

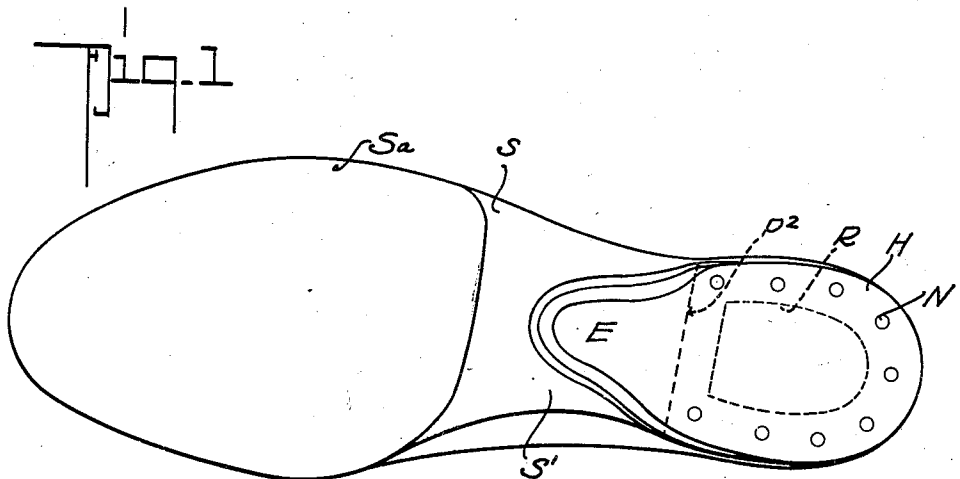
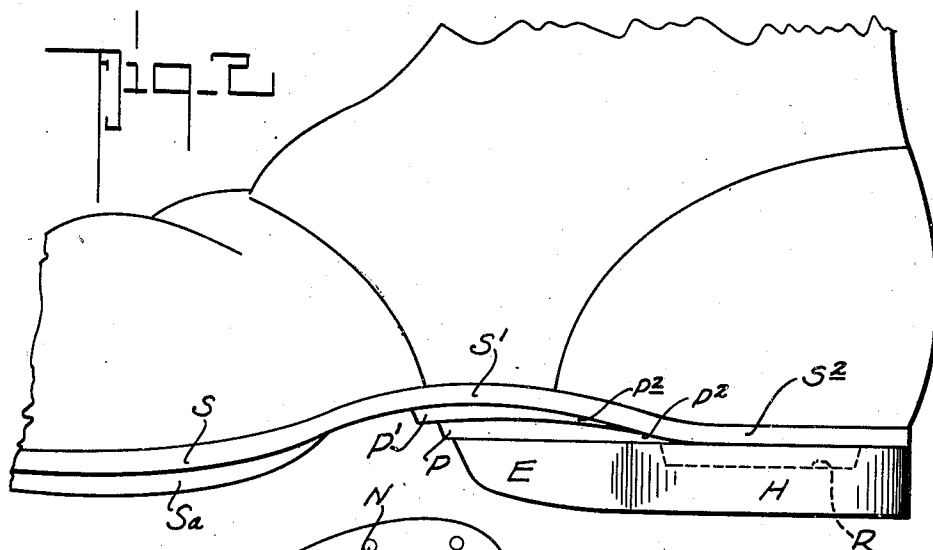
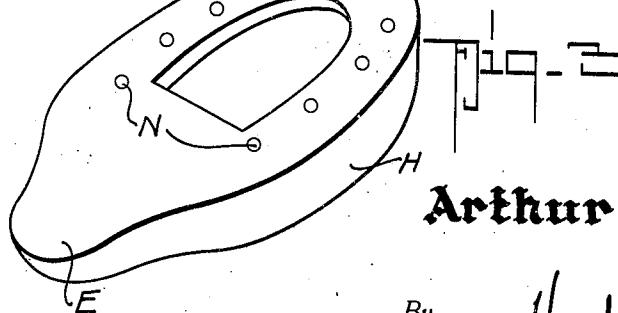
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ARCH SUPPORT

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ARCH SUPPORT

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3 Claims. (Cl. 36—76)

My present invention relates to an improved arch support for a shoe, which support is adapted for use exteriorly of the shank of the sole of the shoe, and is adapted to be embodied in the shoe as a feature of its construction during the process of manufacture, or, due to its simplicity in construction and assembly, the support of my invention may readily be affixed for use on a shoe that is in use.

The invention involves certain novel features of construction and arrangements with relation to the heel and the shank of the sole of the shoe whereby the shank of the shoe is made to conform to the longitudinal arch for the purpose of preventing, as well as correcting, deformities in the longitudinal arch. In carrying out my invention, means exterior of the shoe are provided in combination with the heel and the shank of the shoe for shaping the shank of the sole of the shoe to the longitudinal arch and for preserving the desired shape to insure comfort to the wearer of the shoe.

The arch support is especially adapted for the cure of fallen arches, which deformities are gradually corrected through the use of the device of my invention which adequately supports the arch during the period of time required for such correction, and relieves the victim of the fallen arch of abnormal strains that would otherwise be imposed by the defective arch.

In the accompanying drawing I have illustrated one complete example of the physical embodiment of my invention wherein the parts are combined and arranged according to one mode I have thus far devised for the practical application of the principles of my invention, but it will be understood that changes and alterations may be made in the exemplified structures, within the scope of my claims, without departing from the principles of the invention.

Figure 1 is a bottom plan view of a shoe equipped with the arch support of my invention.

Figure 2 is an enlarged side elevation of part of the shoe; and Figure 3 is a perspective view of the heel of the shoe, detached.

In order that the general arrangement, relation of parts, and the utility of parts may readily be understood I have indicated a typical shoe that includes the main sole S and half-sole Sa, the arch or bent shank S' of the sole of the shoe, and S2 indicates the rear end of the whole sole to which the heel H is attached.

The heel H, which may be of rubber, composition material, or any other material that is suitable for its purpose, is preferably of the pneu-

matic type with a recess R, and nail holes N for the nails N' that affix the heel to the shoe.

At its front or forward end, the heel is fashioned with an extension or lobe E, which has a flat upper face flush with the upper face of the body or main portion of the heel, and as indicated in Figure 3 the lobe is of substantially less width than the body of the heel, and has a rounded front end the lower face of which, it will be noted, is located above the tread-plane of the sole and heel of the shoe. Thus the front lower edge of the lobe is not in position to encounter obstructions, nor is the under face of the lobe in position to frictionally contact with the ground. Therefore the lobe is free from wear, and in position to maintain its inherent characteristics as a supporting member at the front of the heel.

As indicated in Figure 2, the lobe E extends forward beneath the shank S' of the shoe sole approximately to the middle of the shank, and the lobe-portion or extension of the heel is not attached to the sole of the shoe; while on the other hand the body of the heel is directly attached, as usual, by the nails N' to the shoe.

Between the unattached lobe or extension and the arched shank S' of the sole I insert one or more pads P or P', which, as indicated in Figure 1 are of approximately triangular shape, but with rounded front ends. The front ends and sides of these pads, lifts, or shims, P, P' conform to the shape or contour of the lobe E, while the rear portions of these pads taper, as at P2 to a thin edge indicated by dotted lines in Figure 1. These lifts or pads are fashioned of suitable material that is somewhat resilient or elastic, but at the same time they are sufficiently stiff or rigid as to form a yieldable support for the arched shank S' of the shoe sole. As indicated in Figure 2 the lifts or pads are arranged beneath the shank to provide a cantilever support for the shank, i. e. the upper lift P' projects forward of the lower lift, or cushion, or pad P, and the latter also projects forward of the lobe E.

The lobe, the lifts or pads, and the shank S' of the sole may be secured together in any suitable manner, as by cement.

In assembling the parts for correcting a fallen arch, the correction is preferably made gradually, to insure comfort and convenience to the wearer of the shoe. Thus, as an initial step, one pad, as P may be inserted between the lobe and the shank of the sole and securely fastened therein, and this pad possesses sufficient stiffness or rigidity to flex upwardly the shank S' against the under part of the longitudinal arch of the

foot. If the arch requires further correction, at a later period, the upper face of the pad P is detached or unfastened from the shank S' and the pad P' is then inserted between the pad P and the shank, and these parts are then fastened together. The additional pad thus lifts the arch or shank S' and provides a reinforcement for the arch support, and if found necessary or desirable, at a later period of time a third pad may be inserted under the shank of the shoe sole.

In this manner the correct shape of the fallen arch may gradually be built up to eliminate unhealthy conditions of the foot and restore the normal healthy condition of the foot, while at the same time the shoe may be worn with comfort by the wearer as he gradually regains proper balance and correct posture.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. In an arch support for a shoe, the combination with a heel and means for fastening it to the shoe, and an unfastened lobe projecting from the front of the heel, of a reinforcing pad mounted on

the lobe and bearing upwardly against the under face of the shank of the shoe, said lobe having its under-face elevated above the tread-plane of the sole and heel of the shoe.

2. In an exterior arch support for a shoe having an arched sole-shank, the combination with a heel and means for fastening said heel to the shoe, of an integral front lobe on the heel forward of its fastened portion and located beneath the arched sole-shank, a pad inserted between the sole-shank and said lobe, and means for fastening together said sole-shank, pad, and lobe.

3. In an exterior arch support for a shoe having an arched sole-shank, the combination with a heel and means for fastening the heel to the shoe, of a forwardly projecting supporting-lobe on the heel located beneath the arched sole-shank and detached from the shoe, a resilient pad inserted between the lobe and the sole-shank, and means for retaining the sole-shank, pad and lobe in normal position, said lobe having an upwardly curved under face elevated above the tread-plane of the sole and heel of the shoe.

ARTHUR H. GILMAN.