S. B. TUSIS.

ARCH SUPPORT FOR THE FOOT.

APPLICATION FILED JAN. 24, 1920. RENEWED APR. 18, 1921.

1,380,504. Patented June 7, 1921.

Fig. 1.

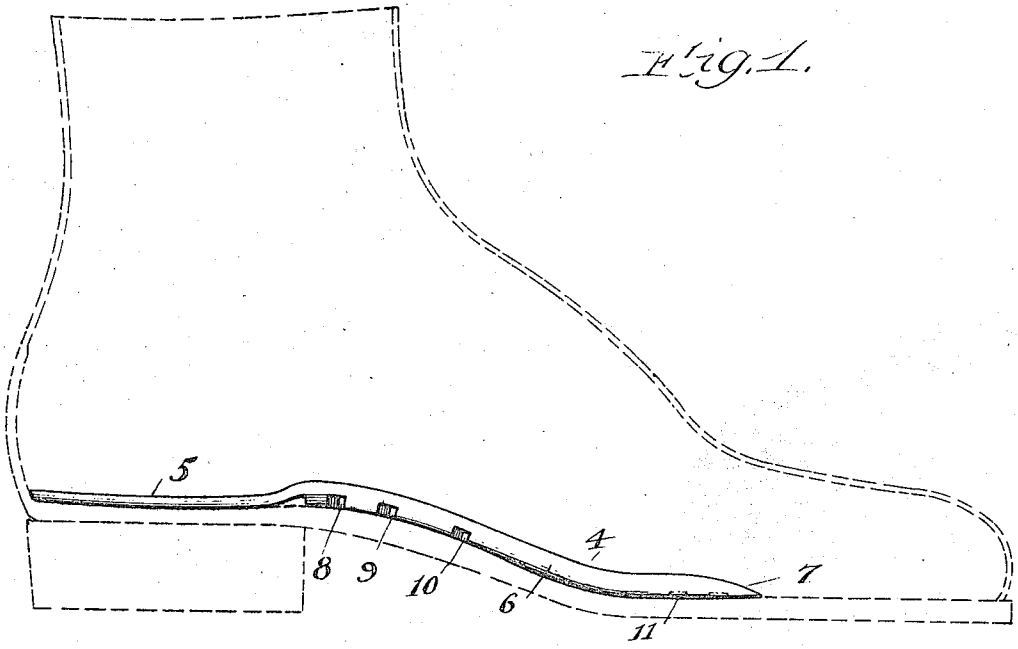


Fig. 2.

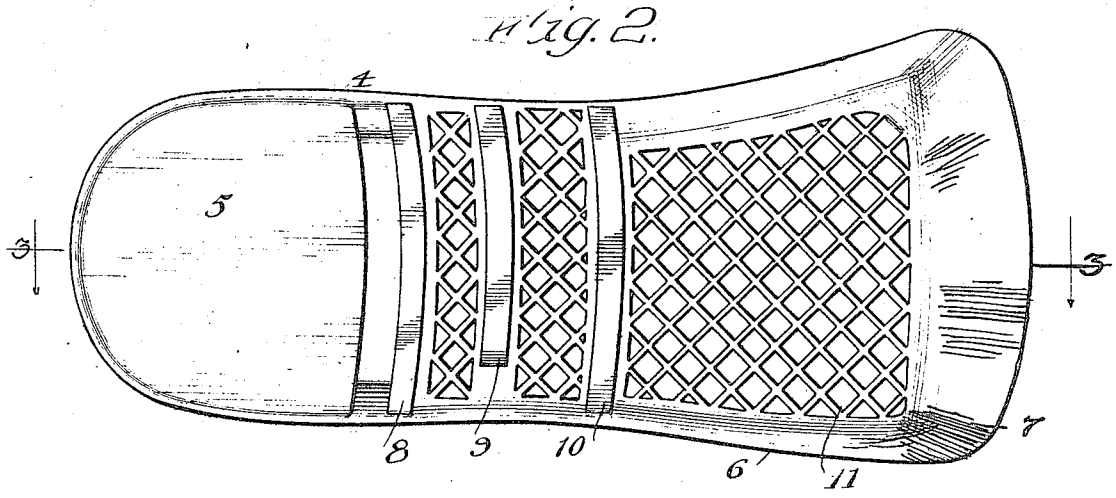
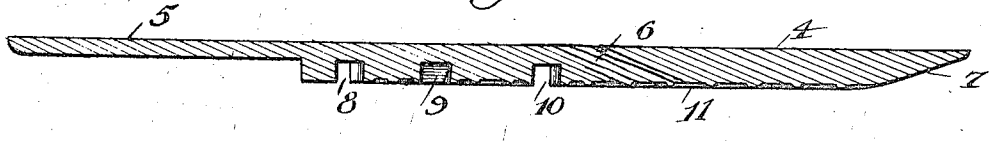


Fig. 3.



Witness:
E. L. Farrington

Inventor:
Soter B. Tusis,
By Glenn S. Noble, Atty.

UNITED STATES PATENT OFFICE.

SOTER B. TUSIS, OF CHICAGO, ILLINOIS.

ARCH-SUPPORT FOR THE FOOT.

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To all whom it may concern:

Be it known that I, SOTER B. TUSIS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Arch-Supports for the Foot, of which the following is a specification.

This invention relates more particularly to devices which are adapted to be inserted in boots or shoes for supporting the arch and other portions of the foot, and for relieving pressure on certain portions of the foot whereby the arch and other portions will be supported and held in a natural and comfortable position.

The objects of this invention are to provide a device of this character which will be advantageous in treating or relieving certain ailments of the feet; to provide a device of this character which will provide separate points of support corresponding to the different portions of the foot between the articulations; to provide a device of this character having supporting portions separated by grooves for increasing the flexibility of the device; and in general, to provide such an improved arch or foot support as will be described more fully hereinafter. In the accompanying drawings illustrating this invention:

Figure 1 is a side view of the device shown in position in a shoe;

Fig. 2 is a bottom plan view; and,

Fig. 3 is a longitudinal sectional view.

As illustrated in these drawings, 4 indicates the support or cushion which preferably extends from the heel to a point under or adjacent to the ball of the foot. This device may be made of any suitable material or materials, but is preferably made of some yielding or resilient material, such as rubber, leather, or cork, or a composition having more or less of the characteristics of these materials. The support comprises a relatively thin portion 5 corresponding with the heel and a relatively thick portion 6 which extends from the heel forwardly to about the ball of the foot. The edges of the device are skived or thinned, as indicated at 7, so that it will fit closely in the bottom of the shoe. The thickened portion is provided with three transverse grooves 8, 9, and 10, corresponding in position to the joints or articulations in the arch of the foot, so that the intermediate portions of the foot will be supported while relieving the pressure on the joints or articulations. These grooves or weakened portions also increase the flexibility of the device so that it will flex or bend in accordance with the bending of the foot. The upper surface of the heel portion 5 is preferably made in alinement with the upper surface of the balance of the support so that it will bend down under the weight of the heel to the position shown in Fig. 1. This increases the flexibility of the heel portion and also relieves the pressure on the heel. By having the front end of the device terminate at approximately the ball of the foot, or adjacent to the forward end of the metatarsus, the pressure on the joints or articulations at this point is relieved and the foot is supported in an exceedingly comfortable manner, and in a way to relieve ailments of the adjacent portions of the foot. It will be noted that the central groove 9 does not need to extend entirely across the support, as the corresponding articulation is shorter, or does not extend as far across the foot as the adjacent articulations.

The bottom of the device is preferably provided with a plurality of recesses 11 to form an irregular or cup-like surface which will coact with the sole of the shoe to hold the device in position, although it will be noted that the device may also be cemented or otherwise fastened if desired.

From the above description, it will be seen that I provide an arch or foot support of simple construction and one which will support the foot in a natural manner, and assures the natural flexibility of the foot while incased in a shoe. This is particularly brought about by the three line or three point support of the arch corresponding to the natural divisions thereof.

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

1. An arch support for the foot, comprising a body portion having transverse grooves corresponding in position to the articulations of the foot whereby the foot will be supported mainly between the joints or articulations.

2. A flexible support of the character set forth, comprising a body portion adapted to fit under the arch and adjacent portion of the foot, said body portion having three

transverse grooves corresponding in position to the articulations in the arch of the foot.

3. An arch support adapted to be inserted in a boot or shoe, comprising a body portion formed of resilient material and having supporting sections connected by portions of greater flexibility, said connecting portions corresponding in position with articulations of the foot.

4. A support of the character indicated, comprising transverse supporting portions with flexible connections, said connections corresponding in position with articulations of the foot.

SOTER B. TUSIS.