Jan. 15, 1946. G. A. GLEASON 2,392,816

SHOEMAKING

Filed April 3, 1944 2 Sheets-Sheet 1

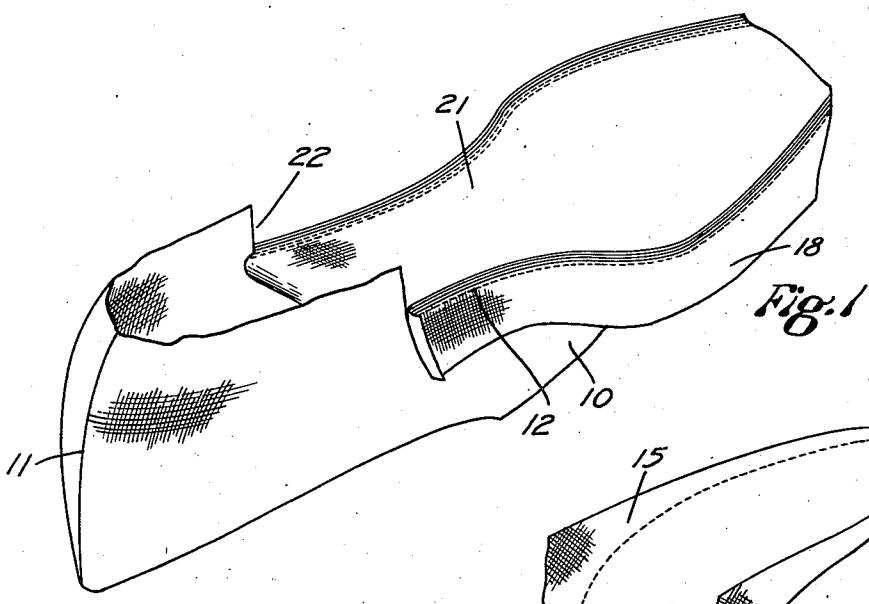


Fig. 1

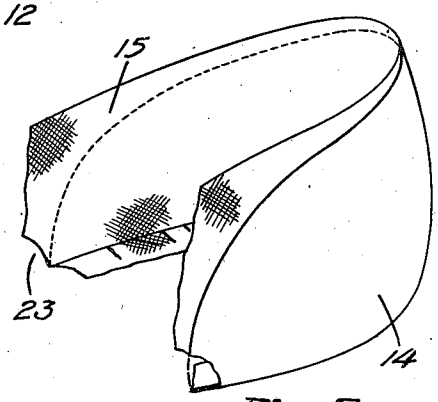


Fig. 3

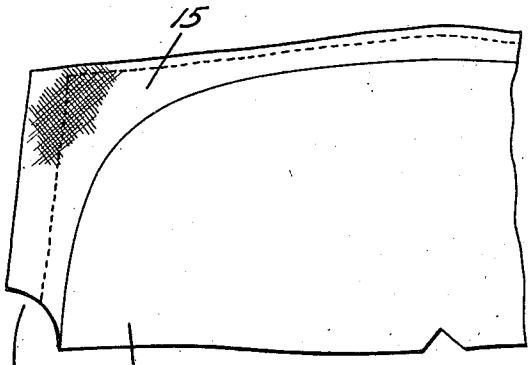


Fig. 2

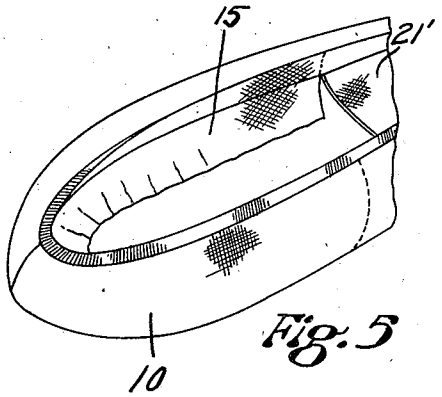


Fig. 5

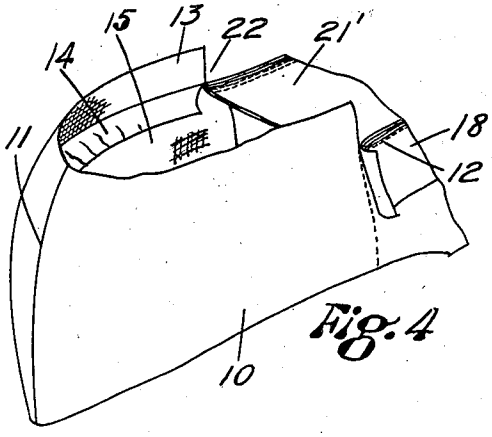


Fig. 4

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Fig. 6.

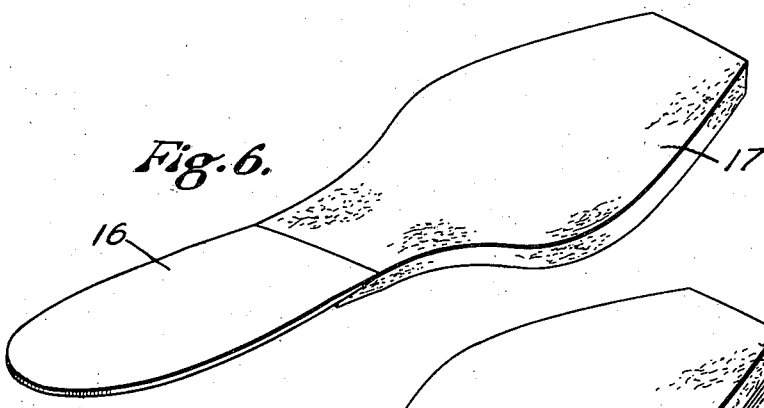
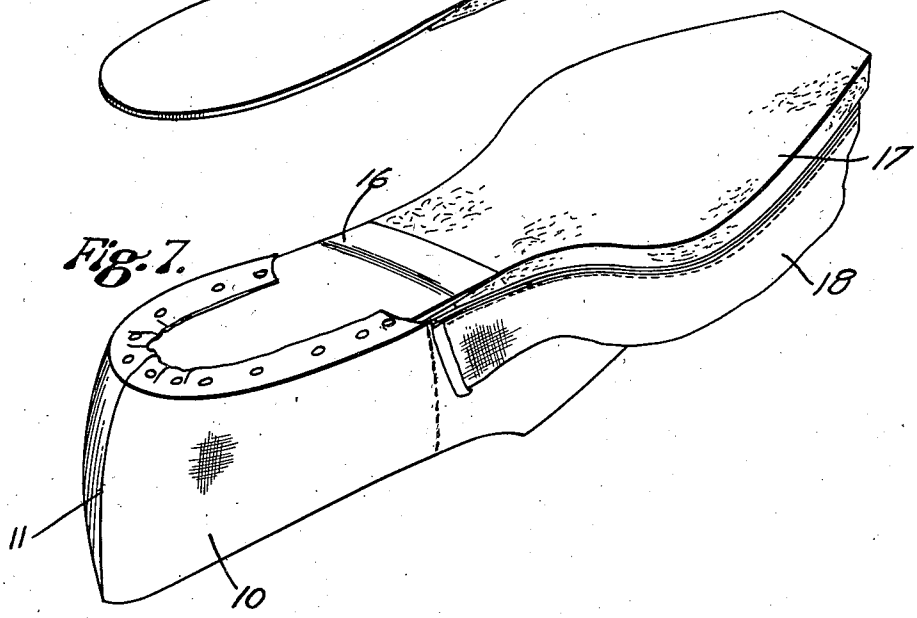


Fig. 7.



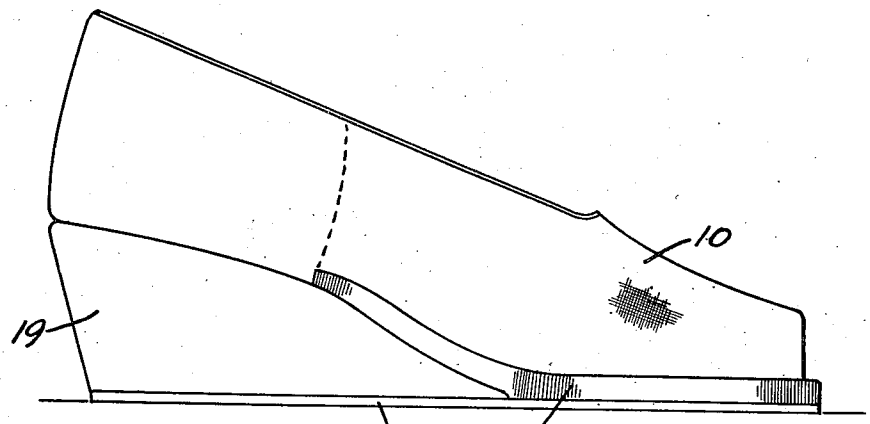


Fig. 8.

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Patented Jan. 15, 1946

2,392,816

UNITED STATES PATENT OFFICE

2,392,816

SHOEMAKING

George A. Gleason, Lawrence, Mass.

Application April 3, 1944, Serial No. 529,289

7 Claims. (Cl. 36—19.5)

This invention consists in a new and improved shoe characterized by a half platform and a hard or molded counter portion.

Shoes of this type have been constructed heretofore by sewing the margin of the upper and a binding strip to the edge of an insole or sock lining, using a straight needle machine for that purpose, then inserting a last in the upper, laying a midsole or platform, wrapping the binder strip about the edge thereof, and securing it to the bottom of the sole or platform. These shoes have not generally included a counter stiffener and have been somewhat unsatisfactory because the upper is flimsy and does not retain the lines imparted to it by the last.

The principal object of the present invention is to provide a platform type of shoe fully closed at its rear end, provided with a counter stiffener and being of a strong, well-secured structure so that it will permanently maintain its shape in wear and generally correct the deficiencies which have heretofore impaired the platform shoe.

I have discovered that a desirable shoe structure may be created by interrupting in the shank the line of stitching which has heretofore secured the upper and sock lining together so as to leave an opening between the inner surface of the upper and the sock lining throughout the heel seat portion of the shoe. This permits me to insert a counter stiffener assembly and to incorporate it conveniently into the rear end of the shoe.

A feature of the invention consists in the novel counter assembly employed in the construction of the shoe. This comprises a lining piece notched in its lower edge to define side wings and having an outline which overlaps the outline of the counter stiffener to be used. The notch defining the side wings interfits with the upper at the termination of the line of stitching by which it is attached to the insole or sock lining, thus locating the counter assembly and supplying a margin which may be conveniently trimmed when the counter stiffener assembly is secured by stitching in the rear end of the upper.

Another feature of the invention consists in providing the upper with an extended lasting margin about its heel seat and terminating the binding strip at the edge of this extended margin of the upper. That is to say, in one aspect, it is a characteristic of my novel shoe structure that the rear end of the binding strip terminates substantially coincidentally with the beginning of the extended margin of the counter portion of the shoe. The result is that the heel seat portion of the upper may be lasted inwardly with the flange of the counter stiffener and the platform effect brought to a termination at substantially the same point in the shoe. The resulting shoe, therefore, may present a platform effect in advance of the heel breast line, whereas the whole counter portion of the shoe is lasted inwardly and may be equipped as desired either with a wood heel or a wedge heel.

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:

Fig. 1 is a view in perspective of the assembled upper, binding strip and sock lining;

Fig. 2 is a plan view of the counter stiffener assembly in flat condition;

Fig. 3 is a view in perspective of the molded counter stiffener assembly;

Fig. 4 is a fragmentary view in perspective showing the counter stiffener assembly inserted in the upper;

Fig. 5 is a similar view showing the rear end of the upper with the counter lining stitched in position;

Fig. 6 is a view in perspective of the composite sole element;

Fig. 7 is a view in perspective showing the sole element assembled with the upper; and

Fig. 8 is a view in elevation of the finished shoe.

The upper 10 is first cut to exact size in its shank and forepart, being notched at the heel breast line and provided with an extended lasting margin about its heel seat portion. The upper is closed by a back seam 11 and then united by stitching throughout its shank and forepart margin to the edge of a binding strip 18 and also to the margin of a sock lining 21. A single line of stitching 12 is herein shown as securing these parts together and this may be formed conveniently by any straight needle machine and terminates at the notches 22 in the upper which, as already stated, coincide with the heel breast line of the shoe and leave the sock lining loose at that point and rearwardly throughout the heel seat portion of the upper. The shoe-making process is represented as having reached this stage in Fig. 1. It will be noted that the binding strip 18 terminates approximately at the point where the stitch line 12 stops and coincident with the notches 22 in the upper.

A counter stiffener 16 of the usual type is now cemented to a lining piece 15 which is shaped to fill the counter portion of the shoe and to over-

lap the stiffener 14 by a considerable margin which may be subsequently trimmed. The counter lining piece 15 extends beyond the ends of the counter stiffener 14 a substantial distance and is provided at each end in its bottom edge with a deep notch 23 defining in part extension wings. The stiffener 14 and the lining blank 15 are now molded as one piece and thus provided with the usual inturned flange which in this case is composite as suggested in Fig. 3.

The next step of the process consists in inserting the molded counter stiffener assembly in the upper and this may be conveniently done with the shoe in inverted position as suggested in Fig. 4. The counter stiffener is located against the inner face of the upper with the counter lining 15 exposed inside the shoe and with the notches 23 of the lining interfitting with the end of the stitch line 12, that is, the extension wings of the counter-lining extend forwardly inside the shoe above the stitch line 12 whereas the flanged portion of the lining and stiffener extend beyond or beneath the plane of the stitch line. The lining blank is now stitched in place within the upper and in this operation the surplus stock is trimmed away making the lining flush with the top edge of the upper and removing the surplus portion of the side wings adjacent to the up and down lines of stitching which secure its forward edges in place within the upper. During all these operations the rear end of the insole or sock lining is loose and unattached so that it may be folded out of the way.

The lining 15 is trimmed and stitched about the top edge of the upper and the trimmed edge is then provided with the usual binding, thus finishing the entire top edge of the shoe. The up and down lines of stitching secure the forward edges of the lining 15 in place and pass closely adjacent to the forward edges of the counter stiffener 14. The counter stiffener itself may or may not be cemented to the inner face of the upper, but in any case it is securely and permanently held in place by the stitched counter-lining 15 to which it is cemented. After the counter stiffener assembly has been inserted as above explained the lasting margin of the upper projects vertically above the molded flange of the counter as indicated in Fig. 4.

The next step in the process consists in providing and inserting a composite insole and platform member of the nature shown in Fig. 6. This comprises a heel seat portion 16 of stiff fibrous insole material, and a shank and forepart portion 17 of thick felt or other resilient composition, for example $\frac{3}{16}$ inch thick. The pieces 16 and 17 are beveled and united by cement or any suitable fastener, presenting a smooth and graduated joint where they overlap. This composite sole is laid upon the shoe bottom as suggested in Fig. 7 with its heel seat portion 16 inserted within the flange of the counter stiffener and its thick platform portion registering with the sock lining 21. The rear portion of the sock lining is then straightened and superposed upon the inner face of the heel seat portion 16 of the composite insole. A last is then forced into the upper and the shoe is heel seat lasted in the usual manner, that is to say, the upstanding lasting margin of the upper is wiped inwardly over the heel seat and tacked in place. In this operation the lasted upper, the inturned flange of the counter, and the heel seat portion 16 of the insole are all firmly secured together. The shank and forepart comprising the platform 17 are then cemented to the outer surface of the sock lining 21. Subsequently the binding strip 18 is wrapped about the margin of the platform 17 and cemented to its lower face, thus carrying the platform effect from the toe of the shoe back to approximately its heel breast line.

The heel may now be attached by first cementing to the shoe bottom and then nailing from inside the shoe in the usual manner. In Fig. 8 the shoe is shown as completed by attachment of a wedge heel 19 although a wood heel of any desired style may be employed. When a wedge heel is selected, the shoe is completed by cementing a thin outsole 20 to the outer face of the platform 17 and the tread face of the heel 19.

Instead of employing a full length sock lining 21 and leaving its rear end loose and unstitched to the upper as shown in Fig. 1, it is convenient in some cases to employ a short sock lining 21' like that shown in Figs. 4 and 5. In that case the sock lining is cut off at approximately the heel breast line or coincidently with the termination of the stitch lines 12 thus leaving the heel seat open for the subsequent insertion of the counter assembly. When a cut-off sock lining 21' is used, a heel pad will be placed in the heel seat of the completed shoe, but otherwise the shoemaking process proceeds as above explained.

In my prior application Ser. No. 523,407, filed February 22, 1944, I have disclosed and claimed a process having certain features in common with the process herein disclosed and which is dominated by the claims of this application.

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

1. A shoe having an upper, a sock lining and a binding strip attached at their edges by a line of stitching terminating on both sides at the heel breast line of the shoe, the upper being closed at its rear end, and a counter assembly inserted in the upper and including a molded counter stiffener and a counter-lining cemented thereto, notched at its lower forward edge and interfitting with the ends of said line of stitching at both sides of the upper.

2. The process of shoemaking which includes the steps of stitching the shank and forepart of an insole element to an upper and a binding strip by stitching terminating at both sides approximately at the heel breast line, interfitting with the ends of the stitching a counter assembly including a counter stiffener and a counter-lining piece notched for the said interfitting engagement, and then stitching the counter-lining thus located to the upper.

3. The process of shoemaking which includes the steps of attaching by stitching a short sock lining, which terminates at approximately its heel breast line, to the shank and forepart edges of an upper, attaching a binding strip to the upper, inserting a counter assembly including a molded counter stiffener and an attached counter-lining into the rear end of the upper through the space left free by the short sock lining, lasting the heel seat of the upper, and then wrapping the binding strip about a platform piece of substantially the same length as the short sock lining.

4. The process of shoemaking which includes the steps of stitching an upper and binding strip to the shank and forepart of an insole, leaving the heel-seat open, separately providing a counter assembly comprising a counter stiffener united to a counter-lining having side wings that project

beyond the stiffener and a composite inturned flange in the stiffener and its lining, inserting the assembly thus prepared, off the last, in the upper, and then lasting the heel-seat of the upper inwardly over the composite flange of the counter assembly.

5. The process of shoemaking which includes the steps of stitching the margin of an upper and a binding strip to an insole, leaving the heel-seat open, providing a counter assembly comprising a counter-lining united to the inner surface of a counter stiffener, the lining having side wings extending beyond the ends of the counter stiffener, and a composite inturned flange in the counter assembly, inserting the said assembly, off the last, in the upper, laying the wings of the lining against the upper inside the shoe above the stitching which unites the upper and the insole, and stitching the wings of the counter-lining to the upper, and subsequently lasting the heel-seat of the upper inwardly over the composite flange of the counter assembly.

6. The process of making shoes of the platform type which consists in stitching the margin of an upper and a binding strip together and to the margin of a sock lining throughout the shank and forepart of a shoe while leaving the upper and sock lining unconnected throughout the heel seat portion of the shoe, inserting a lined and molded counter stiffener within the upper, stitching the lining to the upper, securing the heel seat portion of the sock lining in place, and then wrapping the binding strip about a sole piece located beneath the sock lining.

7. The process of making shoes of the platform type which consists in stitching the margin of an upper and a binding strip together and to the margin of a sock lining throughout the shank and forepart of a shoe while leaving the upper and sock lining unconnected throughout the heel seat portion of the shoe, inserting a lined and molded counter stiffener within the upper, lasting the margin of the upper inwardly about the heel seat, stitching the lining to the upper, securing the heel seat portion of the sock lining in place, and then wrapping the binding strip about a sole piece located beneath the sock lining.

GEORGE A. GLEASON.