Oct. 3, 1967 F. J. DIAMANT 3,344,537

FOOTWEAR

Filed March 26, 1965

Fig. 1.

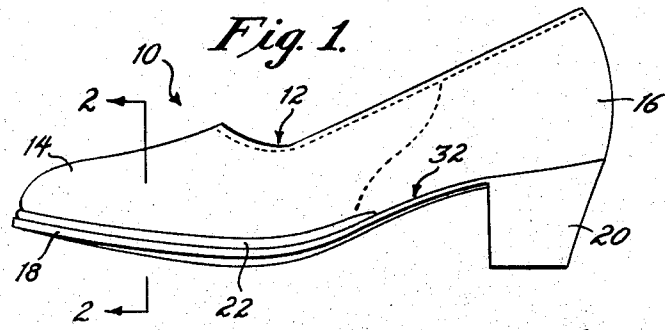
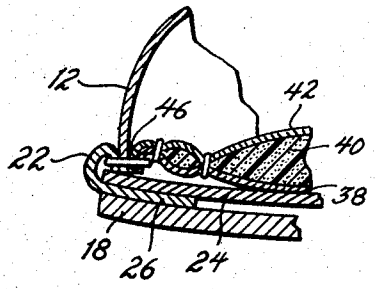


Fig. 2.



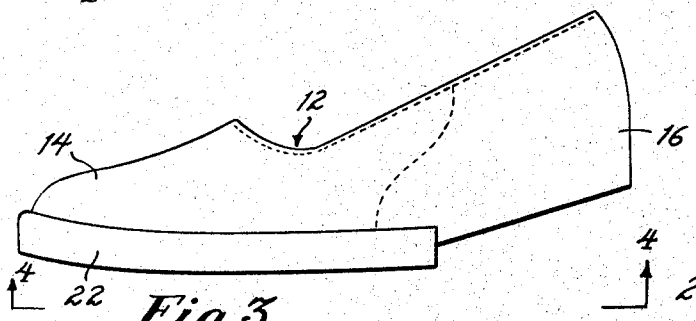


Fig. 3.

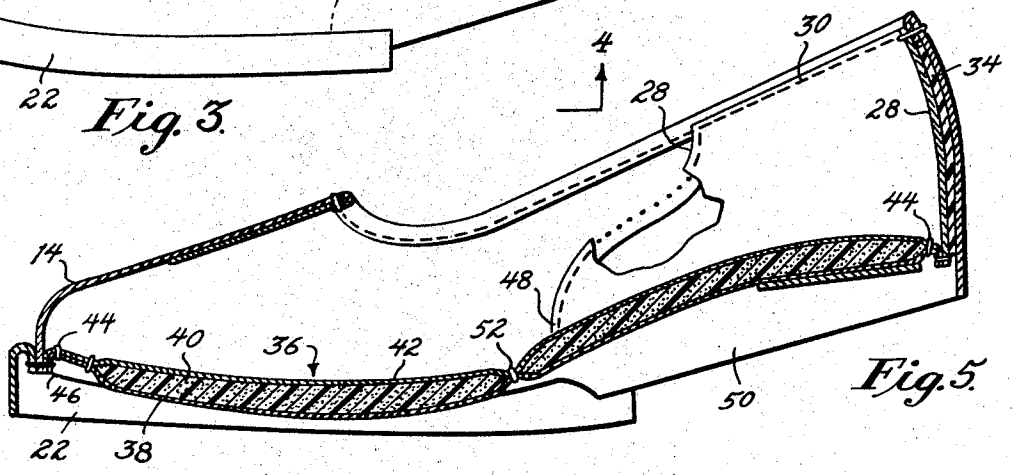


Fig. 5.

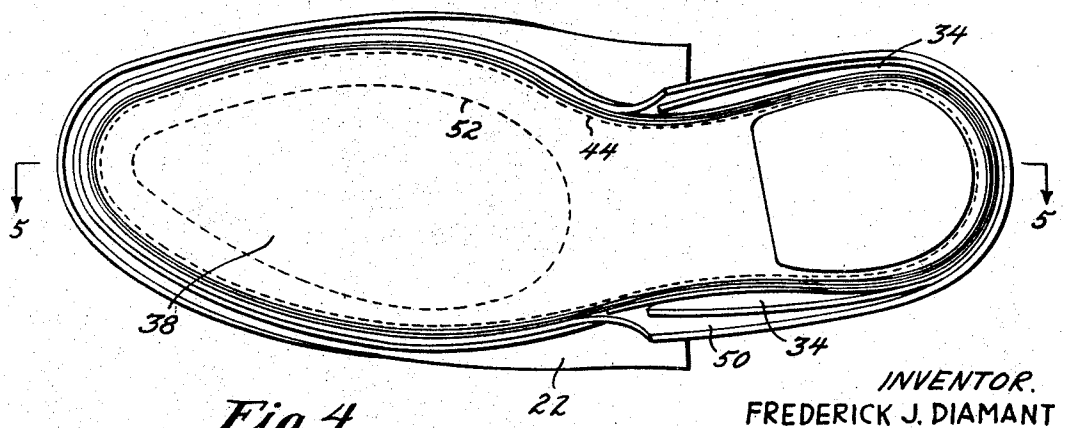


Fig. 4.

INVENTOR.
FREDERICK J. DIAMANT
BY
Seidel & Honda
ATTORNEYS.

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FOOTWEAR

Frederick J. Diamant, % Desco Shoe Corporation, 16 E. 34th St., New York, N.Y. 10016

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9 Claims. (Cl. 36—2.5)

This invention relates to footwear, and more particularly to footwear having novel construction features.

Numerous forms of shoes have been proposed heretofore wherein cushioning means such as a layer of foam rubber is provided in the sole of the shoe. The provision of such a cushioning means greatly increases the comfort of the shoe particularly to those people who stand on their feet for great lengths of time or do a considerable amount of walking. The construction of such shoes has heretofore been completely sliplasted with a platform visible about the entire periphery of the shoe including the quarter portion. The presence of a platform in the quarter portion of the shoe has several disadvantages. Among them are that it makes for grinning stitches, unclean heelseats, and an uneven heelseat width.

The present invention overcomes the foregoing disadvantages, and in addition allows a more sturdy counter to be used than is practical in the type of shoe which is sliplasted around the entire periphery of the shoe. Thus, it is possible to use a counter which has been molded to the last and is much longer than would be practical in completely sliplasted shoes. An additional advantage of the construction disclosed herein is that it provides the shoe with the slick look resulting from a platformless quarter and back. Further, the shoe used in the present construction permits the use of wedge type heels, stack heels, straight back heels, half-breasted heels and full Louis heels which if applied to a completely slip-lasted shoe would be of such disagreeable appearance as to be commerically unsuccessful.

The present invention seeks to overcome the above-mentioned disadvantages and to achieve the indicated advantage by providing a shoe construction wherein the forepart of the shoe is sliplasted and the rearward portion of the shoe is formed with a compo back.

It is an object of the present invention to provide an article of footwear having a novel construction.

It is another object of the present invention to provide a shoe constructed in a novel manner wherein the forepart of the shoe is sliplasted and the rear part of the shoe is of compo construction.

It is another object of the present invention to provide a novel cushion sole type of footwear.

Other objects will appear hereinafter.

For the purpose of illustrating the invention, there is shown in the drawings a form which is presently preferred; it being understood, however, that this invention is not limited to the precise arrangements and instrumentalities shown.

FIGURE 1 is a side elevational view of the shoe constructed in accordance with the present invention.

FIGURE 2 is an enlarged partial transverse sectional view taken along the line 2—2 in FIGURE 1.

FIGURE 3 is a side elevational view of a partly constructed shoe in accordance with the present invention.

FIGURE 4 is an enlarged bottom view of the shoe shown in FIGURE 3 taken along the line 4—4 of FIGURE 3.

FIGURE 5 is a longitudinal sectional view of the shoe shown in FIGURE 4 taken along the line 5—5 of FIGURE 4.

Referring now to the drawing in detail, wherein like numerals indicate like elements, there is shown in FIGURE 1 a shoe designated generally as **10**.

The shoe **10** comprises an upper **12** which may take the form of known uppers proposed heretofore in accordance with the style being worn. For purpose of illustration, the upper **12** for the shoe **10** is shown as being of the type having a closed toe and closed back or quarter. Thus, the upper **12** includes a vamp portion **14** and a closed rear quarter portion **16**.

The shoe **10** is provided with an outsole **18** and a heel **20**. The forepart of the upper **12** is provided with a platform wrapper **22** which is stitched to the upper **12** and lasted over platform **24**. The platform **24** may be made of fiber or paper or cork or any suitable material. The outsole **18** is glued or otherwise attached to the lasting margin **26** of the platform wrapper **22**.

The inner side of the quarter **16** is provided with a counter liner **28** which is stitched along the top margin of the quarter **16** as indicated by the numeral **30** showing the stitching. The bottom portion of the counter liner **28** extends well forward along the shank portion **32** of the shoe. Thus, as shown, the counter liner **28** extends forward to a position which is over three-quarters of the length of the shank portion **32**.

Counter **34** can be a non-molded counter preferably, but not necessarily of thermo-plastic material. Such counter can optionally also be shaped with the same bottom periphery as **28**, and stitched in along counter liner **28** rather than be inserted as is the molded counter **34**, which is practically as long in its bottom periphery as quarter **16**. The counter **34** may be made of any well-known materials such as molded leather fiber or a thermoplastic material.

The shoe **10** is also provided with an insole-sock lining structure designated generally as **36** having the same peripheral contour as the outsole **18**. The insole-sock lining structure **36** includes a layer of canvas **38** that may be fused to or adhesively secured to a layer of foam synthetic resin **40** such as foam polyurethane. In the preferred embodiment no adhesive is used. A leather insole **42** is fused to or adhesively secured to the other side of the layer of foam resin **40**. As shown more clearly in FIGURE 5, stitching **44** is provided around the periphery of the structure **36** with said stitching extending through the canvas layer **38**, foam resin **40**, and the insole **42**. The last-mentioned stitching performs the function of reducing the peripheral thickness of the structure **36**. An alternative way of reducing the peripheral thickness of the structure **36** is to shave the thickness of foam resin **40**. Prior to the application of the stitching **44**, the structure **36** has a thickness of approximately ⅝ of an inch with the layer of foam resin having a thickness of about ½ of an inch.

As shown most clearly in FIGURE 5, the entire forepart of the structure **36** is attached to the vamp **14** by stitching **46**. The stitching **46** may be the same stitching which attaches the platform wrapper **22** to the vamp **14** and the counter liner **28** to quarter **16**.

The structure **36** is attached to the upper **12** only along the periphery of the fore portion of the shoe. Thus, the platform wrapper **22** and structure **36** are attached around the periphery of the fore portion of the shoe from a point extending from the position where the foremost portion of the counter liner is stitched to the quarter portion. This position is indicated generally by the numeral **48**, and it corresponds with the above-mentioned extension of the counter liner to a position at least three-quarters of the forward extension of the shank portion **32**. The edges of the structure **36** and forepart of the upper **12** are concealed by the platform wrapper **22**. As indicated above, the upper edge of the platform wrapper **22** is secured to the upper and to the structure **36** by a line of stitching **46**. As best shown in FIGURES 2 and 4, the stitching **46** is concealed from view by wrapping the plat-

form wrapper over itself and lasting it to a position between the outsole **18** and platform **24**.

The rear portion of the structure **36** is stitched to the bottom edge of the counter liner **28**. This is illustrated in FIGURE 5 by the stitching **48** which is done in one continuous operation from the forepart **18**. As thus constructed, the laminated structure **36** is fully attached about its entire periphery. However, the fore portion of the laminated structure **36** is stitched to the upper **12** and the rear portion is stitched to the lower edge of the counter pocket **28**.

As best shown in FIGURES 4 and 5, the back or quarter portion of the upper is provided with an integral lasting allowance or margin **50**. The provision of a lasting margin **50** is sometimes referred to as a compo type of construction. As shown, the lasting margin extends along the quarter portion from a position immediately juxtaposed to the rearmost portion of the sliplasted forepart of the shoe. When the shoe is constructed, the lasting allowance or margin **50** is heelseatlasted over the platform **24**.

A line of stitching **52** in the form of a closed loop is spaced from the periphery of the structure **36**. The stitching **52** extends through the insole **42**, layer of resin **40**, and layer of canvas **38** at the position of the insole which is adapted to support the ball of the foot. Thus, the provision of the stitching **52** substantially eliminates the possibility of slippage between the insole and the layer of foam resin **26**. The stitching **52** is provided even though the insole **42** is adhesively secured to the layer of foam resin **40**.

As indicated above, the quarter portion of the shoe **10** includes a heel **20**. The heel **20** is shown as a stack type heel. However, it is to be understood that the heel **20** may take other forms such as wedge type, straight back, half-breasted, and full Louis.

It will be noted that the stitching **52** materially reduces the thickness of the laminated structure **36** thereby substantially increasing the height of the structure **36** adjacent to the stitching. This is believed to be the result of the squeezing out of the foam resin. Accordingly, the portion of the structure **36** within the closed loop formed by the stitching **52** is substantially greater than the height of the remainder of the structure **36**. This prevents the stitching from becoming a source of irritation to the ball of the foot of the wearer and provides a quilting effect. In actual shoes, it has been found that the most desirable results are attained when the stitching **52** extends from a portion immediately in front of the arch support to a point approximately ¼ of an inch from the tip of the shoe, with the stitching **52** being spaced inwardly approximately ¼ of an inch from the stitching **44**. In this manner, substantially the entire portion of the ball of the foot is supported by that portion of the laminated structure **36** enclosed within the loop formed by the stitching **52**.

The shoe is constructed in the following manner. The upper **12** is cut and stitched into the correct form such as that which is shown in the drawing. The counter liner **28** is stitched into the inside of the quarter portion by the stitching **30**. Next, the laminated structure **36** is stitched to the forepart of the upper and to the counter liner **28**. Simultaneously or separately the platform wrapper **22** is stitched onto the forepart or vamp portion of the upper as shown in FIGURE 5. As shown, the back of the upper has previously been cut with the lasting margin **50** extending from the quarter portion. A platform **24**, preferably having a fiber shank part with a steel shank (not shown) attached, is spotted onto the canvas layer **38** either on top of the seams or between the seams of the structure **36**. Next, the platform wrapper **22** is lasted over a portion of the bottom surface of the platform **24** in the manner known in the art. Then a counter **34**, which is preferably a flat thermo-plastic counter which may be shaped as shown or which could have been previously secured to upper or counter liner **28** with the same shape as said liner **28**, is inserted in the pocket created at the back part of the upper between the liner and the quarter portion **16** of the upper. Finally, the lasting allowance or margin **50** is heelseatlasted in a conventional manner. It should be noted that the steel shank may be attached to the platform after spotting if desired.

When the shoe has reached the condition of construction thus far described it is ready to be roughed, cemented, sole spotted, heeled, etc., as known in the art. It is also ready for last-pulling and completion in the usual manner.

The construction of the fore portion of the shoe is often referred to as California or sliplasted construction. The construction of the back portion of the shoe is often referred to as compo construction.

A shoe constructed as heretofore described, that is with a sliplasted construction in the forepart and a compo back or quarter portion has several distinct advantages. First of all, it permits the insole to be completely sliplasted with the inherent advantages of flexibility, softness, lightweight and high cushioning. Furthermore, the compo construction of the quarter portion presents a neat and slick appearance which is important in permitting the shoe to have a greater commercial appeal. This is particularly true when heel construction other than the wedge type heel is used. Heretofore, shoes constructed with stack or full Louis type heels on a full California or sliplasted construction, that is with a platform wrapper around the entire periphery of the shoe, have not been sufficiently neat in appearance to attract purchasers in the highly competitive shoe industry. Moreover, the absence of a visable platform in the rear portion of the shoe eliminates grinning stitches, unclean heelseats, and uneven heelseat width. Another advantage of the shoe constructed in accordance with the present invention is that the counter extends much farther forward than had heretofore been practical for the economical manufacture of shoes with the result that a much more sturdy quarter portion is provided.

The present invention may be embodied in other specific forms without departing from the spirit or essential attributes thereof and, accordingly, reference should be made to the appended claims, rather than to the foregoing specification as indicating the scope of the invention.

I claim:

1. A shoe comprising an upper, an outsole, an insole, said upper including a vamp portion and a quarter portion, said insole being secured to said upper only at the vamp portion of said upper, a wrapper strip extending from and secured only to said vamp portion of said upper, said outsole being secured to said wrapper strip and the quarter portion of said upper, a counter liner in said quarter portion, and said insole being secured to said counter liner adjacent a lower edge of said counter liner.

2. A shoe comprising an upper forming a vamp portion and a quarter portion, a counter liner, an insole secured to said upper only at the vamp portion of said upper and to said counter liner, a platform wrapper depending from and secured to said vamp portion, said quarter portion including a lasting extension lasted over said insole, a counter disposed between said counter liner and said quarter portion, and an outsole secured to said extension and said platform wrapper.

3. A shoe in accordance with claim **2** wherein said counter and said counter liner extends around said quarter portion from a position adjacent the rearmost extension of said vamp portion.

4. A shoe in accordance with claim **2** wherein said counter is made of a molded leather fiber.

5. A shoe in accordance with claim **2** wherein said counter is made of a thermoplastic.

6. A shoe in accordance with claim **2** wherein said insole includes a layer of foam resin secured to said insole.

7. A shoe comprising an upper forming a vamp portion and a quarter portion, an insole secured to the vamp

portion of said upper, a platform wrapper extending from and secured to said vamp portion, a platform below said insole, said quarter portion including a lasting extension lasted over a portion of the bottom surface of said platform, said platform wrapper being lasted over a portion of the bottom surface of said platform, a counter liner secured to said heel portion, said insole being secured to said counter liner, a counter disposed between said counter liner and said quarter portion, and an outsole secured to said extension and said platform wrapper.

8. A shoe in accordance with claim 7 wherein said counter liner and said lasting extension extend around the periphery of said quarter portion from points on either side of said shoe which are adjacent the rearmost extension of said platform wrapper, said points being located at substantially the foremost extension of the shank portion of said shoe.

9. A shoe comprising an upper forming a vamp portion and a quarter portion, an insole secured to the vamp portion of said upper, a platform wrapper extending from and secured to said vamp portion, said quarter portion including a lasting extension over said insole, a counter liner secured to said quarter portion, a counter disposed

between said counter liner and said quarter portion, an outsole secured to said extension and said platform wrapper, said insole comprising an insole layer, a layer of foam resin juxtaposed said insole layer, and an outer layer juxtaposed the side of said foam resin opposite the insole layer, and stitching in the form of a close loop extending through said insole, said layer of foam resin, and said outer layer, said loop being wholly disposed at the position of said insole adapted to support the ball of the foot, thereby providing a slippage control between said insole layer and said layer of foam resin.

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PATRICK D. LAWSON, *Primary Examiner.*