

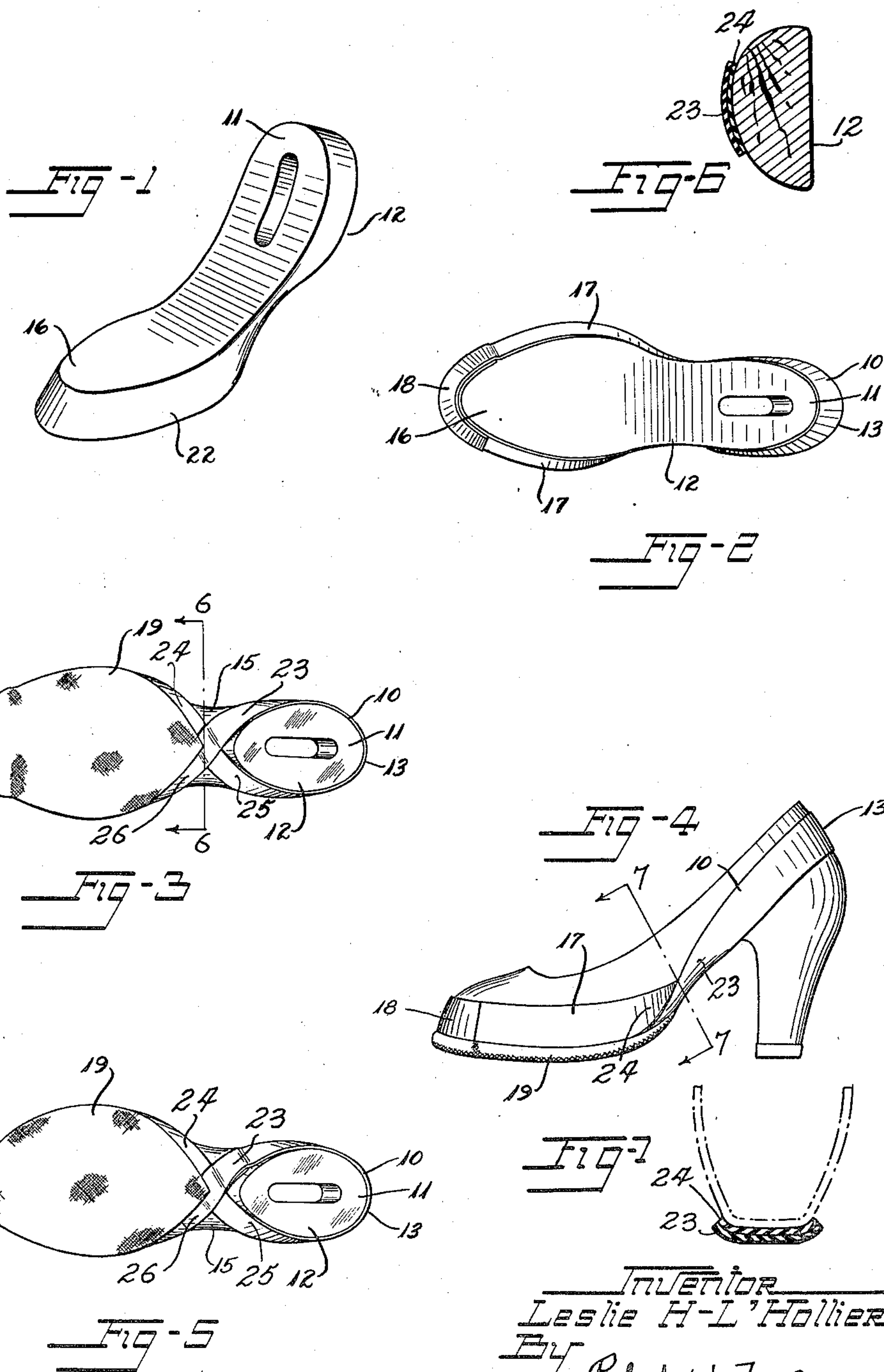
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FOOTHOLD AND METHOD OF MANUFACTURE

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## UNITED STATES PATENT OFFICE

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FOOTHOLD AND METHOD OF  
MANUFACTURE

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This invention relates to an overshoe and a method of making the same, and particularly to a foothold or similar article of footwear and a last for making the same.

It is an object of this invention to provide an overshoe or foothold in which the heel strap and vamp are snug fitting and hug the shoe of the wearer. It is also an object to provide a method of making such an article of footwear. Other and further objects will be apparent from the description which follows.

Although overshoes and footholds have been previously produced, the methods of this invention are new and give new and improved properties to the articles of footwear of this invention.

In this invention a snug fit is obtained by a new method of construction embodying a figure-8 configuration made up of the heel-encircling portion and vamp portion of the article of footwear. This invention is particularly applicable to making light, inexpensive overshoes or footholds, usually worn by women, but a similar construction may be used in any footwear to afford a snug fitting at the heel, vamp, and instep.

This invention may be more readily understood by referring to the accompanying drawings, of which

Fig. 1 is a perspective view of the last used in constructing and forming a foothold embodying this invention;

Fig. 2 is a plan view of the last with the unitary heel strap and vamp member in place and with the ends of said unitary strap overlapped to form a reinforcement at the toe;

Fig. 3 is a bottom plan view of the completed foothold mounted on the last;

Fig. 4 is an elevation of the finished product as it is worn upon the shoe;

Fig. 5 is a bottom plan view of another embodiment of my invention in which the ends of the unitary strap member are overlapped and secured at the shank crossover;

Fig. 6 is a cross sectional view taken along line 6—6 of Fig. 3; and

Fig. 7 is a cross sectional view taken along line 7—7 of Fig. 4.

In carrying out the method of this invention, a 1-inch unvulcanized calendered rubber strip 10 was placed on the side of the heel 11 of the last 12 and wrapped around the heel portion. The strip 10 was then crossed at the shank 15 of the last 12, and brought up around the toe portion 16 of the last 12 to form an upstanding vamp 17 which is integral with the heel-encircling portion 13. The ends of the strip were overlapped and

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adhered one to the other to form a toe reinforcement 18. A sole member 19 was then placed upon the last and adhered to the vamp portion 17 of the rubber strip 10. The product was then vulcanized and the foothold took the form of the last.

The shape of the last may vary depending upon the height of the heel of the shoe for which the foothold is designed, but the shape is not critical for the heel strap, being elastic, will fit various shoes. The sides of the vamp portion 17 are angled inwardly as are the sidewalls 22 of the last 12. Thus, the vamp hugs the shoe at all times and when the foot is flexed, the heel strap tends to pull the vamp snugly against the shoe because of the figure-8 construction. Since the vamp is somewhat elastic and is angled inwardly, the product will adjust itself to shoes of different widths and shapes. The member 23 of the heel-encircling portion 13 and member 24 of the vamp 17 form the outer side of the article of footwear. Likewise member 25 of the heel-encircling portion 13 and member 26 of the vamp 17 form the inner side of the article of footwear. Member 23 overlies member 24 at the shank cross-over as shown in Figs. 6 and 7.

Extruded or calendered stripping may be used for the heel strap and vamp; therefore, the use of dies and the cutting of patterns is eliminated except for the sole members. The use of extruded strap material also does away with any trimming after vulcanization. Economy then is an additional advantage of the method along with those improvements already mentioned.

Other articles of footwear may use a similar figure-8 construction to achieve the snug fitting at the instep. For instance, a galosh may have an insert consisting of a strip which passes over the heel bump and around the quarters, crossing under the shank, and then around the border of the vamp to give the footwear a snug fit at the instep. The ends of the strip material may be overlapped at the toe portion as in the above example or an overlap may be made at other points on the vamp or heel-encircling portions. The ends of the strip were overlapped at the shank crossover in another embodiment of this invention as shown in Fig. 5. Starting at the shank, the strip material was wrapped around the heel and crossed over the end of the strip at the shank, then wrapped around the toe to form a vamp and the ends of the strip then overlapped and secured to each other at the shank. The ends of the strip may also be secured by forming a butt joint disposed at the shank or at any other suitable point. Other materials may obviously be used instead



of rubber. Thermoplastic materials, textile fabrics, rubber coated fabrics, and others may be used. The elasticity of the material used need not be great, however, for the desired properties are derived more from the figure-8 construction than from the nature of the material itself. When thermoplastic materials are used, such as plasticized polyvinyl chloride, the ends of the strap may be secured together by heating locally to form a heat seal. Similarly, the sole member may be heat-sealed to the vamp. Any other suitable method for securing the elements together may be employed of course, such as the use of cements or adhesives, stitching, etc.

The method of this invention is especially adapted to the manufacture of a lightweight foot-hold which is easily removed and which fits snugly when worn.

Although a particular method of manufacture has been stressed, it is my intention that the invention be not limited by this example nor by the materials of this example, but to include all of the obvious variations and modifications falling within the spirit and scope of the appended claims.

**I claim:**

1. An overshoe comprising a band of resilient material, relatively wide as compared to its thickness, endless and twisted in the shape of a figure-8 with the cross-over thereof secured together in face-to-face relation to form a shank, the loop of said band forward of said shank providing an upstanding vamp and the loop of said band to the rear of said shank providing an upwardly and rearwardly directed heel-encircling member by virtue of said shape and twist, and a sole disposed forwardly of said shank and secured along the lower margin of said upstanding vamp.

2. The overshoe of claim 1 in which said band includes a lapped seam disposed in the forward loop remote from said shank, providing a toe reinforcement for said vamp.

3. The overshoe of claim 1 in which said band includes a seam disposed at the shank cross-over.

4. The overshoe of claim 1 in which said band of resilient material comprises a vulcanized rubber.

5. The overshoe of claim 2 in which said band of resilient material comprises a vulcanized rubber.

6. The overshoe of claim 3 in which said band of resilient material comprises a vulcanized rubber.

7. A method of making an overshoe comprising disposing about a last in a figure-8 configuration a band of resilient material having greater transverse width than thickness by placing one end of said band at the toe of said last then wrapping said band around the outer margin of one side of said last to form a part of an upstanding vamp then under and across the shank and around the periphery of the heel and again under and across the shank of said last to form a flat cross-over at said shank then around the outer margin of the other side of said last to

complete said upstanding vamp and joining the ends of the band in a lapped seam to form a toe reinforcement, and securing a sole member to said upstanding vamp.

8. A method of making an overshoe comprising placing at the shank of a last one end of a band of resilient material having greater transverse width than thickness, wrapping said band around the periphery of the heel of said last then under and across the shank to form a flat cross-over at said shank then around the toe of said last to form an upstanding vamp and then joining the remaining end of said band with the starting end at said shank, and securing to said upstanding vamp a sole member.

9. A method of making an overshoe comprising placing at the shank of a last one end of a band of vulcanizable resilient rubber-like material having greater transverse width than thickness, wrapping said band around the periphery of the heel of said last and under and across the shank to form a flat cross-over at the shank and around the toe of said last to form an upstanding vamp and joining the remaining end of said band with the starting end at said shank, securing to said upstanding band a sole member, and heating said structure to vulcanize it.

10. A method of making an overshoe comprising disposing about a last in a figure-8 configuration a band of vulcanizable resilient rubber-like material having greater transverse width than thickness by placing one end of said band at the toe of said last and wrapping said band around the outer margin of one side of said last to form a part of an upstanding vamp then under and across the shank and around the periphery of the heel and again under and across the shank of said last to form a flat cross-over at said shank and around the outer margin of the other side of said last to complete said upstanding vamp, joining the ends of the band in a lapped seam to form a toe reinforcement, and securing a sole member to said upstanding vamp and heating said structure to vulcanize it.

11. A method of making an overshoe comprising disposing about a last in figure-8 configuration a band of flexible material having greater width than thickness with the crossing of the band disposed flat against the shank of said last and the loops of the band forming an upstanding vamp and a rearwardly extending loop around the marginal zones of the toe and heel portions of the last, respectively, and securing a sole member to said upstanding vamp.

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