Aug. 19, 1930. E. J. RAMSEY 1,773,406

STITCH-DOWN SHOE

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Fig. 1.

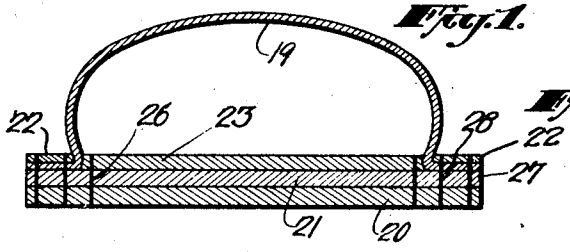



Fig. 2.

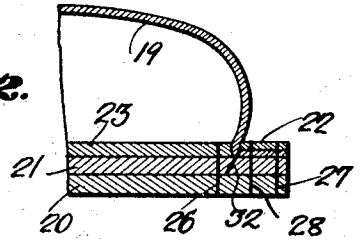



Fig. 3.

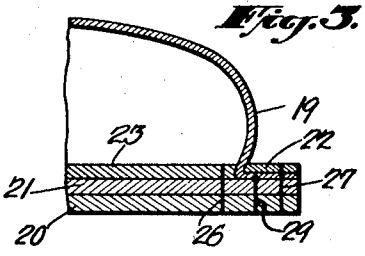



Fig. 4.

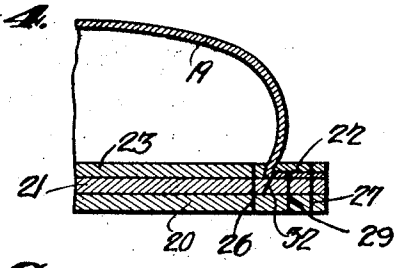



Fig. 5.

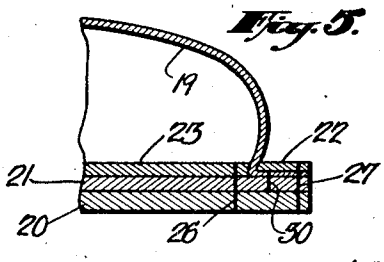



Fig. 6.

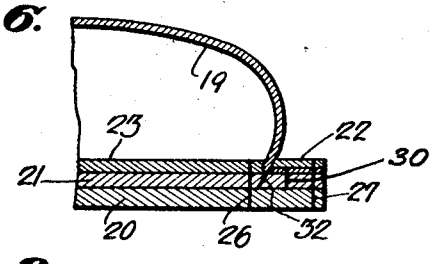



Fig. 7.

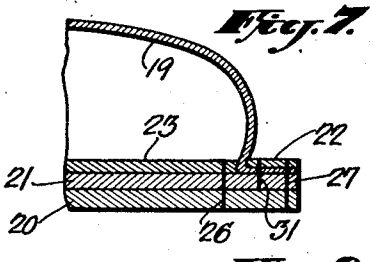



Fig. 8.

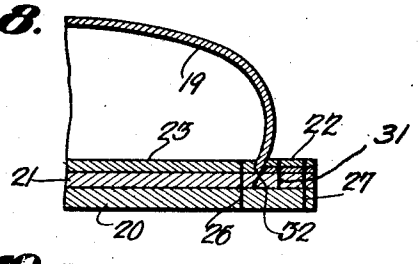



Fig. 9.

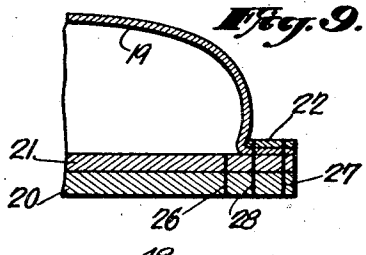



Fig. 10.

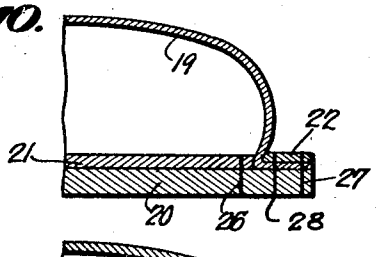



Fig. 11.

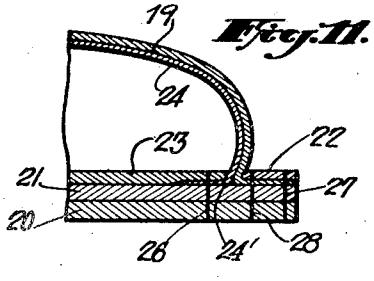
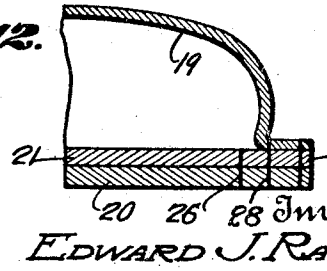



Fig. 12.




Inventor

EDWARD J. RAMSEY.

By His Attorney,

Frank H. Hunt

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STITCH-DOWN SHOE

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Fig. 13.

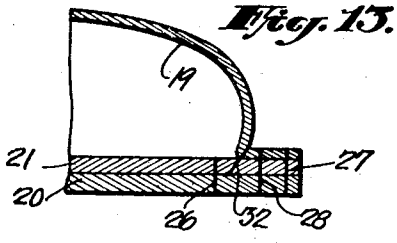



Fig. 14.

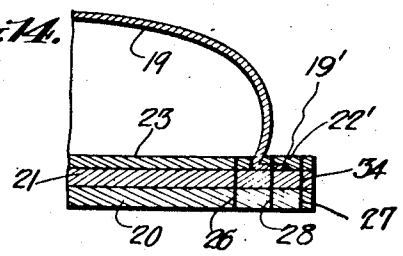



Fig. 15.

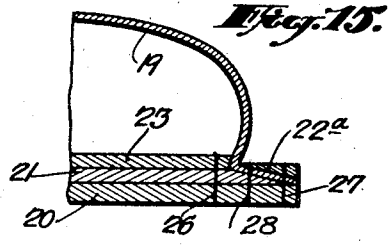



Fig. 16.

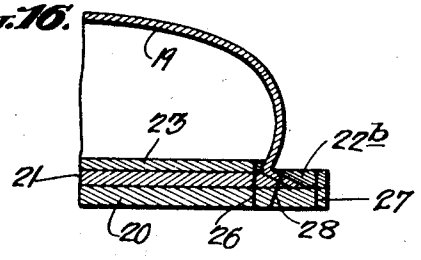



Fig. 17.

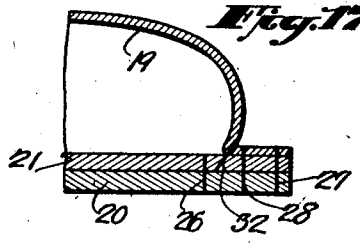



Fig. 18.

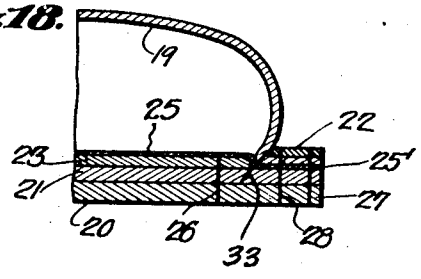
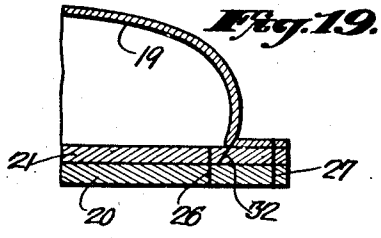



Fig. 19.




Inventor

EDWARD J. RAMSEY.

By His Attorney,

Frank J. Kent.

Patented Aug. 19, 1930 1,773,406

# UNITED STATES PATENT OFFICE

EDWARD J. RAMSEY, OF NEW YORK, N. Y.

## STITCH-DOWN SHOE

Application filed February 18, 1927. Serial No. 169,154.

This invention relates to improvements in the manufacture of stitch-down shoes and the principal object is to provide a construction in which there is not only prevented a tearing apart or ripping of the outer sole from the inner sole, but also any such injury to, or displacement of, any other structural sheet element of the shoe, such as a smaller or second insole, a lining or liner, or the like.

Another object is to provide for such reinforcement by means merely of comparatively few lines of stitching, located for mutually fortifying coaction during wear of the shoe, whether having a welt or not.

Various other objects and advantages of the invention than those hereinabove mentioned will be specifically pointed out or will be apparent hereinafter in the course of the below detailed description of the form of the invention shown, in the accompanying drawings, as a preferred one of the various possible embodiments of the invention; it being understood, naturally that such form is merely illustrative of one of the many possible combinations and arrangements of parts well calculated to attain the objects of the invention, and hence said detailed description of such form is not to be taken as at all defining or limiting the invention itself. That is to say, the scope of protection contemplated is of course to be taken from the appended claims, interpreted as broadly as is consistent with the prior art.

In said drawings:

Fig. 1 is a transverse section showing said form in one of its variations;

Fig. 2 is a half-broken off section showing said form in another variation;

Fig. 3 is a similar view, showing another such variation;

Fig. 4 is a similar view, showing another such variation;

Fig. 5 is a similar view, showing another such variation;

Fig. 6 is a similar view, showing another such variation;

Fig. 7 is a similar view, showing another such variation;

Fig. 8 is a similar view, showing another such variation;

Fig. 9 is a similar view, showing another such variation;

Fig. 10 is a similar view, showing another such variation;

Fig. 11 is a similar view, showing another such variation;

Fig. 12 is a similar view, showing another such variation;

Fig. 13 is a similar view, showing another such variation;

Fig. 14 is a similar view, showing another such variation;

Fig. 15 is a similar view, showing another such variation;

Fig. 16 is a similar view, showing another such variation;

Fig. 17 is a similar view, showing another such variation;

Fig. 18 is a similar view, showing another such variation; and

Fig. 19 is a similar view, showing another such variation.

Similar reference characters refer to similar parts throughout the several views of the drawings.

In each of these views, the upper is indicated at 19, the outsole at 20 and the first insole (or the only insole, if there be but one) at 21.

In each of said views, also, the marginal portions of the upper 19 are out turned as shown and as well-known in the art, to be exposed at the usual welt-location, such welt being missing, as in Figs. 12, 13, 17 and 19, or to underlie such welt, as the generally used flat-strip welt 22 of Figs. 1 to 11, both inclusive, and Fig. 18, or a specially shaped welt as indicated at $22^a$ in Fig. 15 and at $22^b$ in Fig. 16.

It will be noted from these Figs. 15 and 16 that the usual flat-strip welt is desirably apparently presented in the finished shoe; as by bevelling or tapering outwardly and downwardly the marginal portions of the insole 21.

In Figs. 1 to 8, both inclusive, and in Figs. 11, 14, 15, 16 and 18, the variations shown also incorporate a second or last-size in-

sole 23; while in Fig. 11 a liner 24 is present, and in Fig. 18 also such a liner, marked 25, but here laid flatly close to the top of an insole (the insole 23). In the case of said Fig. 11, the liner 24 has its marginal portions, as indicated at 24', inturned and extended between the narrow second insole 23 and the first insole 21. In the case of said Fig. 18, the liner 25 has its marginal portions outturned, as indicated at 25', and extended between the welt-underlying marginal strip of the upper 19, and the first insole 21.

In all these illustrated variations, it will be noted that, characterizing all the elements 19, 20, 21, 22, 23, 24 and 25 as what they really are, pieces of sheet material constituting structural elements of the finished shoe, stitchings are provided in lines lying both inside and outside the main part of the upper. At least one of such stitchings; the stitching 26, always lies within the upper and goes through all the elements 20, 21, 23, 24 and 25 present intersectingly of the vertical plane of the line of said stitching, and at the same time at least one of stitchings, the stiching 27, always lies ouside the upstanding portion of the upper and goes through all the elements 19, 20, 21, 22, and 25 present intersectingly of the vertical plane of the line of said stitching.

Auxiliary and additional stitchings may be employed in various combinations, always to attain the objects and advantages of the invention, as illustrated clearly in the various views. For instance each of Figs. 1, 9, 11, 12, 13, 17 and 18 shows a single auxiliary stitch 28 going through all elements outside the upstanding portion of the upper, as does the stitch 27 in these views. Fig. 3 is the same as Fig. 1, except that the single auxiliary stitch 29 goes through all but the welt 22. Fig. 5 is also the same, except that the stitch 30 goes only through the elements lying between the welt and the outsole 20. Fig. 7 is also the same, except that the stitch 31 goes through all the sheet elements except the outsole. Figs. 4, 6 and 8 are, respectively, exactly like Figs. 3, 5 and 7, except that there is still another additional stitch 32 going at a downwardly inwardly directed angle, through the upper 19 at about the inner edge of the welt location (where a welt is used), and the insole 21. Such another additional stitch is also shown at 32 in Figs. 13, 17 and 19. In Fig. 16, such a diagonal stitch is also employed, but is the stitch 27 already referred to. In Fig. 18, the diagonal stitch used, marked 33, corresponds in function to the stitches 32 of Figs. 13, 17 and 19, but in Fig. 18 the stitch 33 goes through liner 25 as well as through upper and insole 21. In the case of Fig. 14, the third stitch, marked 34, although as long as the stitch 27 going through four elements, goes through only three such elements, the welt 22', the insole 21, and the outsole 20, due to the insetting of the narrow marginal portion 19' of the upper, relative to the undercut welt 22'.

Preferably, the stitching 26 is the last stitching made, and on a McKay machine.

Finally note that in the forms of Figs. 1 to 8, both inclusive, Figs. 10 and 11, and Figs. 14, 15, 16 and 18, the arrangement is such that a second insole is employed, and this and the other sheet elements are so related, that the bottom of the foot is elevated so that when it spreads, it does not spread against the welt or at the usual welt location, but above the same; and the shoe is still further protected against strains tending to separate or displace any sheet element.

Inasmuch as many changes could be made in the above constructions, and many apparently widely different embodiments of the invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interrupted as illustrative and not in a limiting sense.

It is also to be understood that the language contained in the following claims is intended to cover all the generic and specific features of the invention herein described and all statements of the scope of the invention which, as a matter of language, might be said to fall therebetween.

I claim:

1. In a shoe, the combination of an upper having outturned marginal portions, a sole member underlying the same, a sole member underlying the first sole member, and, in addition to a line of stitching connecting the two sole members inside the upper, a line of stitching connecting said marginal portions and both sole members, all said lines of stitching passing continuously about at least the forward part of the shoe from one side of the shank to the other.

2. In a shoe, the combination of an upper having outturned marginal portions, a sole member underlying the same, a sole member underlying the first sole member, and, in addition to a line of stitching connecting the two sole members inside the upper, a line of stitching connecting said marginal portions and the first-mentioned sole member, and another line of stitching connecting said marginal portions and both sole members, all said lines of stitching passing continuously about at least the forward part of the shoe from one side of the shank to the other.

3. In a shoe, the combination of an upper having outturned marginal portions, a sole member underlying the same, a sole member underlying the first sole member, a third sole member overlying the first sole member and terminating so as to lie within the upper but opposite said marginal portions thereof, and, in addition to stitching for securing said

marginal portions and a sole member together, a line of stitching securing the third sole member to the other sole members, all said lines of stitching passing continuously about at least the forward part of the shoe from one side of the shank to the other.

In testimony whereof I affix my signature.

EDWARD J. RAMSEY.