Sept. 29, 1942. E. F. HANSEN 2,297,552

ARCH SUPPORT

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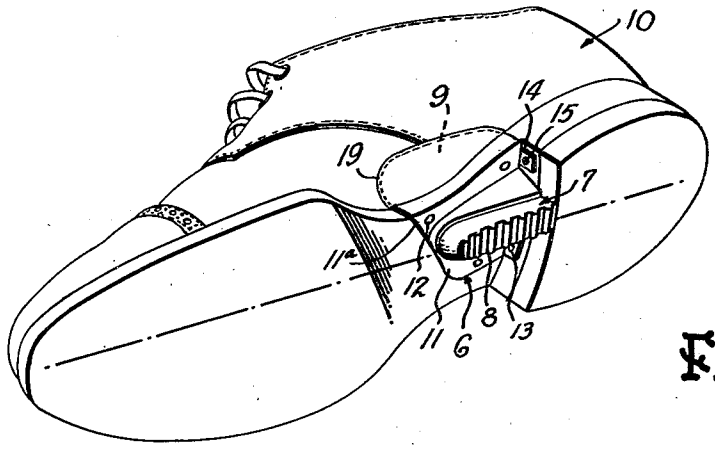


Fig. 1.

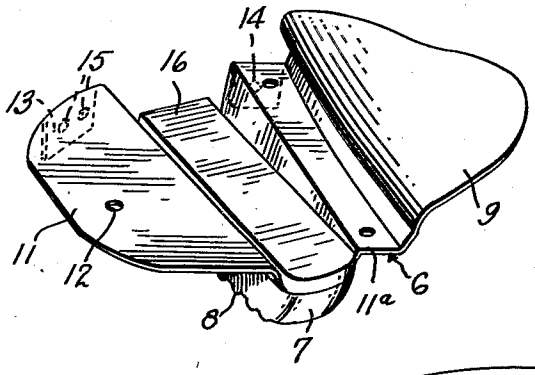


Fig. 2.

Fig. 3.

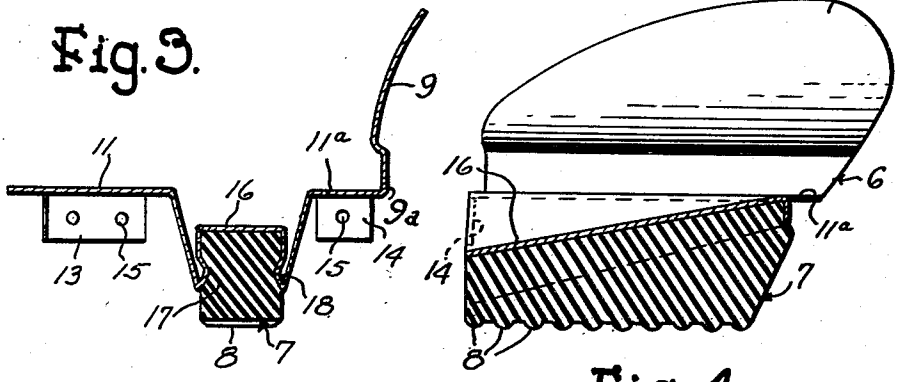


Fig. 4.

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ARCH SUPPORT

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7 Claims. (Cl. 36—76)

This invention relates to arch supports and has particular reference to a device of that character which can be worn on the exterior of a shoe.

Another object of the invention is the provision of a device of the character referred to which is constructed with means for supporting a resilient pad and arranged so that pads of different height and resiliency can be interchanged and replacements can be made when worn or damaged.

Another object of the invention is the provision of an arch support which will prevent the shoe from stretching out of shape, thereby eliminating the tendency of the foot to creep toward the front of the shoe, thus preventing friction between the foot and the shoe and reducing the possibility of the formation of corns and bunions.

Another object of the invention is the provision of an arch support which is so constructed and arranged that it gives the maximum support to the arch of the foot in the direction of the greatest bearing load.

A further object of the invention is the provision of an improved arch support which is simple in construction, light in weight, and one readily attachable to the outside of a shoe in such manner that it can be worn at all times without hurting the foot.

Another object of the invention is the provision of an arch support which is anchored in such manner to the shoe so as to prevent the twisting of the shank when in use.

The foregoing and other objects and advantages of the invention will appear as the description proceeds, reference being made from time to time to the accompanying drawing in which:

Fig. 1 is a perspective view of a shoe equipped with one of my improved arch supports.

Fig. 2 is an enlarged top view of the arch support shown in Fig. 1.

Fig. 3 is a transverse section taken through the device shown in Fig. 2.

Fig. 4 is a longitudinal section.

Referring now more particularly to the drawing it will be understood that in the embodiment herein disclosed my improved arch support consists of a rigid unitary member 6, which can be made of stainless steel, a colored plastic or other suitable material, and a resilient pad 7, which is preferably made of rubber, and corrugated as at 8, to provide a non-skid surface.

The unitary member 6 is formed with a cross section as shown in Fig. 3, and comprises an upwardly extending flange 9, which engages the side of the shoe 10, base portions 11 and 11a which may be nailed as at 12 to the sole of the shoe, end flanges 13 and 14 which may be secured as at 15, to the heel of the shoe, and an inverted channel 16, which has ribs 17, adapted to engage suitable grooves 18 formed in the pad 7. The device is made in pairs to fit right and left shoes. The flange 9 is provided with an offset 9a which is adopted to engage the sole of the shoe.

The shoe 10 may be provided with a pocket 19, into which the flange 9 can be inserted, thereby the better to conceal the device while it is being worn.

Colors to match the colors of the shoes may be provided and the resilient pads 7 can be made to match the height of any heel. The pads 7 can be easily interchanged so that a soft or a hard pad can be used.

It will be noted that the longitudinal axis of the pad 7 extends in a plane in which the greatest bearing load is carried. This is an important feature of the invention. It will also be noted that the device is anchored to the shoe in such manner that it cannot twist out of alignment when in use.

Having described my invention what I claim and desire to secure by Letters Patent is:

1. In an arch support adapted to be worn on the exterior of a shoe, the combination of a base adapted to be secured to the sole of the shoe, a channel member depending from said base, a resilient pad secured in said channel, and an upwardly extending flange adapted to support a portion of the side of the shoe.

2. The combination defined in claim 1, in which the resilient pad is provided with an anti-skid surface.

3. The combination defined in claim 1 in which the resilient pad is provided with an anti-skid surface, and is positioned so that its longitudinal axis is in alignment with the lines of force of the maximum bearing load of the shoe.

4. The combination defined in claim 1, in which the base is provided with flanges adapted to be secured to the heel of the shoe.

5. In an arch support adapted to be worn on the exterior of a shoe, the combination of a base member having nail holes for securing it to the sole of a shoe, said base being bent and rebent to form a channel intermediate its sides, a resilient pad secured in said channel, and an upwardly curved flange formed integral with said base.

6. The combination defined in claim 5, in which the curved flange has an offset portion adapted to engage the shoe sole.

7. The combination defined in claim 5, in which the base is provided with one or more flat integral flanges at one end thereof.

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