Sept. 19, 1950 H. G. FERRIS 2,522,505

BABY SHOE

Filed Feb. 3, 1948

Fig. 1.

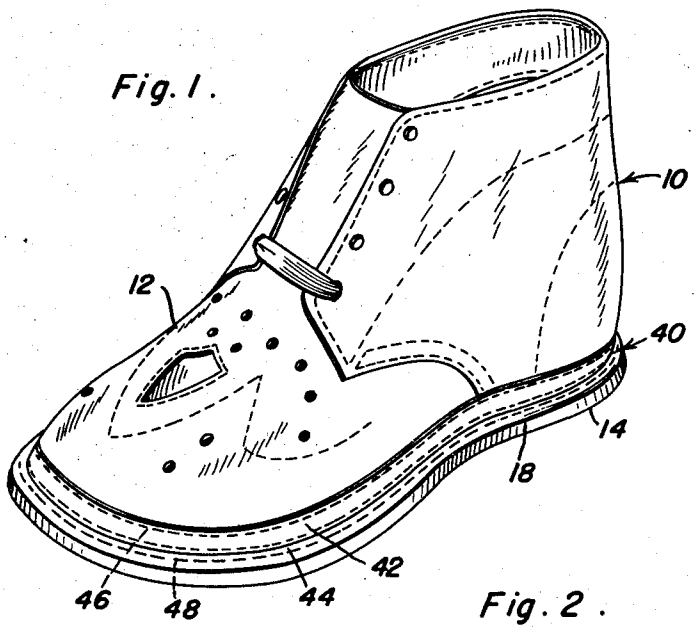


Fig. 2.

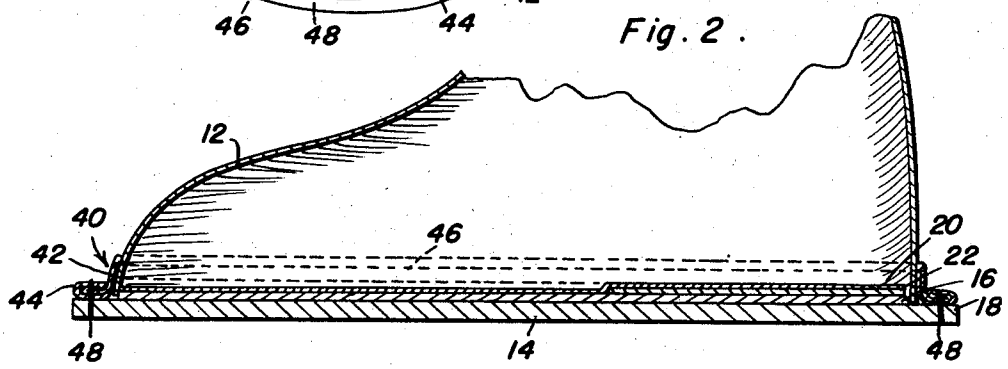


Fig. 3.

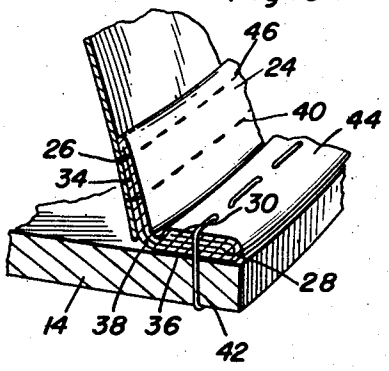


Fig. 4.

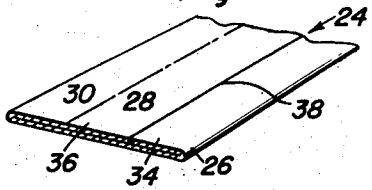
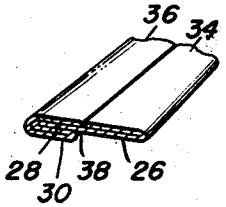


Fig. 5.



Howard G. Ferris

INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson

Attorneys

Patented Sept. 19, 1950

2,522,505

UNITED STATES PATENT OFFICE

2,522,505

BABY SHOE

Howard G. Ferris, Lerna, Ill.

Application February 3, 1948, Serial No. 6,091

4 Claims. (Cl. 36—17)

1

This invention relates to a method of and means for assembling a shoe and more particularly for assembling a baby shoe formed of a soft or light weight leather and has for its principal object to provide an improved soft sole baby shoe or the like, which will have the needed durability and flexibility but will be easier and more convenient to assemble and manufacture with a consequent reduction and saving in time, labor and cost of production.

Another object of this invention is to form a unitary shoe from a pre-formed vamp and out sole, by attaching the two components together in a single convenient operation.

Another object of this invention to be specifically herein enumerated resides in the provision of an improved baby shoe, more finished in appearance and durable in wear and more economical to manufacture, and assemble, due to the novel method and means provided.

A meritorious feature of this invention is the provision of a baby shoe constructed from a soft leather and comprising a pre-formed vamp and outsole, which are connected together to form a unitary shoe by stitching two thicknesses of a welt to the vamp and stitching four thicknesses of the welt to the outsole.

These and ancillary objects and other meritorious features are attained by this invention, a preferred embodiment of which is set forth in the following description and illustrated in the accompanying drawings, wherein:

Figure 1 is a perspective view of a soft or light weight baby shoe constructed in accordance with the principles of this invention;

Figure 2 is a vertical sectional view;

Figure 3 is a fragmentary sectional view of the shoe illustrating in greater detail the means for attaching the vamp to the sole;

Figure 4 is a view in perspective of the welt fastener, and,

Figure 5 is a perspective view of the method of forming the welt.

Referring now more particularly to the drawings, wherein similar characters of reference designate corresponding parts throughout and wherein a preferred form of this invention is illustrated by way of example, 10 designates a unitary baby shoe, constructed of soft or light weight leather, calf skin or a like sturdy, pliable and flexible material. The baby shoe 10 comprises an upper section or vamp 12, which is unitarily formed in accordance with conventional procedure from a blank of leather. A soft substantially flat outsole 14, having an arcuate toe

2

configuration and similar but smaller heel contour with an inwardly tapering instep shape, is provided and the vamp is suitably secured to the outsole by assembling means, comprising the subject matter of this invention. Seated on the upper enclosed surface of the outsole 14 is an inner sole 16 of similar contour but not having the projecting rim or edge 18 disposed on the periphery of the out sole, which projects or extends completely beyond the sides of the vamp 12. A lining or padding 20 of suitable fabric is provided to cover the inner sole 16, which may be merely disposed on the outsole or may be suitably adhesived thereto. Disposed between the inner sole 16 and the sweat lining 20 is a spacing pad or insert 22 of felt or any other suitable cushioning material, which is adapted to offset the heel section from the toe section, forming an instep section. With the utilization of the insert or spacing pad 22, a slight offset elevation is imparted to the heel, which enables a flat sole 14 to be employed, at the same time suitably accommodating the natural contour of a foot.

Of course, the vamp 12, the out sole 14 and inner sole 16 and other components of the shoe 10 are all pre-cut and pre-formed, dependent, upon the size of the shoe to be formed. Means are provided to assemble the above described shoe components and this means comprises the subject of this invention. In assembling the parts, the only operation necessary is to suitably and securely join the vamp to the outsole, as the inner sole and other inner structure seats on the inner closed surface of the outsole, within the vamp sides and accordingly may conveniently be inserted and secured after the vamp and outsole are attached to form the outer unitary shoe 10. This assembly operation entails only the utilization of one machine, a conventional sewing machine, and can be performed in a simultaneous operation.

A welt 24 is provided and is formed from an elongated double ply single piece of leather, which is longitudinally divided into three adjacent sections 26, 28 and 30. The section 30 is bent over and secured onto the section 28 and the section 28 and supported section 30 are bent at right angles to the section 26, as illustrated best in Figure 3. The sections 26 and 28 are provided with bottom surfaces 34 and 36 which are disposed at right angles to each other and which are adapted to seat on the out sole and vamp. Thus, as seen in Figure 3, the section 26 is positioned in engagement of the lower portion of the vamp, with the back surface 34 thereof engaging against and contacting the outer surface of the vamp, while

the section 28 is seated on the outer edge of the out sole, with the bottom surface 36 thereof seated on the out sole and the section 30 secured on the upper surface of the section. It is to be noted that the two sections 26 and 28 are at their bottom surfaces 34 and 36 divided by a longitudinally extending slit 38, which is disposed in the angular juncture of the vamp and sole. The upper two ply section 26 is stitched to the vamp 12 by vertically spaced double in-and-out running stitch 40, while the reinforced ply section 28 is stitched to the projecting out sole by a suitable loop or running stitch 42.

Since many other modifications and purposes of this invention will become apparent to those skilled in the art upon a perusal of the foregoing description, in view of the accompanying illustrations, it is to be understood that such imparts, nothing by way of limitation, but that certain changes in shape, size and arrangement may be effected without a departure from the spirit of this invention and within the scope of the appended claims.

Having described the invention, what is claimed as new is:

1. A shoe comprising an out sole, a vamp, said vamp having its lower end seated on the upper surface of the out sole, and a welt, said welt having longitudinally extending angular side sections of double fold thickness, one of said side sections being folded upon itself to form the section of a greater thickness than the other section, said side sections being secured to the outer edge of the out sole and the lower edge of the vamp.

2. A shoe comprising an out sole, a vamp, said vamp having its lower end seated on the upper surface of the out sole, and a welt, said welt being formed of a single strip folded upon itself to form a double ply strip, said double ply strip being longitudinally bent to define angular side sections

and one of said side sections being folded upon itself, said side sections being stitched to the vamp and out sole with the angular juncture between the sections seated at the juncture of the vamp and out sole.

3. A shoe comprising a vamp, an out sole and a welt, said welt including longitudinally extending angularly disposed side sections of double and quadruple ply respectively, said side section of quadruple ply being seated on and secured to the outer edge of the out sole and said side section of double ply being secured to the lower edge of the vamp.

4. A shoe comprising a vamp, an out sole and a welt, said welt including longitudinally extending side sections disposed at right angles to each other, one of said side sections being of a double ply thickness, the other of said side sections being formed of more than a double ply thickness.

HOWARD G. FERRIS.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,502,559	Giblin	July 22, 1924
1,706,625	Lyon	Mar. 26, 1929
2,062,339	Vizard	Dec. 1, 1936
2,201,382	Vizard	May 21, 1940
2,312,527	Cutler	Mar. 2, 1943

FOREIGN PATENTS

Number	Country	Date
147,278	Austria	Oct. 10, 1936
412,088	Great Britain	June 21, 1934
850,200	France	Sept. 4, 1939