June 9, 1953 H. LIPTON 2,641,006

METHOD OF MAKING PREWELT SHOES

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Fig. 1.

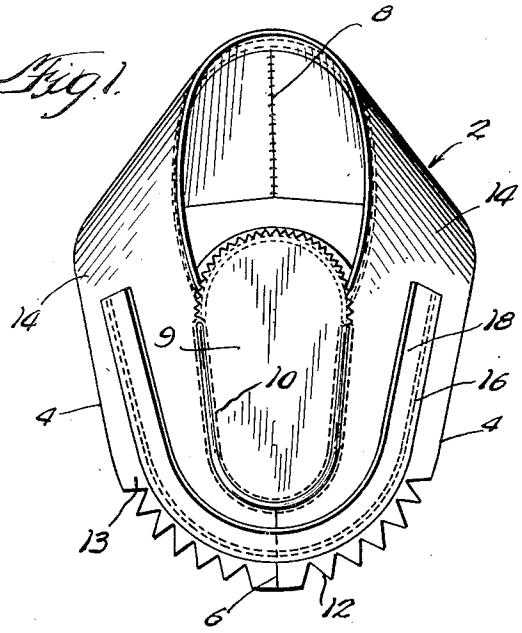


Fig. 5.

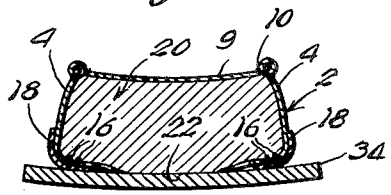


Fig. 2.

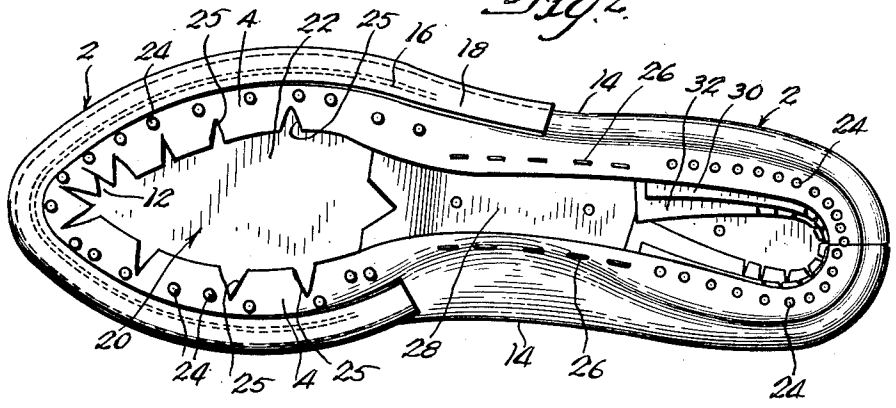
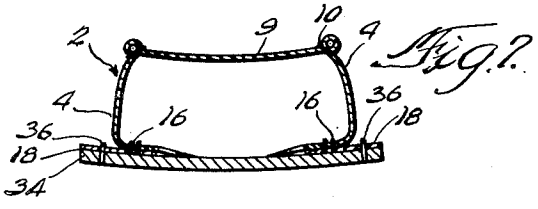


Fig. 7.



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Fig 3.

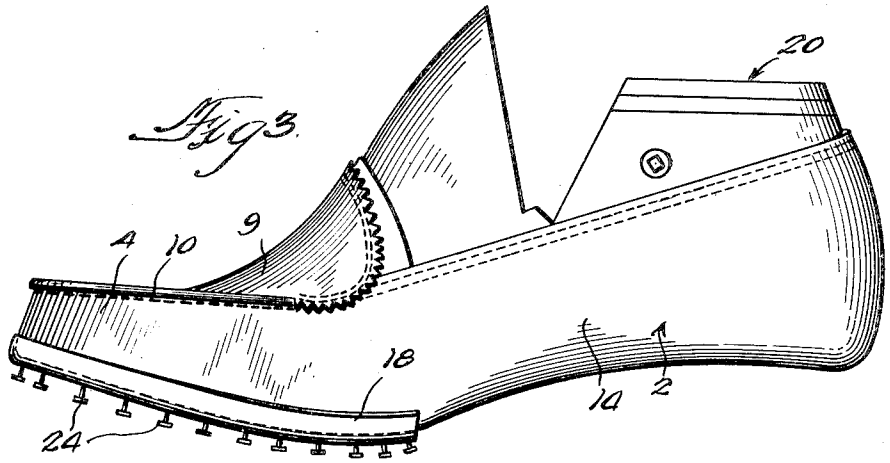


Fig 4.

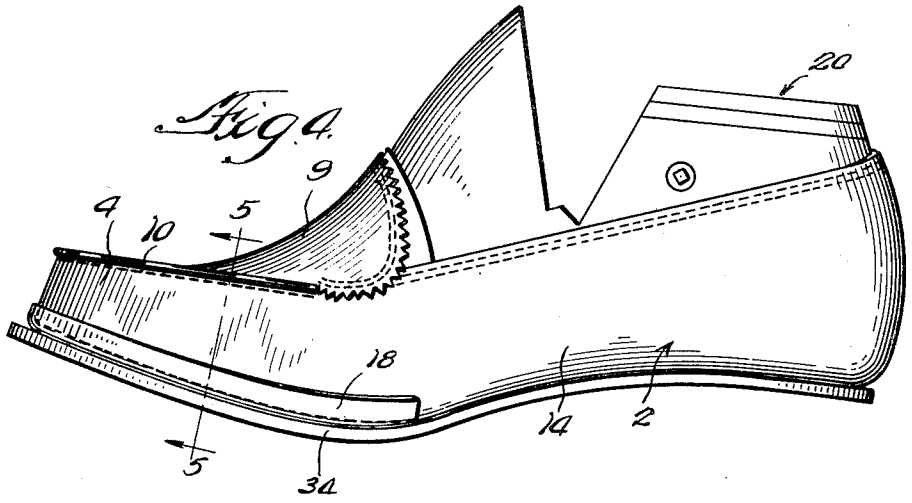
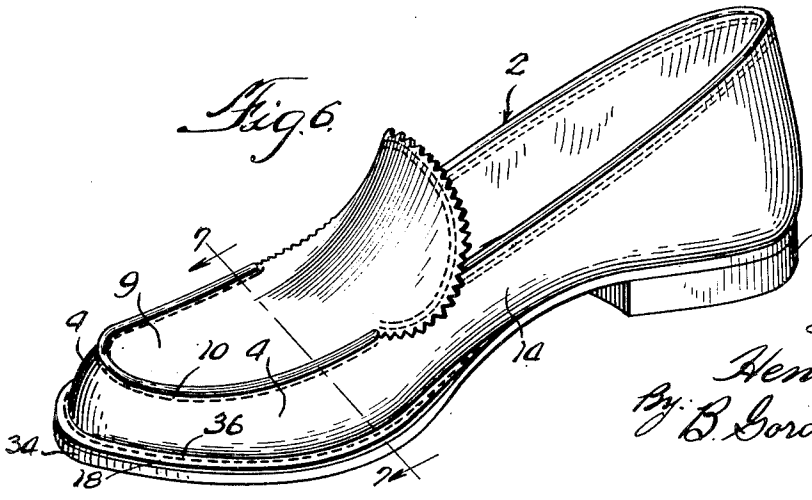


Fig 6.



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METHOD OF MAKING PREWELT SHOES

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1 Claim. (Cl. 12—142)

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This invention relates to a method of making pre-welt shoes.

It is well known that the conventional type of lasted shoe is constructed with both an inner and an outer sole, a so-called filler being used between the two soles. For many years the shoe industry has been endeavoring to fabricate shoes whereby the conventional inner sole may be dispensed with, the upper surface of the outer sole itself acting as an inner sole. Such a shoe has many advantages. It is less expensive, easier to construct and dispenses with the filler, thus retarding irritation and burning of the feet caused by the adhesive used to cement the filler to the inner sole. A heavier outer sole can be used without increasing the weight and the shoe so made is stronger and more flexible. Furthermore, there is no necessity of bed lasting and the use of expensive bed lasting machinery is eliminated.

Many efforts have been made to fabricate such a shoe but without success. Such efforts have been directed to slip lasted shoes and stitched on shoes but no regular lasted shoe has been constructed wherein the inner sole is entirely eliminated.

It is an important object of the present invention to provide a novel constructed shoe wherein the conventional inner sole is dispensed with, and a novel method of fabricating the same.

Another general object of the invention is to devise a lasted shoe which is of more economical construction and is stronger than lasted shoes known in the prior art.

Another object of the invention is to eliminate the necessity of an inner sole and filler and to attach the outer sole directly to the upper.

A further object of the invention is to provide a heavier outer sole without increasing the overall weight of the shoe and at the same time increasing its flexibility.

Still another object of the invention is to manufacture a lasted shoe without the necessity of a bed lasting operation, thereby eliminating the expense of bed lasting machinery.

A more specific object of the invention is to attach the sole by adhesive to an inturned portion of the upper and to a welt stitched thereto, prior to stitching the sole to the welt.

The foregoing and other objects of the invention will become apparent from the specification and the accompanying drawings, wherein:

Fig. 1 is a front perspective view of the upper;

Fig. 2 is a bottom plan view of the upper tacked to a last;

Fig. 3 is a side elevational view of the upper and last shown in Fig. 2;

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Fig. 4 is a side elevational view of the upper and last, with the tacks removed and a sole secured by adhesive to the upper and its welt;

Fig. 5 is a sectional view on line 5—5 of Fig. 4;

Fig. 6 is a perspective view of the finished shoe; and

Fig. 7 is a sectional view on line 7—7 of Fig. 6.

Describing the invention in detail and referring first to Fig. 1, an upper generally designated 2, preferably formed of leather, is accurately prefabricated to the configuration of a last by stitching side segments 4 to each other at the toe end of the upper along the line 6 and at the heel end along the line 8, a top segment 9 being stitched to the side segments as at 10. The toe ends of the segments 4 are serrated along their lower edge as at 12 for a purpose hereinafter described, either before or after stitching of the segments to each other.

The external surface of the upper is then roughened in any desired manner as at 13 from the lower edge of the segments 4 upwardly to a line extending above the serrations 12 and rearwardly therefrom to the shank portions 14 of the segments 4, and along this line as at 16 is stitched the lower edge of a welt 18. As best seen in Fig. 5, the lower edge of the upper is preferably tapered.

The upper thus formed is then pulled over a last 20 as shown in Figs. 2 and 3, until the stitching 16 overlaps the sole or bottom surface 22 (Fig. 2) of the last 20. The lower edge of the upper is then turned in and tacked or similarly secured as at 24 (Figs. 2 and 3) to the surface 22, the shank portions 14 of the segments 4 being secured as by staples 26 to a conventional stiffener 28 (Fig. 2) preferably formed of leather. A pair of reinforcing pieces 30 and 32 of leather are also preferably tacked between the stiffener 28 and the inturned edge of the upper 2 to afford convenient securement to a conventional heel and arch support (not shown). It may be noted that the serrations 12 of the toe end of the upper overlap each other after the lower edge thereof has been turned in, thereby affording a flat unwrinkled surface for attachment of a sole as hereinafter described. Any wrinkles which may develop along any part of the inturned portion of the upper are preferably cut away as at 25, thereby forming additional serrations and ensuring a flat unwrinkled surface.

With the upper thus secured to the sole surface 22 of the last 20, the upper is shrunk or ironed to configuration with the last 20 in the usual manner, as by moistening the leather and applying a hot iron to press the upper against

the last and to shrink the upper to the configuration thereof.

After the ironing process, the tacks **24** are removed and the inturned exterior edge of the upper is preferably reroughened, whereupon an outer sole **34** is secured thereto by adhesive and to the inturned edge of the welt **18**, over the stitching **16** as best seen in Figs. 4 and 5.

The welt **18** is then turned flat against the sole **34** as best seen in Figs. 6 and 7 and is stitched thereto as at **36**, whereupon a heel **38** is applied in the usual manner and the shoe is finished as desired.

Thus it will be understood that I have devised a novel shoe and method of making the same, whereby the upper is accurately formed to the shape of the last and is then lasted to accommodate ironing and subsequent attachment of a sole not only to the inturned edge of the upper but also to the stitched edge of a welt, whereupon the welt is stitched to the sole to afford a second attachment thereo. The novel shoe produced by this process has proved not only to be unusually flexible for a lasted shoe but is a more economical and a stronger shoe than lasted shoes of the prior art. Furthermore, by elimination of the conventional inner sole, a heavier outer sole may be used without increasing the over-all weight of the shoe or detracting from its flexibility.

Thus there is provided a novel inexpensive method of fabricating a shoe wherein the outer sole is secured directly to the upper and the conventional inner sole and filler is completely eliminated. Shoes made by this method are stronger, more flexible and free from the adhesive element which causes burning and irritation of the feet.

Changes may be made in form and construction without departing from the spirit of the invention or sacrificing any of its advantages, and the right is hereby reserved to make all changes as fairly fall within the scope of the following claim.

What is claimed as new and desired to be secured by Letters Patent of the United States is as follows:

A method of manufacturing prewelt lasted shoes comprising providing an upper having a welt attached thereto at a sufficient distance from its lower edge to provide a lasting allowance below the welt, applying said upper to a bare last, pulling the lasting allowance over upon the last and fastening it thereto, cementing an outsole to the lower surface of said welt and finally sewing said welt to said sole to provide a flexible single sole shoe.

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