June 10, 1924. 1,497,598

E. SEAVEY

ARCH SUPPORT

Filed Oct. 25, 1922

Fig. 1.

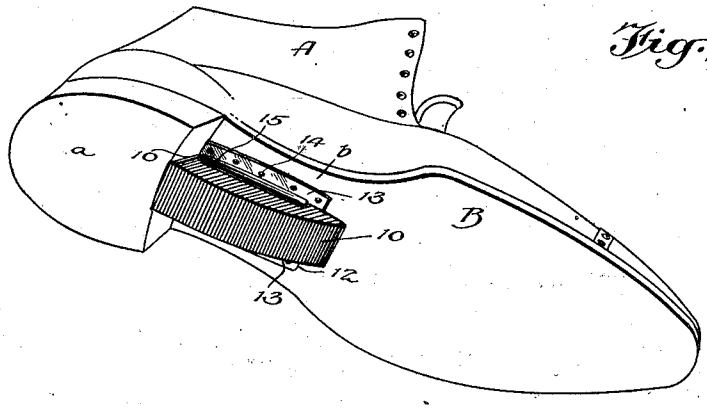


Fig. 2.

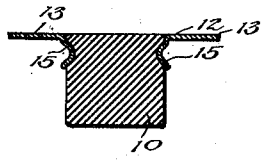


Fig. 3.

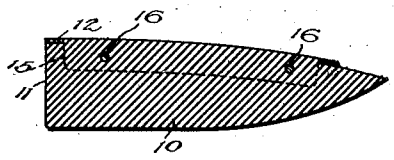
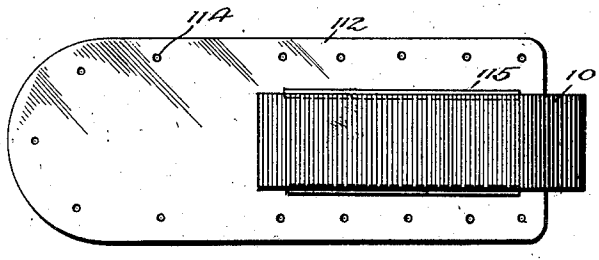


Fig. 4.



WITNESSES

INVENTOR

Eugene Seavey

BY

ATTORNEYS

Patented June 10, 1924. 1,497,598

UNITED STATES PATENT OFFICE.

EUGENE SEAVEY, OF RIDGEFIELD PARK, NEW JERSEY, ASSIGNOR TO C.-V. PRODUCTS CORPORATION, A CORPORATION OF NEW YORK.

ARCH SUPPORT.

Application filed October 25, 1922. Serial No. 596,827.

To all whom it may concern:

Be it known that I, EUGENE SEAVEY, a citizen of the United States of America, and a resident of Ridgefield Park, in the county of Bergen and State of New Jersey, have invented a new and Improved Arch Support, of which the following is a description.

My invention relates to arch supports and particularly to an arch support adapted to be supplied to the shoe sole beneath the arch.

The general object of my invention is to provide a yielding arch support with means to secure the same to the shoe sole beneath the arch and embodying means to brace the shoe sole at the arch thereof to prevent the shoe from breaking down at the sides of the arch support.

Reference is to be had to the accompanying drawings forming a part of this specification, it being understood that the drawings are merely illustrative of one example of the invention.

Figure 1 is a perspective view of an arch support embodying my invention showing the same applied to a shoe;

Figure 2 is a transverse vertical section of my improved arch support;

Figure 3 is a longitudinal vertical section thereof;

Figure 4 is an inverted plan view of a brace means in a slightly different form.

Referring at first more particularly to the form of the invention shown in Figures 1 to 3, I provide a block 10 of resilient rubber tapering at its forward end, the tapered lines at the under side being curved. The rear end 11 of the block 10 is vertical to lie snugly against the front surface of the heel *a* of a shoe A. The arch support is adapted to be applied to the shoe sole B at the arch *b* thereof at the under side. The block 10 is disposed at the medial plane of the sole and presents a substantial under surface to engage the ground and afford substantial support for the shoe arch *b*. The positioning of the block 10 distant from the side edges from the arch *b*, would leave substantial areas of said arch *b* unsupported at each side of the block 10 so that a shoe would have a tendency to break down at the sides of said block. In order to brace the arch *b* and at the same time provide means to securely fasten the block 10 in position, I secure said block to a base 12 having a width to project laterally at each side of said block in the form of flanges 13, said flanges having holes 14 for nails or other suitable fasteners.

The base 12 is formed with longitudinal side flanges 15, the base being open between said flanges to receive the top portion of the block 10. The depending flanges 15 are indented or formed with a corrugation as clearly shown in Figure 2 so that the engagement of the rubber of the block 10 with said flanges and the entrance of the material of said block into the central opening of the base 12 forms an effective interlock between the block 10 and the base 12. In practice the block 10 may be vulcanized to the base 12 to aid in holding the block against accidental detachment. If desired transverse pins 16 may be passed through the flanges 15 and the portion of the block 10 between said flanges.

In Figure 4 the base 112 has flanges 115 corresponding with the flanges 15, the block 10 being the same as previously described. Said plate 112 has holes 114 for receiving nails or screws for fastening the base to the shoe and the base is in the form of a broad plate having a length to lie between the lifts of the shoe heel *a*.

For ordinary use the rubber block 10 will not be vulcanized to the base plate 12 or 112 so as to be the more readily removable whenever the sole and the heel are to be renewed. Vulcanizing is preferably resorted to where the wear is to be severe as in the case of a baseball player or one engaged in other athletic activities.

It is to be noted that the base 12 or 112 is elongated and generally of oblong form and also that the resilient block 10 is elongated. The block and the base when disposed longitudinally on the shank of the shoe will present sufficient tread surface to take the pressure exerted by the weight of the wearer. Also, it is to be noted that the space between the side flanges 15 is open at the back and front. The open rear end of the space between the flanges results in the forcing of the rubber of the block rearwardly under the pressure for the block to assume a firm contact against the front surface of the shoe heel whereas the front opening similarly results in that the rubber will be forced forwardly under the pressure and crowded be-

neath the arch at the front thereof adjacent the ball of the foot affording support at the most important point. Moreover, the described formation of the base and block overcomes the objections to a mere depending plug on the arch in that the plug is liable to trip on stair steps and on other objects, whereas there is no probability of my improved block catching on objects beneath a shoe. Furthermore, to prevent all possibility of the block 10 catching on an object said block tapers toward the front and the under surface forms a curvilinear angle with the top surface of the block and therefore with the shank of the shoe incident to the forward crowding of the rubber.

I would state in conclusion that while the illustrated example constitutes a practical embodiment of my invention, I do not limit myself strictly to the exact details herein illustrated, since, manifestly, the same can be considerably varied without departure from the spirit of the invention as defined in the appended claims.

Having thus described my invention, I claim:

1. As an article of manufacture, an arch support consisting of an elongated resilient block, and an oblong base carrying said block and adapted to be applied to the shank of the shoe beneath the arch, said base extending laterally at the sides of the block to brace the arch when the device is applied to a shoe, said block extending longitudinally of said base and said base having longitudinal flanges at the sides of the block and interlocking the latter, the space between said flanges being open at the back of the base for the material of the block to be forced rearwardly against the front of the shoe heel when the support is applied to the shoe shank, said space being also open at the front to permit the material of the block to be forced forwardly under the pressure due to the weight of the wearer so that the material of the block affords material support to the wearer adjacent the ball of the foot.

2. As a new article of manufacture, an arch support consisting of a resilient block adapted to be disposed on a shoe at the arch thereof, and an oblong base carrying said block, said base having an opening extending longitudinally thereof and said block extending into said opening; together with longitudinally disposed flanges on said base at each side of said opening, said flanges having each a longitudinal corrugation, the material of said block interlocking with the corrugations, the flanges presenting between the same a space open at the front to permit the material of the block to be forced forwardly toward the ball of the foot when the device is worn to thereby afford support for the wearer adjacent the juncture of the shank of the shoe and the sole thereof and said block having a tapered front end.

EUGENE SEAVEY.