April 30, 1940. L. J. GOLDEN ET AL 2,199,338

CHILD'S SHOE

Filed March 12, 1937

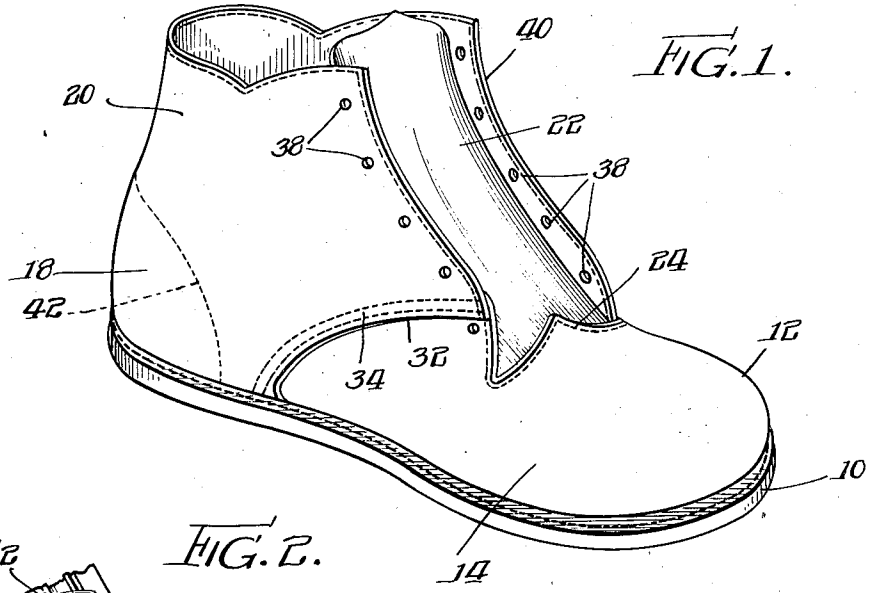


FIG. 1.

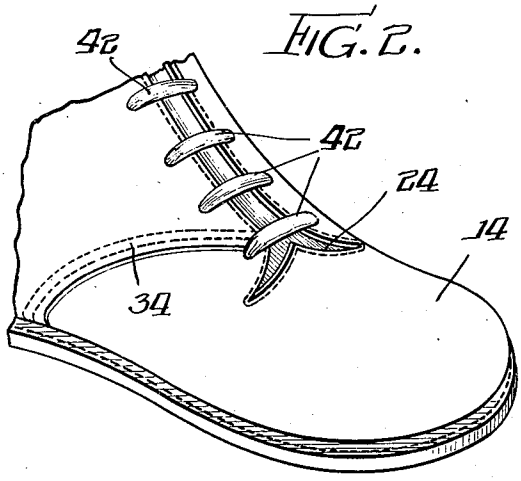


FIG. 2.

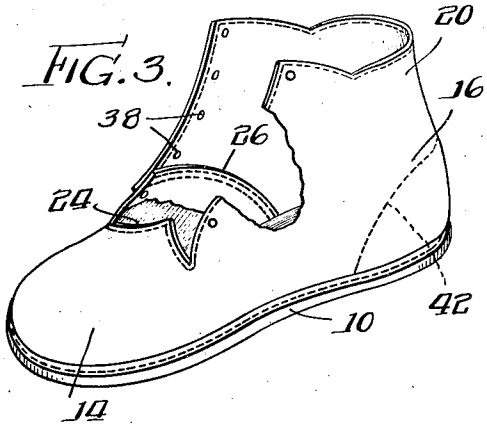


FIG. 3.

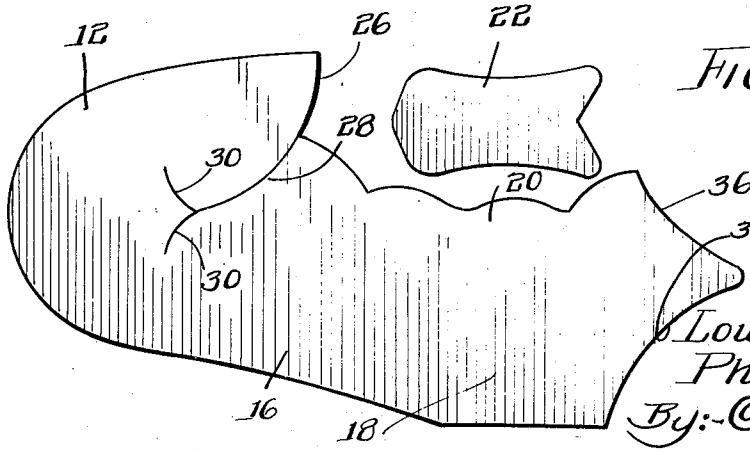


FIG. 4.

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CHILD'S SHOE

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Application March 12, 1937, Serial No. 130,448

3 Claims. (Cl. 36—45)

This invention relates to a shoe and method of making the same and more particularly to a shoe adapted for wear by small children and infants.

It is an object of this invention to provide an infant's shoe of the blucher type which is generally symmetrically constructed at the front and has an upper formed from a single, integral blank.

Another object of this invention is to provide a shoe in which little or no loss of material occurs during the forming operation and in which the extent of seaming required as well as the labor and expense of fabricating are reduced to a minimum.

A further object of this invention is to provide a shoe and a method of manufacture therefor in which the number of pattern parts is greatly reduced with a resultant decrease in the number of operations necessary to form the final shoe.

Yet a further object of this invention is to provide a shoe which is relatively seamless and which omits seams at the rear and other points where seaming is particularly objectionable and conducive to discomfort or objectionable appearance.

Other objects of this invention are to provide a blucher type shoe having a one-piece upper with a tongue affixed thereto; to provide a shoe wherein the manufacture of the upper blank involves no cut-out wasted portions; to provide an infant's shoe having substantially only one seam to maintain the upper in assembled relationship and to provide a shoe having a smooth, solid back portion together with the absence of any multiple seams such as would result in hardened areas.

Numerous other objects and advantages will more fully appear during the course and progress of the following specification.

Figure 1 is a perspective view of the infant's shoe made in accordance with the present invention.

Figure 2 is a detail perspective view of the front part of the shoe shown in Figure 1, showing the lace in operative position.

Figure 3 is a perspective view of the shoe from the left side, portions being broken away to show the manner of seaming.

Figure 4 is a plan view of the blanks or patterns employed in manufacturing the present shoe.

The shoe shown for purposes of illustration, is designed to fit the left foot. It will be obvious that the other member of the pair will be constructed with the various portions thereof oppositely arranged.

The shoe comprises a sole portion 10 to which is sewed, or otherwise secured, an upper 12 having a toe covering or vamp portion 14, left and right counterportions 16 and 18 respectively, and a top portion 20. These areas are integrally joined to form the upper. The tongue 22 is a separate piece stitched thereto along the lines 24.

The single, integral upper may be cut from a single, flat piece of leather or the like in the form of a somewhat L-shaped pattern (see Figure 4). The curved front portion 12 corresponds to the vamp portion in the final shoe and has a somewhat parabolic forward edge. An integral rearward extension 16 provides the lefthand side of the shoe, the left and right counter-portions and the top 20. The curved rearward edge 26 of the front portion 12 is extended inwardly in the blank as a slit 28 which in turn terminates in two slits 30 forming the blucher portion of the vamp and the line of juncture along which the tongue is seamed to the vamp.

The rearmost edge 32 is cut in a curve similar to that of the edge 26 so that, when the upper is in assembled position, the edges 26 and 32 will overlap and may be sewed together to form a seam 34 adjacent the instep portion of the shoe. The edge 36, on the other hand, is cut in a curve to correspond to the curve on the opposite edge of the top formed by the slit 28.

These edges 28 and 36 are preferably pierced by a series of apertures 38 to accommodate the laces or other equivalent releasable closure means. It will be apparent that in assembling the blank pattern to form an upper, the rear portion of the blank is twisted away from the plane of the front portion and bent around until the edge 32 of the right counter-portion overlaps the edge 26 of the vamp portion and stitched together as at 34 in Figures 1 and 2. The tongue piece 22 is secured to the vamp along the curved edges 24 formed by the slits 30. It will be evident that the edge 36 will form the righthand or inner forward edge of the top portion of the shoe which will normally lie generally parallel to the opposite forward side edge 40 formed in the original blank by the slit 28.

The upper is stitched or secured to the sole piece 10 in any conventional manner. At any suitable time during manufacture, the apertures 38 may be formed and a lace 42 inserted therein to provide means for lacing the shoe in position with respect to the foot.

In the preferred embodiment the lowermost apertures 38 are situated more or less exactly in the position shown in the figures for, when thus positioned, it will be apparent that the forward edge of the seam 34 will be at all times completely covered and concealed by the lace. The remainder of the seam 34 is effectively situated

adjacent the hollow or under-portion of the instep. While the invention comprehends the positioning of this seam within wide limits, nevertheless, when arranged according to the preferred embodiment, the shoe appears to be seamless, in view of the fact that its only side seam is unobtrusively placed and concealed with only a portion normally visible.

The present invention provides a method of shoe manufacture in which little or no waste of material is necessary since the patterns demand no inner cut-outs, nor cut-away portions interiorly of their periphery. The pattern of the upper being somewhat L-shaped, the section of material formed by the hollow portion or notch in the L serves admirably as a source of the tongue **22**. The arrangement of the parts in Figure 4 clearly illustrates the manner in which the two blanks may be cut from a single, relatively small piece of material with very little waste.

The present shoe is characterized by an absolute minimum of seams around the outside of the upper portion. From this several advantages accrue. In the first place, overlapping seams are known to provide hardened areas which are conduce to a chafing or other harmful action upon the foot, particularly in the case of small infants. In the present shoe such seams are studiously eliminated over most portions of the foot including the entire front area, the sensitive bal section and the entire top. In addition, the back portion of the shoe is of the solid type, i. e., completely devoid of overlapping seams. The particular positioning of the only seam **34** is well calculated to obviate any of the normal difficulties since it resides at a place where harmful rubbing does not normally occur.

In many types of shoes three or more layers overlap to form a seam resulting in increased hardness and brittleness of the leather with a tendency to act like sole leather and to harm the tender foot. In the preferred embodiment according to the present invention, all triple overlapping seams are omitted.

It should be particularly noted that the curved edges **26** and **32** do not possess an identical degree of curvature. In other words, as is obvious from carefully comparing the curves of these edges shown in Fig. 4, each curve is arranged in a line having a varying degree of curvature, with the curve **26** having the greater degree of curvature. On the other hand, as clearly shown in Figs. 1, 2 and 3, these edges, when overlapped to form the instep seam **34**, are overlapped an equal distance throughout their length. This is of great significance since it confers upon the rear or heel portion of the shoe a special formation adapted to conform to the heel portion of an infant's foot. Thus when the non-complementary curved edges are overlapped and sewn together a slight pulling forward of the top portion of the rear of the quarter is effected and this confers a relative additional fullness upon the lower portion of the quarter at the rear thereof. It will be readily understood from the foregoing that if this procedure were not observed the heel portion would not possess this additional fullness but that the rear portion of the shoe would extend substantially vertically upwardly. In other words, the shoe would not conform to the relatively slim part of the ankle and the lower bulged portion of the heel. It is, therefore, evident that this construction confers a shape and form highly desirable but hitherto lacking in a one-piece upper construction.

It should further be noted that the configuration of the top edges of the upper in the region of the ankle vary in elevation. Thus in the finished shoe these top edges reach their highest elevation above the sole, as clearly shown in Figs. 1 and 3, at three points, which points are located at the rearmost point of the edge and at the two points forming the upper extremities of the forward side edges. The top edge of the shoe gradually inclines downwardly to points adjacent the sides of the ankle. It will be obvious from the foregoing that the present construction obviates the tendency of the straight edge to dig into the bony portion of the ankle when the shoe is tightened. Thus an inordinate tension cannot be applied to the top edge of the shoe by lacing since the depressed portions interfere with the continuous application of stress at this point. It has been found, therefore, that this type of structure provides a shoe which will not chafe or irritate the foot at its upper edges.

It will be likewise apparent that the present invention provides a pattern which is better adapted to the manufacture of relatively high shoes. As is apparent in Figure 4 there is plenty of available material with which to extend the upper edge of the top portion **20** as high as may be desired, at least until the blank loses its generally L-shaped configuration. Conventional blanks in which minimization of the number of parts is attempted, usually are characterized by limitations upon the height of the shoe since opposed areas cannot be expanded without limit due to mutual encroachment.

The present invention provides a blucher shoe which is exceedingly simple to cut out and assemble and which possesses great value and utility. While, according to the preferred embodiment, a seam is disclosed adjacent the hollow of the instep, nevertheless the pattern and its assembly may be varied considerably. In other words, the seam **34** may be positioned rearwardly or forwardly as desired and material may be cut away at various places in order to achieve various effects in appearance and form.

By the term "hollow of the instep", as employed in the specification and claims, is meant that portion of the foot conventionally so termed and extending normally below and centrally of the foot but on the inner side thereof. In other words, assuming the instep portion of the foot to comprise that portion between the ball of the foot and the ankle, the hollow of the instep will comprise the portion on the inner side of the foot below the instep and extending from the middle portion of the adjacent side edge of the conventional sole but substantially to the top of the instep portion. So also, in accordance with the present invention there is defined a blank, as well as a shoe made from a blank, in which the substantially complete upper is in generally L-shaped form. It will be noted that this L-shaped blank has a lower portion corresponding to the base of the letter L and a second portion extending upwardly from one side thereof. By the term "enclosed area" of this L-shaped blank is meant the space or area which is opposite the two portions of the L. It is this portion from which the tongue blank may be taken, as clearly indicated in Figure 4.

It is thought that the invention and numerous of its attendant advantages will be understood from the foregoing description and it is obvious

that numerous changes may be made in the form, construction and arrangement of the several parts without departing from the spirit or scope of the invention, or sacrificing any of its attendant advantages, the form herein described being a preferred embodiment for the purpose of illustrating the invention.

The invention is hereby claimed as follows:

1. In a shoe, an upper comprising integral vamp, counters and opposite side portions having opposed forward edges extending upwardly along the instep, laces adjacent said edges and engaging therewith and forming releasable means for securing said shoe in position with respect to the foot, and an upwardly extending seam extending across the hollow formed by the under side of the instep from a point adjacent the sole and terminating at the inner one of said opposed edges and at its latter portion being positioned under said laces whereby to make said seam inconspicuous, whereby, when the shoe is in position on the foot, the seam is substantially throughout its entire extent inconspicuous by being arranged on the inner and lower portions of the foot and by its upper end being arranged under the laces, said seam comprising overlapping, curved, generally co-extensive edges of said upper, one of said edges being formed in a line of increased curvature and said edges being overlapped an equal distance substantially throughout the length of the seam to provide a bulge adjacent the heel portion for receiving the heel portion.

2. In an infant's shoe comprising an upper having integral vamp, counters and opposite side portions with opposed forward edges extending upwardly along the instep, laces adjacent said edges and engaging therewith and forming releasable means for securing said shoe in position with respect to the foot, and an upwardly extending seam extending across the hollow formed by the under side of the instep from a point adjacent the sole and terminating at the inner one of said opposed edges, said seam comprising overlapping, curved, generally co-extensive edges of said upper, one of said edges being formed in a line of increased curvature and said edges being overlapped an equal distance substantially throughout the length of the seam to provide a bulge adjacent the heel portion for receiving the heel portion.

3. In an infant's shoe having a sole and comprising an upper having integral vamp, counters and opposite side portions with opposed forward edges extending upwardly along the instep, laces adjacent said edges and engaging therewith and forming releasable means for securing said shoe in position with respect to the foot, and an upwardly extending seam extending across the hollow formed by the under side of the instep from a point adjacent the sole and terminating at the inner one of said opposed edges, said seam comprising overlapping, curved, generally co-extensive edges of said upper, one of said edges being formed in a line of increased curvature and said edges being overlapped an equal distance substantially throughout the length of the seam to provide a bulge adjacent the heel portion for receiving the heel portion, said side portions having an upper edge irregular in elevation above the sole, said upper edge having its greater elevation adjacent the rear portion of the shoe and adjacent the upper extremities of said forward edges and at intermediate portions being gradually inclined downwardly to points adjacent the opposite sides of the upper.

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