Jan. 7, 1936. C. TWEEDIE 2,027,072

SOCK LINING FOR SHOES

Filed May 27, 1933

Fig. 1.

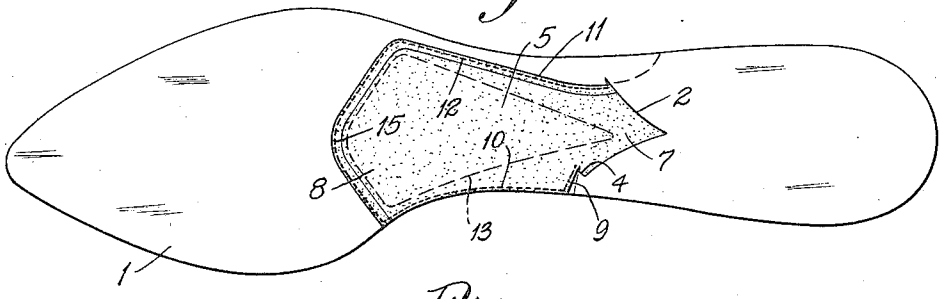


Fig. 2.

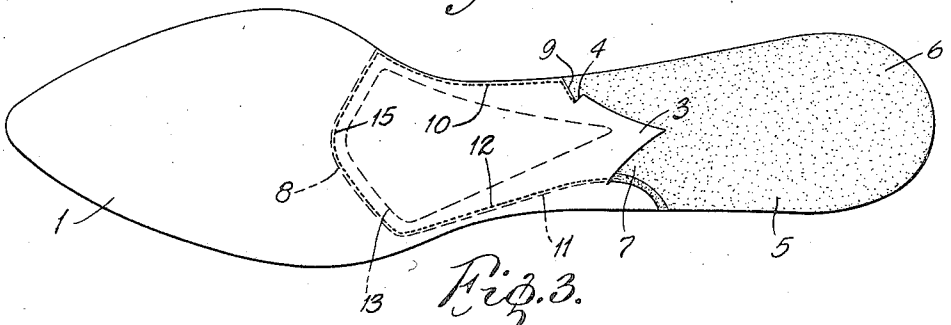


Fig. 3.

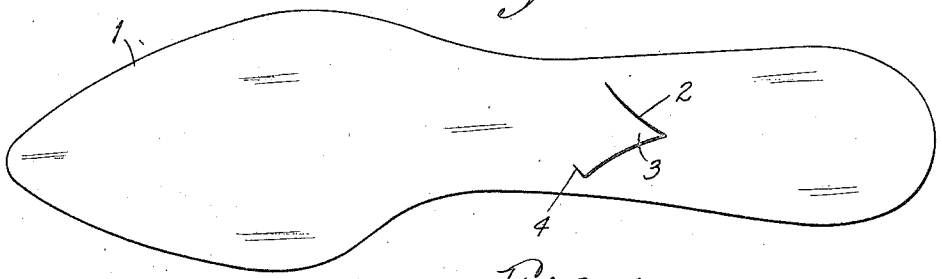


Fig. 4.

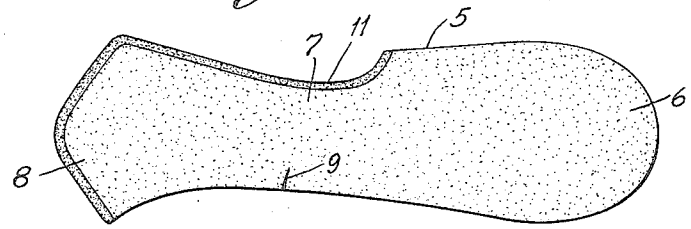
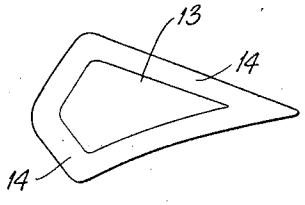


Fig. 5.



INVENTOR:

Charles Tweedie

by Cowan Cowan Brady

HIS ATTORNEYS.

Patented Jan. 7, 1936

2,027,072

UNITED STATES PATENT OFFICE

2,027,072

SOCK LINING FOR SHOES

Charles Tweedie, Jefferson City, Mo.

Application May 27, 1933, Serial No. 673,130

3 Claims. (Cl. 36—71)

My invention relates to sock linings for shoes. According to present day practice, it is customary to cover the insole of a shoe with a piece of leather, commonly known as a sock or sock lining, whose rough side is cemented to the insole, leaving the smooth or grain side exposed. With such a smooth sock, there is a tendency for the foot to slip forward and crowd the toes, especially in the case of high heeled shoes. It is also customary, in the manufacture of women's shoes to concave the upper surface of the shank portion thereby leaving a depression where there should be support for the longitudinal and transverse arches of the foot.

The principal objects of the present invention are to devise means for preventing or minimizing the tendency of the foot to slip forward and to afford adequate support for the longitudinal and transverse arches of the foot; and to embody these advantages in a simple and inexpensive sock lining that may readily be applied to an otherwise finished shoe. The invention consists in the construction and arrangements of parts hereinafter described and claimed.

In the accompanying drawing, wherein like reference numerals refer to like parts wherever they occur,

Fig. 1 is a top view of the sock lining embodying my invention,

Fig. 2 is a bottom view thereof,

Fig. 3 is a view of the main member of the sock lining,

Fig. 4 is a view of the secondary member which constitutes a support for the arch of the foot and furnishes a rough frictional surface for resisting slipping; and

Fig. 5 is a view of an arch support insert.

The main body 1 of my device is a sole-shaped piece of finished leather of the size and shape of the ordinary leather sock lining, the smooth or grain side thereof being uppermost in use. In the shank portion of this member is a V-shaped slit 2 which forms a rearwardly extending tongue 3. The inner leg of the V-shaped slit extends slightly forward of the outer leg and, at its forward end, joins a short slit 4 which extends transversely thereto at a forward and inward inclination.

The arch support member 5 is preferably of the general form illustrated in Letters Patent No. 1,828,086 granted to me October 20, 1931 for an Arch support. It comprises a rear or heel seat portion 6, a shank portion 7 and a front end portion 8 of angular shape adapted to rest under the transverse arch of the foot, as more fully explained in said patent.

This arch support member 5 is preferably made of suede leather or other suitable material whose upper surface is rough enough to afford substantial frictional resistance to the slipping forward of the foot thereon. A short slit 9 is cut in the inner or concave edge of this arch support member in such position that, when the arch support member is applied to the main body 1 with their rear ends in register, the inner end of the slit 9 will practically coincide with the point where the inner leg of the V-shaped slit of the body 1 meets the short transverse slit 4 thereof. The distance from the inner end of the slit 9 in the inner margin of the arch support member cross-wise to the outer edge thereof is substantially equal to the spread of the V-shaped slit of the main body.

The main body 1 and the arch support member are assembled by passing the arch support member part-way through the V-shaped slit of the main body in such manner that the portion of the arch support member back of said V-shaped slit lies below the main body 1 and the portion forward of said slit lies above the main body 1. When assembled in this manner, the inner margin of the portion of the arch support member forward of the short transverse slit 9 thereof coincides with the inner margin of the main member and is stitched thereto throughout its length, as indicated at 10. The outer margin 11 of the upper portion of said arch support member lies inwardly from the outer margin of the main body, to which it is stitched throughout its length, as indicated at 12. It is noted, however, that the member 5 extends transversely on both sides of the longitudinal center line of the shank portion of the main body 1. The portions of the main body and of the arch support member back of the V-shaped slit are secured together, as for instance, by cementing.

Between the main body and the portion of the arch support member above it is a wedge-shaped pad 13, preferably of relatively thick leather, with all its margins beveled off as shown at 14. Preferably, the pointed end of this pad extends rearwardly as far as the front tips of the V-shaped slit; and the front end of the pad is of angular form terminating short of the front end of the arch support member but conforming to the shape thereof and with its tip in the region of greatest width of the main body and thus in position to lie slightly back of the anterior end of the

second metatarsal bone of the foot. It is noted that the third metatarsal extends further forward than the fourth metatarsal and that the second metatarsal extends further forward than either the third or the first metatarsal, so that, when the front tip of the arch support member lies back of the anterior end of the second metatarsal, the oblique edges of the front end of said member will lie rearwardly of the anterior ends of the first, third and fourth metatarsals and, in this position, the fleshy portion of the foot back of the anterior knobs of said metatarsals will rest upon and will be supported by the arch support, thereby affording relief both for the longitudinal arch and the transverse arch of the foot.

The front margin of the arch support member is stitched to the main body 1, as indicated at 15. Preferably, the beveled side of the pad 13 is glued to the main body 1 before the arch support member is stitched to the main body. In some cases, however, it may be desirable to leave the pad free, in which case, one pad may be replaced with another of different thickness by merely cutting the front stitches 15 to open the pocket, which contains the pad, and afterwards securing said front ends by cement or in any other convenient way.

The construction hereinbefore described may be readily applied to an ordinary shoe and serves to support the longitudinal and transverse arches thereof in the manner more fully described in said Patent No. 1,828,086. It has another great merit in addition, namely, it offers substantial resistance to the tendency of the foot to slip forward while walking. This tendency is considerable, especially in the case of shoes with high heels, and is liable to result in painful cramping of the toes; whereas the rough surface of my arch support member of suede leather or other suitable rough material opposes substantial frictional resistance to such tendency to slip.

While the secondary member of my device hereinbefore described constitutes both an arch support and a means for preventing slipping forward of the foot, it is obvious that the anti-slipping function may be separate from the arch support function. For the purpose of preventing such slipping, it is sufficient that the sock lining shall have a rough upper surface throughout a substantial area. Such rough surface is readily obtainable, for instance, by sewing or otherwise securing on top of the body a piece of suede leather preferably shaped like the upper or front portion of the arch support member 5. The same rough effect may be readily obtained also by making the body of three pieces, the middle piece being preferably thicker than the others and having its upper surface rough.

What I claim is:

1. A sock lining comprising a sole-shaped body portion having a V-shaped slit in the rear part of its shank portion, and an arch support member extending through said slit, said arch support member having a short slit in its inner margin opposite the forward end of said V-shaped slit, the outer margin of said arch support member being located inwardly from the margin of the main body, and the margin of the heel portion of said arch support member and its inner margin conforming substantially to the margin of said body, the front end of said arch support member being of angle shape with its tip in the region of greatest width of the body portion so as to lie below the second metatarsal bone of the foot.

2. A sock lining comprising a sole-shaped body having a V-shaped slit in the rear part of its shank portion, and an arch support member extending through said slit, said arch support member having a short slit in its inner margin opposite the forward end of said V-shaped slit, and a beveled pad between said body and the upper portion of said arch support member, the outer margin of said arch support member being located inwardly from the margin of the main body, and the margin of the heel portion of said arch support member and the inner margin thereof conforming substantially to the margin of the main member, the front end of said arch support member being of angle shape with its tip in the region of greatest width of the body portion so as to lie below the second metatarsal bone of the foot.

3. A sock lining comprising a sole-shaped body portion having a slit in the rear part of its shank portion, and an arch support member of suede leather with its rough side uppermost extending through said slit, the front end of said arch support member being secured on top of said body portion and being of angle shape with its tip in the region of greatest width of the body portion so as to lie below the second metatarsal bone of the foot, and the rear portion of said member being below and conforming to the outline of the heel portion of said sock lining.

CHARLES TWEEDIE.