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2,550,484

INFANT'S SHOE

Filed Feb. 11, 1949

FIG. 1.

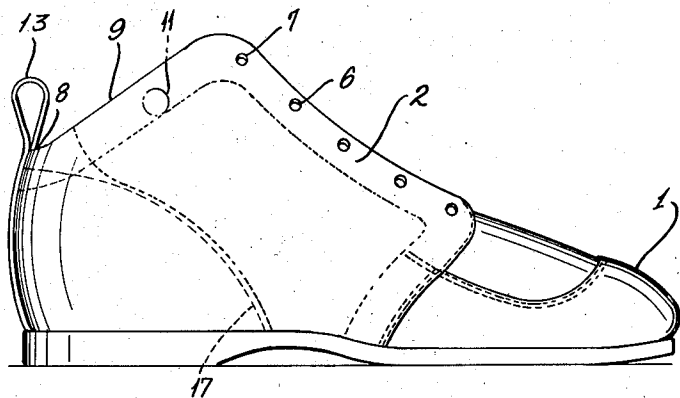


FIG. 2.

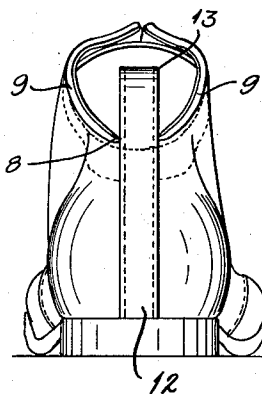


FIG. 3.

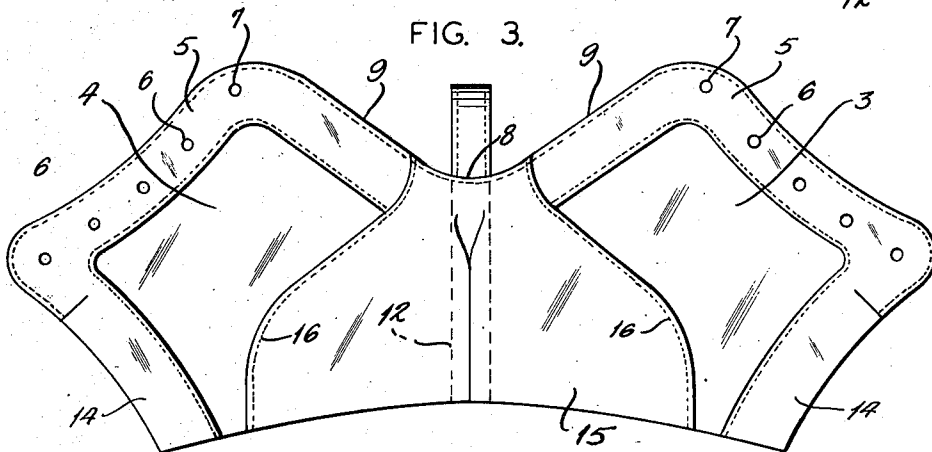
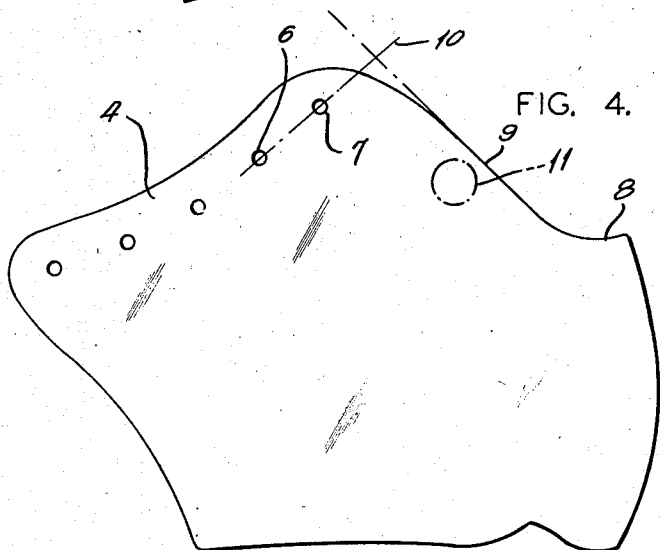


FIG. 4.



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INFANT'S SHOE

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1 Claim. (Cl. 36—8.5)

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This invention relates generally to shoes and particularly to infants' shoes.

In the construction of infants' shoes, as heretofore practiced, it has been customary to build according to what is known as the high-quarter style or according to the low-quarter style. There are well recognized benefits of the high-quarter style in that protection is afforded for the ankle bone, but it has been believed by some authorities that it was more helpful and beneficial to the infant during the formative stages of the feet that they be shod with low-quarter shoes because of the tendency of mothers to lace the high-quarter shoes as tightly as possible in order to provide the infant with the greatest degree of support and protection for the ankle. The tight lacing of such high-quarter shoes, however, reduces the circulation in the foot and in many cases is more detrimental than beneficial.

The object of the present invention, generally stated, is to provide an infant's shoe which provides all the beneficial support and protection heretofore offered by high-quarter shoes, but wherein it is impossible to lace the shoe so tightly that circulation in the foot is impaired.

Other objects will become apparent to those skilled in the art when the following description is read in connection with the accompanying drawings, in which:

Figure 1 is a view in side elevation of a shoe constructed in accordance with the present invention;

Figure 2 is a view in rear elevation of the shoe shown in Figure 1;

Figure 3 is an interior plan view of the quarter section of the shoe shown in Figure 1 before being fitted with a vamp; and

Figure 4 is a pattern outline for the individual quarter sections comprising the quarter shown in Figure 3.

In accordance with the present invention, generally stated, the quarter sections of a shoe upper are cut so as to embrace the ankle bone and have their lace stays, including at least one fastening point, extending above the elevation of the ankle bone area. From the top of the lace stay, however, the quarters are cut so as to extend downwardly and rearwardly, making an angle of approximately 45° with the tread surface of the shoe, and terminating rearwardly in a back line, which is located below the elevation of the ankle bone area. With a shoe constructed in general as just described, protection and support are afforded for the ankle when the shoe is

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laced taut, but in view of the rearward, downward inclination of the top line, the shoe is free of zones of tension extending substantially horizontally about the ankle area. Consequently, there is no danger of constricting the ankle area to an extent such as to impair circulation. On the contrary, the uppermost zone of tension, which extends from the uppermost fastening point to the back line of the shoe, preferably passes through the ankle area and thus provides the desirable support for that region. The tension lines, exerted upon pulling the laces taut, extend throughout the shoe either vertically or at substantial angles with the tread surface, and only in the area which is rigidified by the counter (which embraces the fleshy part of the heel) is there substantial likelihood of tension zones approaching parallel with the tread surface.

Referring now to the drawings for an illustrative embodiment of the invention, the shoe comprises an upper having a forepart 1 and a quarter 2. In the embodiment shown, the quarter 2 consists of two quarter sections 3 and 4, each of which is initially cut according to pattern shown in Figure 4. The quarter sections define a fastening stay 5 having a plurality of fastening points, at least two of which 6 and 7 are disposed above the elevation of the back line 8 defined by the quarter. Between the back line 8 and the lace stay 5, the quarter is cut to define a top line 9 which, as above indicated, in the completed shoe makes an angle of approximately 45° with the tread surface of the shoe when viewed in side elevation. Moreover, it is preferable to cut the top line and position the lacing points 6 and 7 so that the mutual axis of the latter, indicated by the line 10, makes substantially a right angle with the top line 9.

The quarter sections 3 and 4 are cut so as to embrace the ankle bone area of the foot on which the shoe is to be worn, said ankle bone area being indicated at 11, and it will be observed that the back line 8 lies below, while at least one fastening point 7 lies above, the ankle bone area 11.

The two quarter sections 3 and 4 are connected together in the usual manner by a back stay 12, which in the embodiment shown extends upwardly above the back line 8 to provide a pull-tab 13. The assembled quarter sections are provided with a skeleton lining 14 extending about all margins thereof except those which constitute the lasting allowance, and finally a counter-pocket 15 is connected by means of stitch-lines 16

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so that the counter-pocket, below and between the stitch-lines 16, is left unconnected with the assembled quarter sections 3 and 4.

The usual counter 17 is inserted between the counter-pocket 15 and the assembled quarter sections 3 and 4. Thereupon the shoe is lasted in the usual manner.

From the foregoing description those skilled in the art will readily understand that the particular angular arrangement of the top line of the shoe relative to the tread surface and to the axis of the uppermost fastening points eliminates the possibility of severe constriction of the ankle above the ankle bone, yet provides a strong and rugged support and protection for the ankle joint and the ankle bone. The shoe of the present invention may be laced as taut as is consistent with the comfort of the wearer without in any wise interfering with the circulatory functions of freedom of movement of the foot or ankle.

While the particular angularity of the top line relative to the tread surface and to the axis of the fastening points, as herein described and shown, is the preferable arrangement, it is to be understood that such angularity may be varied a few degrees either way from the position shown without substantially impairing the results achieved. It is important, however, that the disposition of the back line 8 be no higher than the elevation of the ankle bone, and such is preferably disposed as close to the top edge of the counter as the conditions of manufacture permit.

While a complete disclosure of one embodiment has been given, it is to be understood that the invention is not limited to the details thereof,

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but that the principles are applicable not only to infants' shoes, but to adults' shoes, and that many other variations and alterations may be made herein without departing from the spirit of the invention or the scope of the appended claims.

Having thus described the invention, what is claimed and desired to be secured by Letters Patent is:

10 In an orthopedic child's shoe having a sole providing a tread surface, and an upper including a quarter defining a back line and a closure opening at the entry therein, stays at the edges of the closure opening, the top line of said upper
15 extending between the back and the top of said stays at an angle of approximately 45° with the tread surface, and said back being positioned below the area of said quarter which embraces the ankle bone of a foot within the shoe.

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

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