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ORTHOPEDIC SHOE

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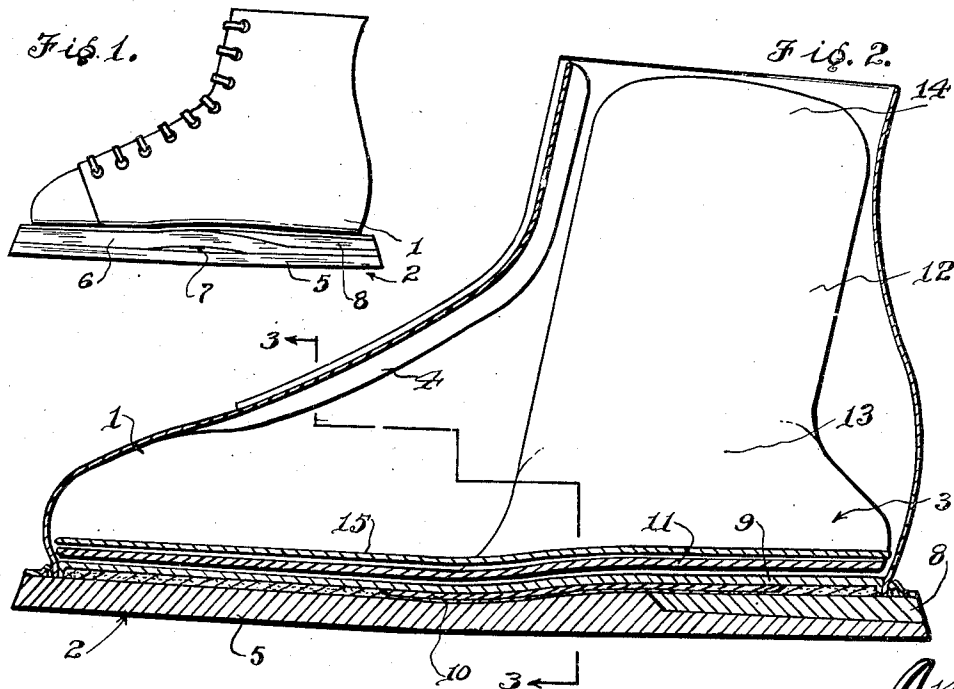
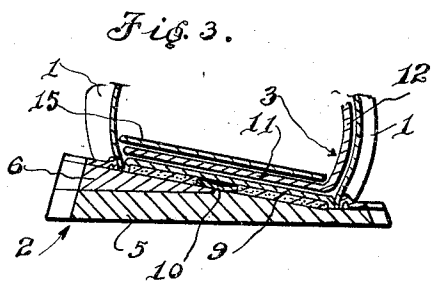


Fig. 4.

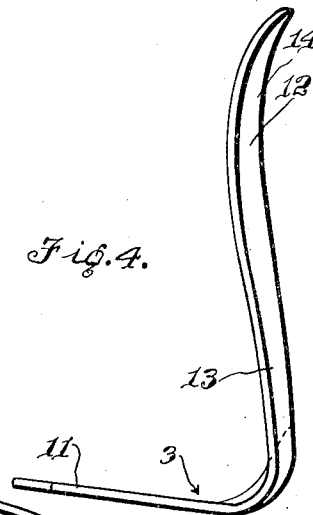
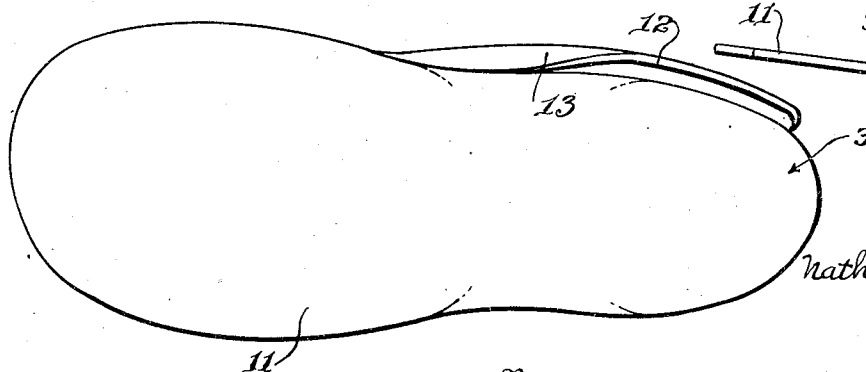


Fig. 5.



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ORTHOPEDIC SHOE

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3 Claims. (Cl. 36—8.5)

This invention relates to orthopedic shoes and more particularly to a shoe for assisting in the correction of a clubfoot condition.

The essential feature or object of the invention is to provide an innersole possessing a shoe-high extension up the outside to help force the ankle over to the inside or to prevent the ankle from turning over on the outside which has happened in 75% of the clubfoot cases. In some cases the extension would have to be reversed in that the extension would be arranged on the inside of the foot.

A further object of the invention is to provide a shoe having an insole inclined downwardly toward the outside for forcing the foot into its normal position.

A still further object of the invention is to provide an innersole for the shoe having an upstanding wall on the outside of the shoe to support the ankle of the wearer.

Other objects of the invention will appear as the disclosure progresses. It is obvious that the actual needs of manufacture may necessitate certain mechanical changes. It is therefore not intended to limit the invention to the embodiment illustrated but rather to define such limits in the appended claims. For a more general understanding of the invention attention is called to the drawing in which like reference characters denote like parts throughout the specification.

In the drawing:

Figure 1 is an outside view of the shoe.

Figure 2 is a longitudinal sectional view of the shoe.

Figure 3 is a section on line 3—3 of Figure 2.

Figure 4 is an end edge view of the innersole.

Figure 5 is a top orthogonal view of the innersole but with the orthogonal lines making slightly more than right angles with that side of the innersole having the upstanding member.

Referring now to the drawing in detail, numeral 1 designates the shoe upper, 2 the sole, 3 the innersole and ankle support all in one piece, and 4 the tongue. The sole extends clear to the rear of the shoe and there is no raised heel portion as in the usual shoe. The sole comprises a bottom layer 5, a wedge shaped pad 6 extending the length of the sole, an instep insert 7 and a rear insert 8. This insert 8 serves to tapering space the tread member 5 from the insole so that the heel portion of the latter is raised while the tread surface of the member 5 is held in a plane. Above the sole is an inner pad 9. Between the last mentioned pad and the sole, at the arch por-

tion of the shoe is a steel arch supporting shank 10. Resting on the pad 9 is the innersole 3.

The combined innersole and ankle support comprises an innersole 11 and an upstanding wall 12 to support the ankle of the wearer and arranged at an acute angle to each other. As shown in Figure 5 the part 11 of this member is indicated as tilted slightly up at the bottom so that the upright portion does not overlie this part 11. The upstanding wall curves inwardly as at 13 and then outwardly as at 14. Resting on the innersole is a sock pad 15.

It will thus be seen that I have provided an efficient and practical method of automatically correcting foot deformities while the patient is wearing the shoe. A shoe of this kind would be particularly valuable in the post-operative treatment of clubfoot possessing as it does some of the characteristics of a splint and thus holding the parts operated upon in desired positions relative to one another. The arch wedge, the heel wedge, and the upstanding wall would be on the outside in most of the shoes built. However in cases of extreme flat feet or in some cases of infantile paralysis as well as some unusual cases that require this elevation the entire construction can be reversed. Whenever the upstanding wall would be on the outside, the wedges would be on the inside, and vice versa. While the shoe is designed primarily for children it is also applicable for adults. The exterior appearance of the shoe is almost the same as a standard shoe and whatever small difference there is cannot be seen except by close inspection.

Having described my invention, I claim:

1. A shoe for the purpose described comprising an outsole including a bottom layer extending the full length and width of the shoe, a wedge member secured to said bottom layer and extending along an edge portion thereof with its thin edge extending inwardly to substantially the longitudinal center line of the shoe, an inner sole seated upon said bottom layer and inner portion of said wedge strip, a brace member having an inwardly extending flat portion seated upon said insole and extending the full width thereof transversely of the shoe and provided with an upstanding wall at the edge of said flat portion adjacent the side of the bottom layer opposite that at which the wedge strip is located, said flat portion and said upstanding wall member being arranged at an angle to each other less than a right angle, said upstanding portion being curved intermediate its length to conform to the ankle portion of the foot of the wearer to form

a brace therefor, and an upper secured to said bottom layer and wedge strip.

2. In a shoe for the purpose described, an outsole including a bottom layer extending the full length of the shoe, a wedge strip resting upon said bottom layer along one longitudinal side of the shoe from end to end thereof with its thin edge innermost, said wedge strip being relatively thick in its forward part and relatively thin in its rear part, said bottom layer being relatively thick beneath said wedge strip and relatively thin at its opposite edge, the upper surface of said thin portion constituting an inclined surface forming a continuation of the plane of the upper surface of said wedge strip, and an inner metal brace member secured upon said inclined surface and extending across the same and formed at one edge with an upstanding integral ankle brace wall on the side edge thereof opposite said wedge strip

and reversely curved to ankle shape in the direction of its length and height.

3. In a shoe for the purpose described, an outsole including a bottom layer extending the full length of the shoe and having a thick and a thin margin at opposite longitudinal edges thereof, a wedge strip resting on said bottom layer along the thick margin thereof, a second wedge member having a longitudinal convex upper face inserted between the bottom layer and the wedge strip midway of the length of the wedge strip, and an inner member secured to said sole and having an angle brace wall connected to the side edge thereof opposite the edge portion of said bottom layer upon which said wedge strip is seated, said inner member continuing across said sole to adjacent said wedge strip and overlying the inner portion of said wedge strip.

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