June 17, 1958 F. MACCARONE 2,838,855

NARROW SHANK SHOE AND PROCESS OF MAKING THE SAME

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Fig. 1

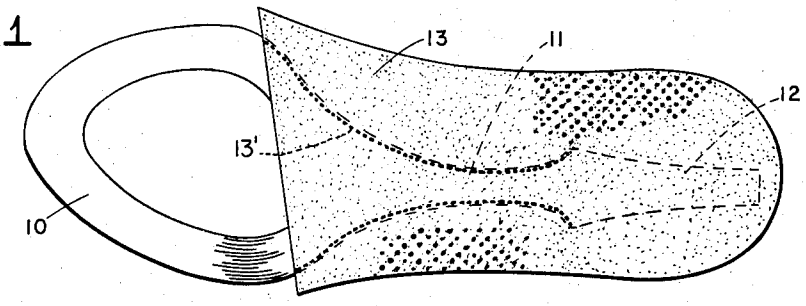


Fig. 3

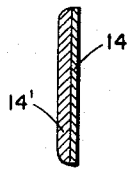


Fig. 2

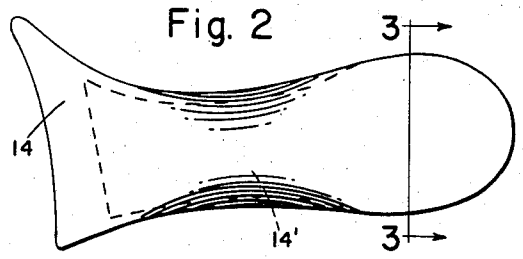


Fig. 4

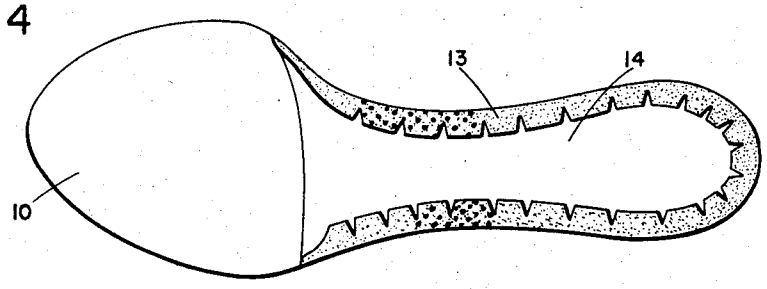


Fig. 5

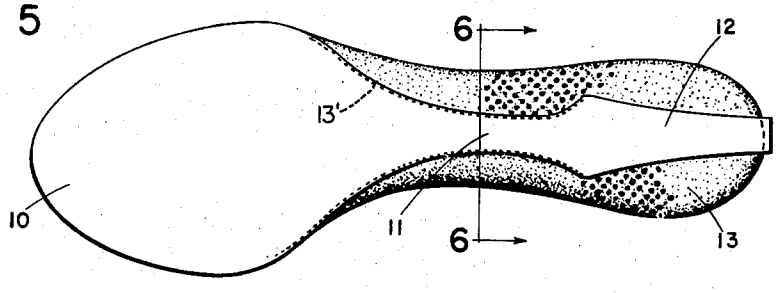
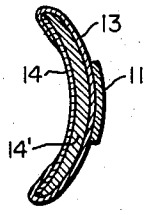


Fig. 6



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NARROW SHANK SHOE AND PROCESS OF MAKING THE SAME

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Fig. 7

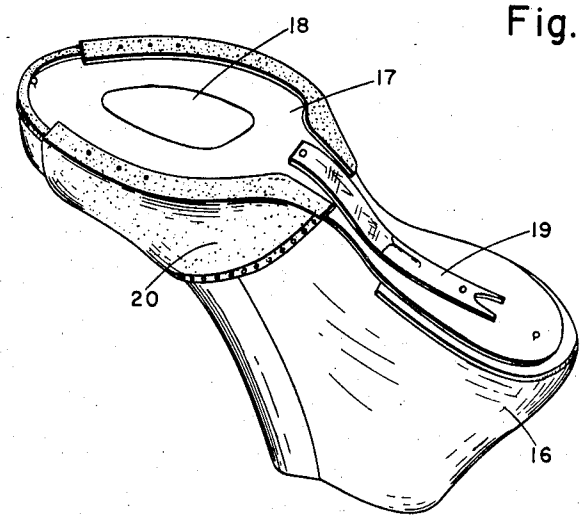


Fig. 8

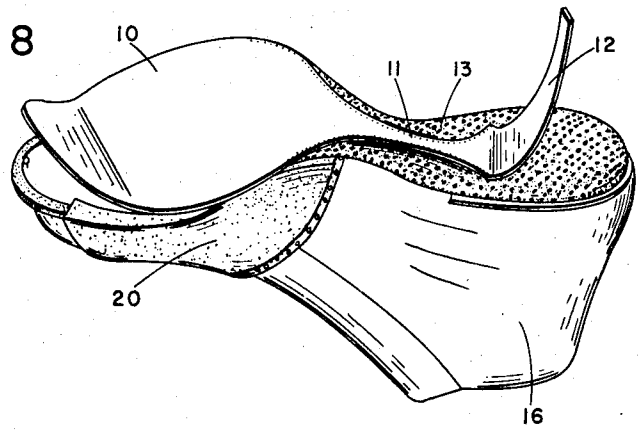
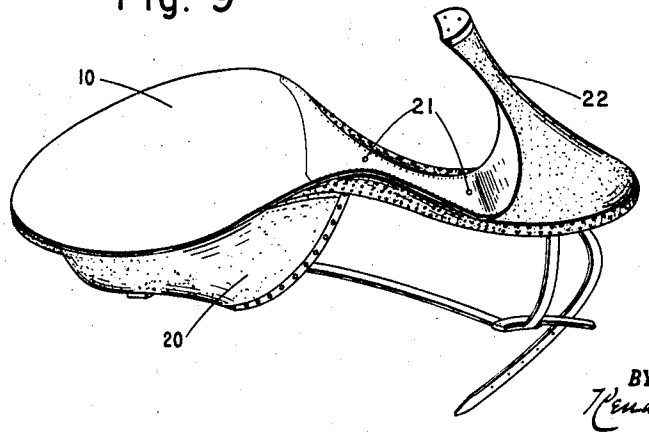


Fig. 9



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United States Patent Office 2,838,855 Patented June 17, 1958

2,838,855

NARROW SHANK SHOE AND PROCESS OF MAKING THE SAME

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Application March 16, 1956, Serial No. 571,931

4 Claims. (Cl. 36—30)

This invention comprises a woman's shoe of new and improved construction permitting the most advanced and delicate high style appearance to be realized in shoes that may be manufactured at moderate cost with assurance of satisfactory wear characteristics. The invention includes within its scope the novel shoemaking process herein disclosed and also the novel shoemaking unit utilized in the construction of my improved shoe.

One of the criteria of fine shoemaking in woman's shoes is the presence of a very narrow or fiddle shank. Heretofore the requirements of structural strength and stability of the shank have of necessity determined its least permissible width and thus an apparently insurmountable obstacle has arrested the artistic development of such shoes. The present invention solves this long standing problem of providing at the same time a shoe having a shank of any desired degree of apparent thinness or narrowness and the full structural strength required by accepted standards of shoemaking.

My invention is characterized by the step of attaching an elongated blank of sheet upper stock or other ornamental material by stitching or cement to the inner face of a narrow-shank outsole and then wrapping the margins of the blank about the peripheral edges of a wider superposed shank piece of pronounced transverse curvature. An outsole unit is produced in this manner in which the contour of the narrow shank is exposed against the background of upper stock extending on both sides from within the outsole. While the shank piece supplies structural strength to the shank, the shoe bottom may present to view the contour of an extremely narrow shank; for example, the outsole shank may present usual sole leather bottom finish against the background of a dark suede upper stock. The effect is of a shoe having the daintiest and most artistic shank imaginable.

By constructing the shoe as above outlined opportunity is afforded of strengthening and reinforcing the whole shank structure in the highest degree and this is of the greatest importance since the narrow shank feature requires the employment of an extremely high heel of very small cross section that exerts by its leverage a severe strain of the shank. However, the shoe of my invention preferably includes an insole of pronounced shank curvature having a stiff reinforcing member conformed thereto and enclosed by the outsole unit. Where this combination of elements is used the margins of the upper stock inturned above the shank piece will be interposed and concealed between the outer or lower surface of the insole shank and the inner or upper surface of the wrapped shank piece in the outsole unit.

These and other features of the invention will be best understood and appreciated from the following description of a preferred embodiment thereof, selected for purposes of illustration and shown in the accompanying drawings in which:

Figs. 1, 2, 4 and 5 are plan views showing progressive steps in the construction of the outsole unit,

Fig. 3 is a view in cross-section on the line 3—3 of Fig. 2,

Fig. 6 is a view in cross-section on the line 6—6 of Fig. 5,

Figs. 7 and 8 are views in perspective showing successive steps in constructing the shoe, and

Fig. 9 is a view in perspective of the finished shoe shown in inverted position.

The outsole unit herein shown includes an outsole **10** of a shape not heretofore considered practicable in the shoemaking industry in respect to the extreme narrowness of its shank **11**. The outsole is formed of sole leather preferably by the well-known Del-Mac process in which matching outsoles and insoles are formed, the outsole having a relatively thick land in its forepart and the insole having a correspondingly reduced area. The shank **11**, besides being extremely narrow, is also reduced in the thickness to an unusual degree. For example, to a thickness of 2 irons or even less. The rear part of the shoe is formed as a heel breast leaf **12**.

To the inner face of an outsole of this description is secured a blank **13** of upper stock or other ornamental flexible material, and this may comprise the same material as that to be used in the vamp of the shoe or it may be of contrasting appearance, but in any case it should be of such color as to contrast with a shank having conventional bottom finish. The blank **13** covers the outsole **10** from the ball line to its rear end. The blank in its most convenient form may be aptly termed "tongue-shaped" in that it is of elongated contour and has a smoothly rounded rear or heel end, slightly diverging side edges and a straight forepart edge inclined to the longitudinal axis of the blank at an angle corresponding to the ball line of the sole. It may be attached by cement or by a line of through-and-through stitching **13'** following the entire marginal edge of the shank and imparting ornamental appearance thereto. Extremely narrow outsole shanks of the type herein disclosed having an overall width of about ½" are appropriately designated as "fiddle shank."

Having attached the blank **13** to the inner face of the outsole as shown in Fig. 1, a shank piece of conventional outline and pronounced transverse curvature is superposed upon the blank in approximately symmetrical relation to the underlying shank. The shank piece may be constructed of leatherboard or other stiff resilient material, preferably being of full width, two-ply thickness and extending from the ball line of the outsole to the rear end of the heel seat. As shown in Fig. 3 the shank comprises plies **14** and **14'**, the latter having smoothly rounded peripheral edges and, of course, being very substantially wider than the shank **11** of the outsole, for example, of the full width of a conventional shank for the shoe. The shank piece is placed upon the blank **13** with its convex face down thus exposing to view its flat upper face as shown in Fig. 4.

The margins of the blank **13** are now wrapped upwardly about the edges of the shank piece, folded inwardly and adhesively secured in place to its flat face as indicated in Fig. 4. As suggested in that figure, the marginal edges of the blank **13** may be pinked or slashed to facilitate smooth wrapping of the marginal portions about the shank piece. The unit at this stage is shown in Fig. 5 from which it will be apparent that the upper stock of the blank **13** is exposed on both sides of the shank **11** of the outsole in smooth convex curvature. The relationship of the assembled parts is shown in the sectional view of Fig. 6, it being understood that the finished surface of the upper stock is disposed outwardly about the convex surface of the wrapped shank **14—14'** and downwardly as attached to the outsole in Fig. 1. The

article shown in Figs. 4, 5 and 6 is herein referred to as the "outsole unit" and is claimed hereinafter as a step product of the invention.

In proceeding with my novel process, a molded insole **17** is secured in conventional manner to the bottom of a last **16** having a very pronounced longitudinal shank curvature. The insole is of the Del-Mac type having a recess **18** in its forepart corresponding to the land of the outsole, but any desired type of insole may be satisfactorily employed. A steel shank stiffener **19**, conformed to the shank curvature of the insole, is permanently attached to the insole at this point. The upper **20** is then applied to the last and lasted over upon the marginal face of and to the insole **17**. In the present illustration the upper is shown as comprising only a cut-off vamp **20** formed from somewhat different pattern of upper stock from that of the blank **13** in which is wrapped the shank portion of the outsole unit. It will be clear that an upper of any ornamental shape or design may be employed that makes suitable contrast with the exposed surface of the wrapped outsole shank piece. In the case of an open toe style, the toe end of the insole is bound with an ornamental finish as shown in Figs. 7 and 8.

Having carried the shoemaking process to the stage suggested in Fig. 7, the outsole unit is laid and adhesively attached in conventional manner as suggested in Fig. 8, the breast flap **12** being left free at that time.

The shoe is now completed by inserting a pair of rivets **21** through the opposite ends of the shank assembly, and for this purpose perforations may be provided in the metal shank stiffener **19**. A heel **22** is then attached and its breast surface covered by the leaf **12**. Finally, heel or ankle straps are added to complete the upper.

The transverse convex contour of the outer or lower surface of the shank piece is an essential feature of the invention since it is this that exposes to view the smoothly rounded portions of the blank **13** and makes apparent the extremely small width of the outsole in the shank of the shoe. The shank piece may be outwardly and convexly curved or it may have the V-shaped contour of the so-called "cottage shank." In either case the upturned marginal edges of the shank piece hug closely to the surface of the lasted upper and make continuous contact and fit between the exposed surface of the blank **13** and the upper.

This application is a continuation in part of copending application Ser. No. 509,813 filed May 20, 1955, now abandoned in favor of the present application.

Having thus disclosed my invention and described in detail a preferred embodiment thereof, I claim as new and desire to secure by Letters Patent:

1. An outsole unit for a woman's shoe comprising an outsole having a fiddle shank, a tongue-shaped blank of upper stock attached to the inner face of the outsole rearwardly of the ball line, and a shank piece wider than the shank of the outsole and downwardly convex in transverse contour having its peripheral margin wrapped by the upper stock of the said tongue-shaped blank.

2. An outsole unit for a woman's shoe comprising an outsole having a fiddle shank, a tongue-shaped blank of upper stock stitched to the inner face of the outsole rearwardly of the ball line with its finished surface exposed on both sides of the shank, and a stiff shank piece wider than the shank of the outsole and downwardly convex in transverse contour superposed on the blank upper stock, wrapped thereby about its convex face and peripheral edges and having the margins of the blank cemented to its exposed surface.

3. In a woman's shoe, a shoemaking unit comprising an outsole having a narrow shank with a tongue-shaped blank of sheet upper stock wider than the outsole shank stitched through-and-through to its inner face, and a superposed shank piece also wider than the outsole shank and of downwardly curved convex transverse contour wrapped about its peripheral edges within the sheet upper stock of said tongue-shaped blank, the marginal edges of the upper stock being interposed between the inner face of the shank piece and the outer face of the insole shank.

4. In a woman's shoe, a shoemaking unit comprising an outsole having a narrow shank with an elongated blank of sheet upper stock attached to the inner face of the outsole and of sufficient width to extend transversely beyond the outsole shank on both sides thereof, and a superposed shank piece also wider than the outsole shank, projecting outwardly on both sides of the said shank, having a downwardly convex transverse contour and wrapped about the convex face and side edges of the shank piece and thus exposed on both sides of the shank of the outsole.

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