July 3, 1928. 1,676,162

R. SCHILLER

ARCH SUPPORT

Filed Aug. 20, 1925

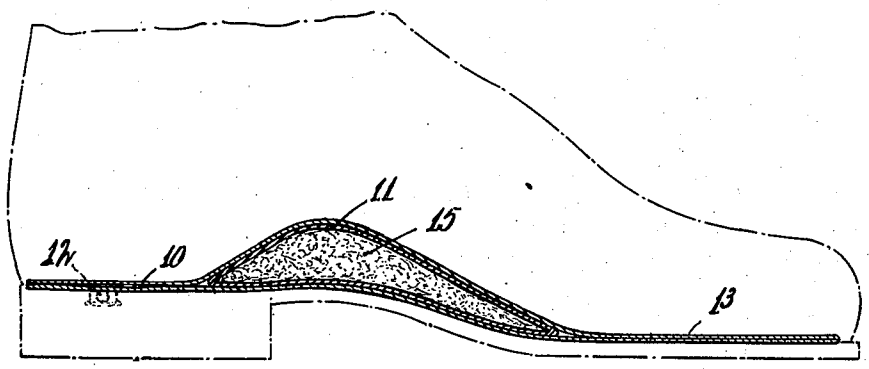


FIG. 1

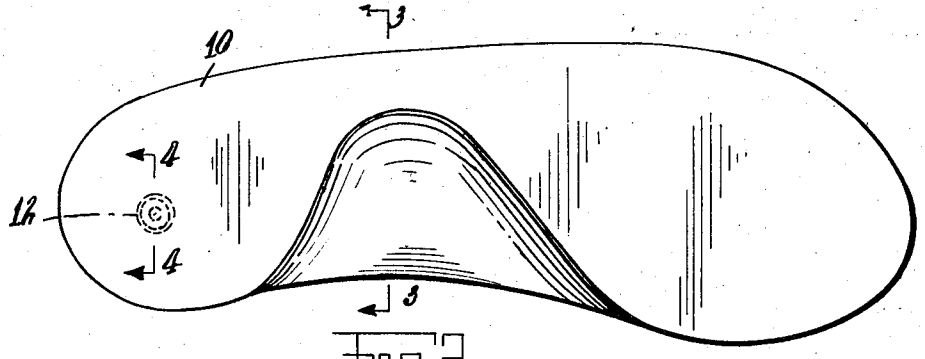


FIG. 2

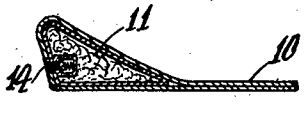


FIG. 3

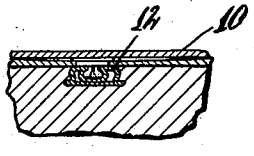


FIG. 4

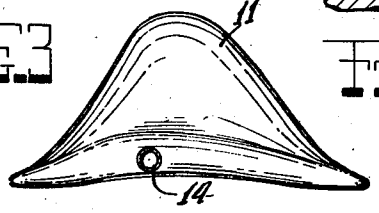


FIG. 5

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Patented July 3, 1928. 1,676,162

UNITED STATES PATENT OFFICE.

RUDOLF SCHILLER, OF BROOKLYN, NEW YORK.

ARCH SUPPORT.

Application filed August 20, 1925. Serial No. 51,409.

This invention relates to improvements in arch supporters, and particularly to that class adapted to be secured within shoes, or like apparel for the relief and comfort of persons suffering from weakness or bone displacement in the feet, and the principal object of the device is to provide an article of this character which shall give the required support and yet preserve a condition of elasticity and capacity to adapt itself smoothly to the contour of the foot, thus greatly increasing the comfort of the wearer.

A further object is to provide a supporter which may be inflated to any desired degree of hardness.

Another object is the provision of means to secure the said device to the shoe in such a way as to prevent the slipping, or any misplacement thereof.

Other objects and characteristic features of my invention will be more readily understood from the following description and from the drawings accompanying this specification.

Referring to the said drawings:

Figure 1 shows a side view of the device in section.

Figure 2 shows a full plan view.

Figure 3 shows a section on the line 3—3 of Figure 2.

Figure 4 shows a section on the line 4—4 of Figure 2.

Figure 5 shows an inflatable inner member.

The invention comprises the following component parts;

A container 10 is constructed of any suitable material, preferably leather, canvas, or the like, the said container being so formed as to permit of opening for the insertion of the inner member 11. A snap fastener 12 serves as means, both to keep the container closed, and also to secure it in operative position within the shoe. The forward portion as shown at 13 may be secured together, and acting with the main body of the device serves in the capacity of an inner sole affording protection against dampness, cold, etc.

The inner member 11 is constructed of flexible material, preferably of rubber, or the like, and has secured within the wall thereof an air valve 14 by means of which it may be inflated to the desired degree. A filler of resilient material, preferably of a cellular nature such as sponge rubber or the like as shown at 15 may be placed within the air chamber and will afford a considerable degree of support without inflation if it is desired to use the device in this way. I do not confine myself however to the use of this material. It forms an optional feature of the device which adds to the value thereof, but may be discarded without departing from the spirit of the invention.

As illustrated, the device rests on the inner sole of the shoe. It is open at its rear extremity, being secured in its closed position by the snap fastener 12 which also serves to hold the device in place as before stated. It may be removed from the shoe, and other inner members inserted at will and may be inflated by the use of a hand pump, or like device.

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

An arch supporter insertible in a shoe, comprising upper and lower sheets of flexible material extending the length of the shoe, said sheets being unattached from the ball portion rearwardly to the heel, an inflatable pad adapted to be inserted between said sheets under the arch, said pad containing a core of sponge rubber, and means for detachably securing the sheets at their rear end, said means also detachably securing the supporter to the shoe to prevent displacement thereof.

In testimony whereof I have affixed my signature.

RUDOLF SCHILLER.