 7 is illustrated, and in the construction shown in Figures 3, 4, 5, and 9, the lining 5 as well as the counter stiffener 7 and the outer 6, have their margins outwardly turned. The heel end portion of the member 1 is unattached to the upper materials rearwardly of the stitch lines 8.

The shoe so assembled with the upper materials and the innersole parts is then slip lasted, and if desired, the rear end of the innersole member 1 and the upper margins are cemented. The heel end of the shoe is then molded to form with the margins of the upper materials, including the stiffener, if one is used, a marginal shelf for the attachment of the rear or heel end of the member 1 which may thereafter be secured in position as by the cement. An outersole 12 is then applied and suitably secured in position, as, for example, by stitching, cementing, or the like, to the marginal portions of the innersole member 1, the out-turned upper materials, and at the heel portion, if desired, with an intermediate wedge member 15. The sole portion is then finished by the usual operations, such as edge trimming, edge setting, and the like.

The last is then removed from the shoe and the unattached edge portion of the member 2 along the edge of the "cookie" portion 11 is then lifted and a wedge filler member 16 is inserted between the "cookie," the lower innersole member 1, and the upper, as shown in Figure 5. The free edge portion of the upper innersole member 4 is then cemented in position against the wedge, the lower innersole member 1, and the inside face of the shoe upper.

In some cases it may be desired to employ a last having a cut-out in its sole face to make room for the "cookie" and the wedge filler, and where this is used, the operations may be somewhat different since it is then possible to introduce the "cookie" and filler in position before the shoe is lasted. Such a last is shown, for example, in Figure 9 at **20**, in position in the shoe. Where such a last is employed, after the rear end of the member **1** has been secured, the wedge may be inserted at the side of the shoe provided with the "cookie" extension between the innersole members **1** and **2**, and then the wedge, and this extension may be cemented in position. The shoe is then slip lasted with the special last with the cut-out to receive the wedge and the "cookie." Then the outersole is applied and suitably secured to the shoe either by cement or marginal stitching, or both, as desired, and the sole is finished, after which the last is removed.

In some cases it may be desired to turn the lining, or the lining and heel stiffener inwardly at the heel portion of the shoe, while the outer margin is out-turned to overlie the lower innersole member, as shown, for example, in Figure 8. Or, it might be desired to turn in all the margins at the heel. In such a situation the upper innersole member **2***a*, as shown in Figure 7, may be employed, this being narrower than the lower innersole member **1** so that it may fit within the lining as shown in Figure 8. With this arrangement it will not ordinarily be desired to employ a "cookie" and ordinarily this innersole member will not be secured about either margin to the innersole member **1** and it will be laid in position and cemented before the slip lasting operation. With this construction ordinarily it will not be desired to employ a wedge in either side of the shoe and consequently a last without any cut-out to receive such elements will be employed. The upper sole member **2** or **2***a* may extend forwardly within the shoe as far as is desired. In case it extends well into the toe portion of the shoe, it may perform somewhat the function of a sock lining in that it covers the surface of the lower innersole member **1** which may then be made of some material such as canvas, or the like, which would not be desirable for a sole portion exposed on the inside of the shoe. The margin of such a lower innersole **1** may be cut away or turned inwardly as is known in the art near to the stitches **8**, so that it does not extend to the outer edge of the completed sole member so that its edge will not show in the completed shoe. This is particularly desirable when it is of material such as fabric which will not give the same appearance as the edge of the outersole or upper when finished.

From the foregoing description of certain embodiments of this invention it will be evident to those skilled in the art that various further changes and modifications may be made without departing from its spirit or scope.

I claim:

1. A shoe comprising a flexible innersole having an upper heel and shank portion provided with an integral inside backstay and a lower portion, upper materials having their lower margins secured to the margins of said innersole including said lower portion, and a filler wedge located between said upper and lower portions.

2. A shoe comprising a flexible innersole having an upper heel and shank portion provided with an integral inside backstay and a lower portion, upper materials including a lining and outer, said lining having its heel margin turned inwardly between said upper and lower innersole portions and the margin of said outer being out-turned and secured to the margin of said innersole including said lower portion, and an outersole secured to said outer margin and to said innersole.

3. A shoe comprising an innersole having an upper heel and shank portion provided with a lateral extension at one side and an integral inside back-stay and having a lower portion, upper materials secured to the margin of said innersole including said lower portion and a part of said upper portion, said lateral extension engaging the inner face of said upper materials, a wedge filler between said upper and lower portions at said extension, and an outersole underlying and secured in position.

4. A shoe comprising an innersole having an upper heel and shank portion provided with a lateral extension at one side and an integral inside backstay and having a lower portion, upper materials secured to the margin of said innersole including said lower portion, said lateral extension engaging the inner face of said upper materials, a wedge filler between said upper and lower portions at said extension, and an outersole underlying and secured to the margins of said innersole including said lower innersole portion and said upper material margins.

5. A shoe comprising an innersole having an upper lamination and a lower portion, said upper lamination having a heel portion provided with an integral inside backstay, an upper secured at its lower margin to the margin of said innersole including the margin of said lower innersole portion and on the outside of the shoe to said upper innersole portion, an outersole secured to the marginal portions of said upper and innersole including said lower innersole portion, and a wedge piece inserted between said upper and lower innersole portions.

6. The method of making a shoe which comprises stitching together the margins of at least the forepart and shank of a shoe upper and an innersole having an upper portion provided with an integral inside backstay, one side of said upper portion being left unattached to said upper, said innersole also having a lower portion beneath said upper innersole portion, slip lasting the shoe, applying an outersole, removing the last, lifting the unattached upper innersole portion, inserting a wedge between said upper innersole portion and said lower innersole portion, and returning and cementing said unattached portion over said wedge and lower innersole portion.

7. The method of making a shoe which comprises stitching together the margins of at least the forepart and shank of a shoe upper and an innersole having an upper portion provided with an integral inside backstay, one side of said upper innersole portion being left unattached to said upper and provided with a lateral extension, said innersole having a lower portion beneath said upper innersole portion, slip lasting the shoe, applying an outersole, removing the last, lifting the unattached part of the upper innersole portion, inserting a wedge between said upper innersole portion and said lower innersole portion at said extension, and returning and cementing said unattached part over said wedge and lower insole portion with said extension engaging the inner face of said upper.

8. The method of making a shoe which comprises stitching together the margins of at least

the forepart and shank of a shoe upper and an innersole having an upper portion provided with an integral inside backstay, the forward portion of said upper innersole portion being unattached to the upper and said innersole having a lower portion, then applying and securing the forward portion of the upper innersole portion against said lower innersole portion, and slip lasting the shoe.

9. The method of making a shoe which comprises stitching together the margins of at least the forepart and shank of a shoe upper and an innersole having an upper portion provided with an integral inner backstay and a lower heel and shank portion free from securement to said upper, said upper innersole portion having a lateral extension on one side, applying and cementing a wedge between the innersole upper portion and the lower heel and shank portion and cementing said extension against the face of said upper, slip lasting the shoe with a last having a cut-out in its sole face at said wedge, molding the heel end of the shoe, and applying an outersole to the shoe.

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