Aug. 11, 1953 J. MELTZER 2,648,081

METHOD OF MAKING SLIP-LASTED SHOES WITH REINFORCING COUNTER AND STITCHED-IN SOCK LINING

Filed Sept. 23, 1952 2 Sheets-Sheet 1

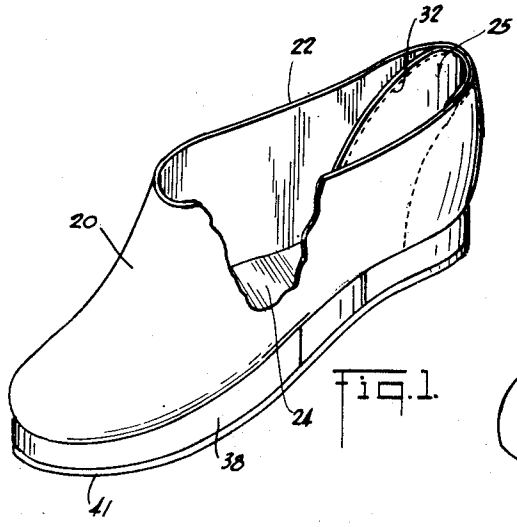


Fig. 1.

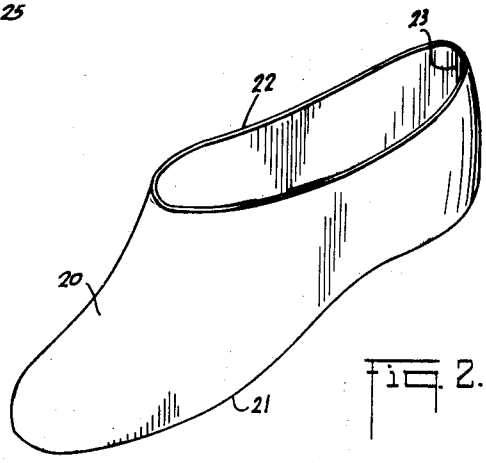


Fig. 2.

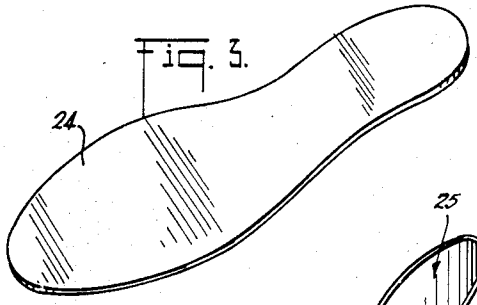


Fig. 3.

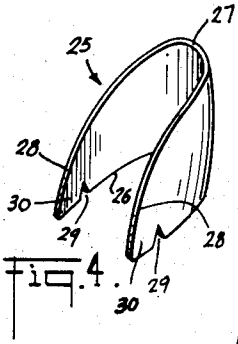


Fig. 4.

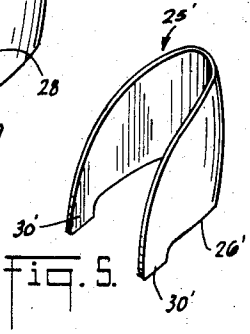


Fig. 5.

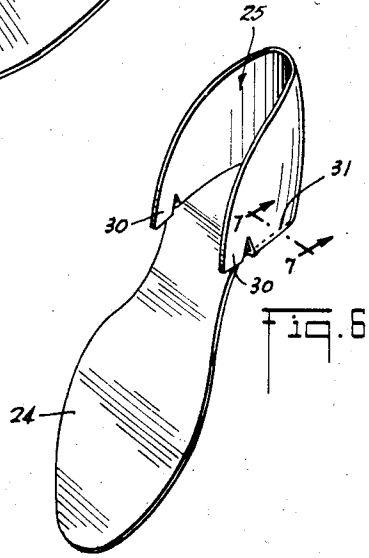


Fig. 6.

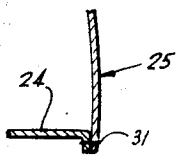


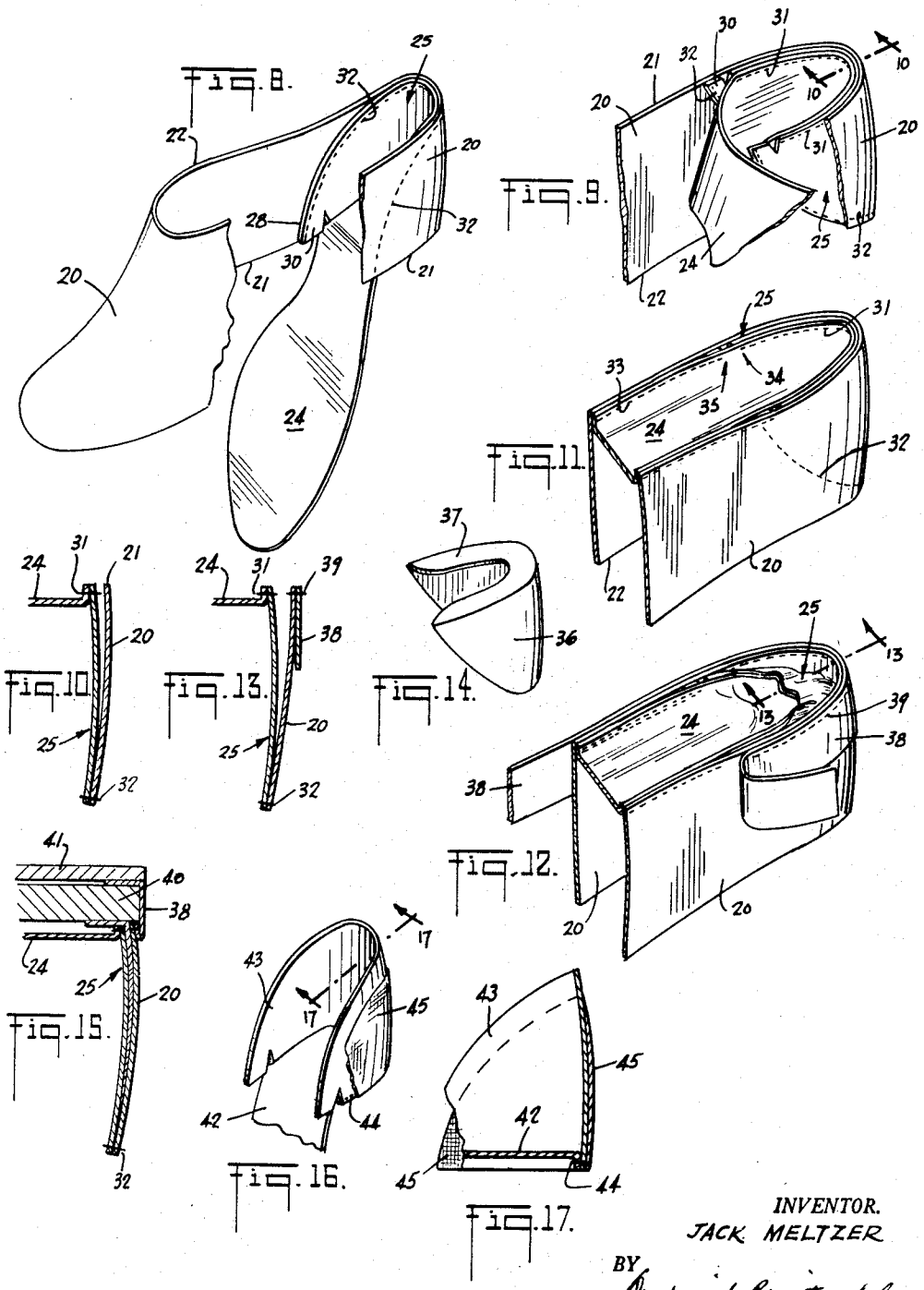
Fig. 7.

INVENTOR.
JACK MELTZER
BY Frederick Breitenfeld
ATTORNEY

Aug. 11, 1953 J. MELTZER 2,648,081

METHOD OF MAKING SLIP-LASTED SHOES WITH REINFORCING COUNTER AND STITCHED-IN SOCK LINING

Filed Sept. 23, 1952 2 Sheets-Sheet 2



INVENTOR.
JACK MELTZER
BY
Frederick Gretenfeld
ATTORNEY

Patented Aug. 11, 1953 2,648,081

UNITED STATES PATENT OFFICE

2,648,081

METHOD OF MAKING SLIP-LASTED SHOES WITH REINFORCING COUNTER AND STITCHED-IN SOCK LINING

Jack Meltzer, Los Angeles, Calif.

Application September 23, 1952, Serial No. 310,942

7 Claims. (Cl. 12—142)

1

My present invention relates generally to shoes, and has particular reference to articles of footwear of the so-called slip-lasted type, and to certain procedural steps involved in making such articles.

It is a general object of the invention to provide a construction in which the advantages of a reinforcing counter, either in the heel region or elsewhere, are attained in a shoe having a full length sock lining stitched into position around its entire periphery.

As is known, a stitched-in sock lining is highly desirable because it is not susceptible to displacement and is devoid of edges which may curl and thereby cause discomfort or which impair the attractiveness of shoes having openings at the toe or elsewhere. A rainforcing counter is desirable because of its ability to lend staunchness and form-retaining qualities to the shoe, and to impart a stylish and attractive appearance to it. A counter is of particular importance in the heel region of the shoe, but the invention is not restricted to the employment of a reinforcement of this particular kind.

One of the features of the present invention resides in the fact that the dual benefits of a full length stitched-in sock lining and of a reinforcement counter may be simultaneously achieved in a shoe in which the upper of the shoe is not necessarily provided with a lining. In fact, the upper may consist of separate and spaced vamp and quarter elements, if desired.

Another object of the invention is to provide these desirable results in a simplified manner and by a sequence of procedures which are relatively easy to perform, expeditious, and inexpensive. The method is in many respects an improvement over the procedure described in Moskowitz Patent 2,371,703. The steps called for by the present invention are capable of performance by relatively unskilled hands, and the finished article of footwear is not only of stronger and more rugged wear-resistant construction, but it has an unusually neat appearance, and a soft and comfortable interior. The procedure is suitable for the manufacture of a large variety of shoes, slippers, sandals and similar items intended for either street wear or indoor use, and lends itself readily to variations in style and to the employment of various ornamental materials.

Several ways of achieving these general objects and advantages, and such other objects and advantages as may hereinafter appear, are illustratively exemplified in the accompanying drawings in which—

Figure 1 is a perspective view of an illustrative article of footwear which may be produced by means of the present inventoin;

Figure 2 is a perspective view of the upper entering into the construction of the shoe shown in Figure 1;

Figure 3 is a perspective view of the sock lining by itself;

2

Figure 4 is a perspective view of a counter-covering element;

Figure 5 is a similar view showing a modified type of counter-covering element that might be employed.

Figure 6 is a perspective view of the elements of Figures 3 and 4 joined together to form a preliminary assembly;

Figure 7 is a fragmentary enlarged cross sectional view along the line 7—7 of Figure 6;

Figure 8 shows the preliminary assembly of Figure 6 partially joined to the upper of Figure 2;

Figure 9 is a perspective view of the rear end of the assembly of Figure 8, as viewed from underneath;

Figure 10 is an enlarged fragmentary cross sectional view along the line 10—10 of Figure 9;

Figure 11 is a view similar to Figure 9 with the sock lining and upper in a further stage of interconnection;

Figure 12 is a view similar to Figure 11 showing how a platform wrapper is added to the assembly of parts;

Figure 13 is a view similar to Figure 10, taken substantially along the line 13—13 of Figure 12;

Figure 14 is a perspective view of a pre-molded flanged reinforcement counter of known kind;

Figure 15 is a cross sectional view similar to Figures 10 and 13, showing the parts in the relationships they assume after the reinforcing counter is in position and the sole structure of the shoe has been completed;

Figure 16 is a perspective view similar to Figure 6, illustrating a modification of the procedure at this stage; and,

Figure 17 is a cross sectional view substantially along the line 17—17 of Figure 16.

In the shoe shown by way of illustration in Figure 1, the upper 20 is of plain unornamented type, having a lower edge which is continuous throughout the entire periphery of the shoe. It will be understood, however, that this upper is purely illustrative, and that the procedure is not restricted to an unadorned continuous upper of this particular character. The upper is preliminarily formed in any desired fashion, by procedures which are well known per se, and of any desired material. The upper 20 is shown by itself in Figure 2. Its lower edge is indicated at 21, its upper edge at 22. At the rear end a seam 23 is indicated.

The sock lining 24 of Figure 3 is of suitable size to extend for the full length of the shoe. It is composed of any well known sock lining material, and its initial dimensions are such as to allow for the stitching of its edges to the corresponding parts of the shoe.

Figure 4 is a perspective view of a counter-covering element, of soft yieldable fabric or equivalent material. In explaining the features and advantages of the invention, I have chosen to illustrate an article of footwear in which there is a reinforcing counter in the heel region. The

counter-cover **25** of Figure 4 is therefore of a shape and size which is suitable for the covering of a reinforcing heel counter. The element **25** may be composed of a single initial blank, or of more than one element. In its finished state it has a bottom edge **26**, and a top edge **27** at the rear which merges gradually along a substantially convex curvature with side edges **28** terminating at the forward ends of the bottom edge **26**. Slightly to the rear of these ends, the bottom edge **26** is provided with notches **29** which serve as convenient markers for a subsequent stitching operation, and which also serve to shape the ends of the element **25** in the form of tabs or flaps **30**. The notches **29** are shown in an exaggerated manner in the drawings, for the sake of clearness of illustration. In actual practice they are smaller and narrower, in proportion to the counter cover **25** as a whole. Substantially the same result can be achieved by means of a counter-covering element of the character shown at **25'** in Figure 5. In this case the bottom edge **26'** turns downwardly near its ends, thus defining tabs or flaps **30'**. The purpose of these ends or tabs will be explained hereinafter.

As a first step in the practice of the improved procedure, the counter-cover **25** of Figure 4 is secured to the edge of the sock lining **24** by a line of stitches **31**, as best indicated in Figures 6 and 7. It should be observed that the stitches **31** extend only to the notches **29**, i. e., they terminate short of the ends of the bottom edge **26** of the counter cover. Thus they leave the ends or tabs **30** temporarily detached from the sock lining **24**. To facilitate the operation indicated, and bring the parts into proper positional relation, the sock lining **24** may be formed with notches or projections or other suitable markings (not shown) with which the notches **29** can be brought into alignment before the stitching begins. Where a counter cover of the type of Figure 5 is employed, the same procedure is followed, i. e., the stitches are caused to terminate short of the ends of the bottom edge **26'**, thus leaving the ends **30'** temporarily detached from the sock lining.

As a subsequent step in carrying out the procedure, the counter cover is secured along its side and top edges to the inside of the upper. This is indicated in Fig. 8. Here, too, to assure a proper relative positioning of the parts, the lower edge **21** of the upper may be provided with positioning marks or projections (not shown). The securement of the counter cover is achieved by a second line of stitches **32** which extend all the way to the bottom edge of the counter cover. The tabs or ends **30** are thus secured to the upper at this time, but are still detached from the sock lining. In fact it is for the very purpose of permitting the stitches **32** to extend all the way to the bottom edge of the counter cover that the tabs **30** were deliberately left temporarily detached from the sock lining **24** during the preliminary assembly of parts according to Figures 6 and 7.

It is at this stage of the procedure that the top edge **22** of the upper **20** is subjected to the particular finishing treatment which the design of the shoe or article of footwear calls for. For example, a binding or collar may be stitched to the top edge of the upper at this time. In applying it, it extends over and catches in the top edge of the counter cover **25**. Its securement to the forward regions of the top edge **22** is greatly

facilitated by the fact that the sock lining **24** is still in a detached relationship to the upper.

It is only at a subsequent stage of the procedure, best indicated in Figures 9 and 11, that the unattached edges of the sock lining **24** are secured to the corresponding parts of the bottom edge **21** of the upper **20**. This is accomplished by a third line of stitches **33**. It is to be observed that these stitches extend not only around the entire forward part of the shoe (not shown in Figure 11) but also rearwardly to points where they at least meet the first line of stitches **31**. For simplicity of illustration I have shown in Figure 11 how the first line of stitches **31** terminate at the point designated **34**, while the stitches **33** terminate at a point marked **35**, which is approximately in the same region. In actual practice the stitches **33** are caused to extend just slightly beyond the point **34** in order to establish a firm interengagement of the parts. In either case, it is to be observed that the stitches **33** finally engage with and catch in the temporarily detached ends or tabs **30**. This is best illustrated by a comparison of Figures 9 and 11. In Figure 9, the sock lining **24** has been shown turned back to indicate that it is still detached from the tabs or ends **30**. In Figure 11, these ends have been caught in by the stitches **33**.

The platform wrapper **38** is now attached to the upper. This is achieved by a line of stitching **39**. These stitches are so made that they avoid engagement with the bottom edge of the counter cover. To accomplish this result the counter cover is pushed aside, as indicated in Figure 12.

In the region of the shoe where the stitches **39** coincide or overlie the stitches **33**, it is a possible alternative to employ only a single line of stitches such as the stitches **33**, to secure the sock lining to the upper and also to secure the platform wrapper thereto. In most cases, however, it is better practice to run the stitches **39** around the entire periphery of the shoe, as a procedure separate from that which involves the stitching **33**.

It is at this stage that the reinforcing counter is inserted into the pocket beneath the counter cover. The counter may be of any appropriate shape. In shape 14 I have illustrated a preformed or pre-molded counter **36** having a flange **37** along its bottom edge. This is a counter of well known type, and is illustrative of the kind of reinforcing element that can be employed. It is not necessary, however, that the counter be of the flanged type shown. Of primary importance is the fact that the counter be so chosen, as to configuration and dimensions, that it will fit snugly into the pocket designed for it. This pocket is obviously bounded, on the inside, by the stitches **32**.

The assembly of parts is now ready for application to a last, and the sole structure of the shoe may be completed as indicated in Figure 15. A platform **40** is applied, and the platform wrapper **38** is brought around to cover its edges. An outer sole **41** is then applied. These procedures are well known per se, involving the use of adhesives and other expedients. The parts adjust themselves into a snugger relationship than that shown in Figure 15, but for the sake of simplicity of illustration, spaces have been left (in Figure 15) between the sock lining **24** and the platform **40**, between the platform **40** and the outer sole **41**, etc. In actual practice these spaces are either deliberately filled, or the parts compress them-

selves into a more compact relationship than that shown. The sole structure, per se, forms no parts of the present invention.

A desirable modification of the procedure is illustrated in Figures 16 and 17. In this case a sock lining **42** is secured to a counter-covering element **43** by a line of stitching **44**, in exactly the same way as the corresponding parts are secured together in Figure 6. However, before the securement of the counter cover to the upper, a reinforcing counter, in soft and pliable state, is adhesively bonded to the under side of the counter cover **43**. The "underside" is the convex side as shown in Figure 16. The reinforcing element is designated **45**. It consists of fabric or equivalent material impregnated with a resinous binder or other substance which has the ability to harden (usually with the aid of heat and pressure) into a relatively stiff and rigid condition.

The element **45** may be of any desired shape, and its top and side edges may terminate short of the corresponding top and side edges of the element **43**, or the two parts may be co-extensive in area. In Figures 16 and 17 I have illustrated a reinforcing element **45** whose bottom edge terminates at the bottom edge of the counter-covering element **43**. This is not essential, either, and if desired the element **45** may have a part which defines an underlying flange similar to that shown at **37** in Figure 14.

Where the element **45** is adhesively bonded only to the counter cover **43**, as shown in Figures 16 and 17, the completion of the procedure follows the steps herein described and illustrated in Figures 8–15, except that the separate insertion of a pre-formed counter becomes unnecessary.

A preferred procedure lies in bonding the reinforcing counter **45** to the counter cover **43**, as indicated in Figure 16, and also bonding it to the upper at the time the counter cover is secured to the upper by the stitches **32**. This can be readily achieved by applying suitable adhesive or other bonding substance to the outer or convex side of the reinforcement **45** at the time of the assembly of the parts as indicated in Figure 8. This bonding of the reinforcement to the counter cover and also to the upper involves only a slight modification in the procedure hereinbefore described, since it becomes necessary under these circumstances to secure the platform wrapper **38**, at least in the part alongside the bottom edge of the counter cover, prior to the application of the stitches **32**. The best way to achieve this result is to secure the platform wrapper **38** to the upper in a preliminary step.

Even where the reinforcement **45** is not to be adhesively bonded to the upper, it may under certain circumstances be desirable to secure the platform wrapper to the upper in a preliminary step, i. e., prior to the stitching of the counter cover to the upper along the line of stitches **32** (Figure 8).

While I have illustrated the procedure as it applies to a shoe in which the reinforcing counter is in the heel region, it will be understood that the process may be carried out in connection with reinforcing counters in other regions of the shoe as well. In each case, the counter cover will have a configuration corresponding to the reinforcement to be employed and to the region of the shoe in which the stiffening is to be achieved.

In general it will be understood that many of the details herein illustrated and described are merely illustrative, and that deviations from these details may be made in a number of respects, by those skilled in the art, without necessarily departing from the spirit and scope of the invention as expressed in the appended claims.

Having thus described my invention and illustrated its use, what I claim as new and desire to secure by Letters Patent is:

1. In the art of making a slip-lasted article of footwear having a reinforcing counter and provided with a full-length stitched-in sock lining, the sequence of steps which comprises securing the bottom edge of a counter cover to an edge part of a full-length sock lining by a first line of stitches terminating short of the ends of said bottom edge and thus leaving said ends temporarily detached from the sock lining, thereafter securing the counter cover along its side and top edges to the inside of an upper by a second line of stitches extending all the way to said bottom edge of the counter cover, and thereafter securring the unattached edges of the sock lining to the corresponding parts of the bottom edge of the upper by a third line of stitches which extend at least to said first line of stitches so as to catch in said temporarily detached ends.

2. In a procedure as set forth in claim 1, the additional steps which comprise inserting a reinforcing counter into the pocket beneath said counter cover, and finally applying the assembly to a last and completing the sole structure of the article.

3. In a procedure as set forth in claim 1, the additional steps which comprise securing a platform wrapper to the bottom edge of the upper by stitches which avoid engagement with the bottom edge of the counter cover, inserting a reinforcing counter into the pocket beneath said counter cover, and finally placing the assembly on a last and completing the sole structure by steps which include application of a platform and covering its edges with said platform wrapper.

4. In a procedure as set forth in claim 1, the additional steps which comprise securing a platform wrapper to the bottom edge of the upper by stitches which avoid engagement with the bottom edge of the counter cover, the securement of said wrapper to said upper, at least in the part alongside said bottom edge of the counter cover, being performed prior to the securement of the counter cover to the upper by said second line of stitches.

5. In a procedure as set forth in claim 1, the additional step which comprises a finishing treatment along the top edge of the upper, said step being performed after the application of said second line of stitches but before the application of the third.

6. In a procedure as set forth in claim 1, the additional step which comprises adhesively bonding a reinforcing counter to the under side of said counter cover, said step being performed prior to the securement of the counter cover to the upper by said second line of stitches.

7. In a procedure as set forth in claim 1, the additional steps which comprise adhesively bonding a reinforcing counter to the under side of said counter cover prior to the securement of the counter cover to the upper by said second line of stitches, and also adhesively bonding said counter to the upper itself at the time of application of said second line of stitches.

JACK MELTZER.

No references cited.