

June 27, 1939.

A. J. COTE

2,163,906

ARCH SUPPORT

Filed March 31, 1938

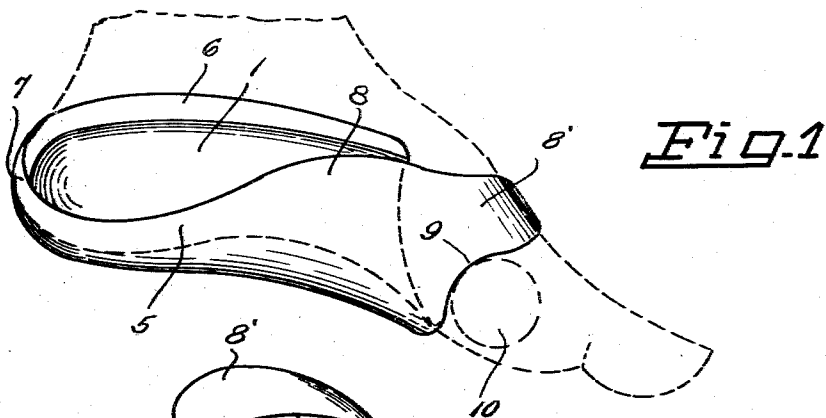


Fig. 1

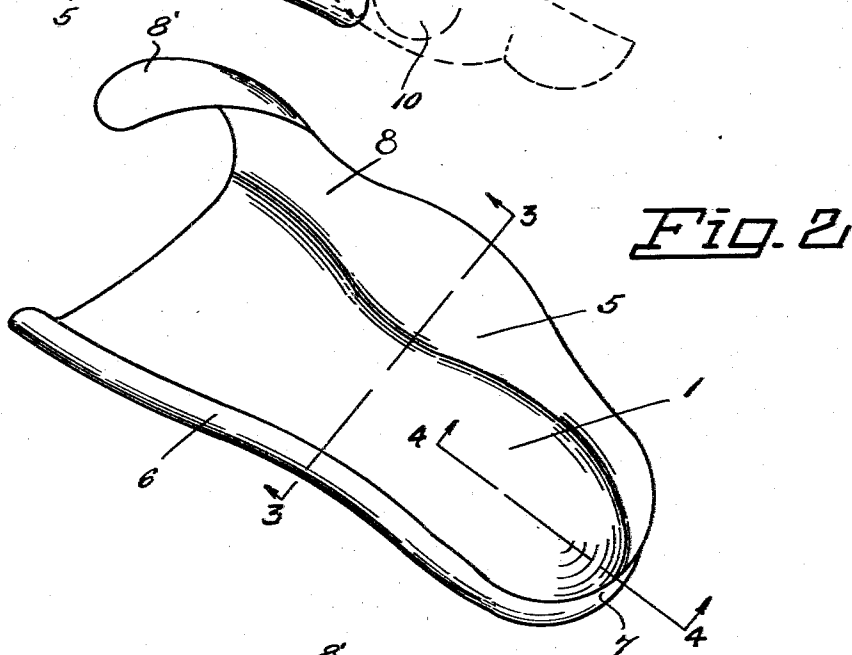


Fig. 2

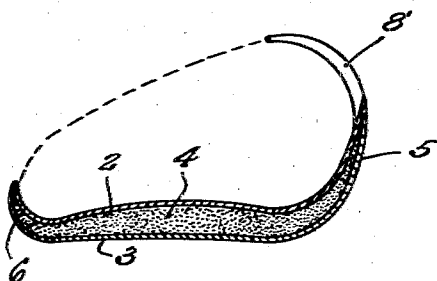


Fig. 3

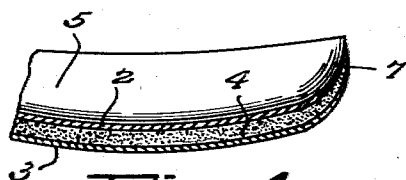


Fig. 4

INVENTOR
Adelard J. Cote
BY *Glenn L. Fish*
ATTORNEYS.

UNITED STATES PATENT OFFICE

2,163,906

ARCH SUPPORT

Adelard J. Cote, Spokane, Wash.

Application March 31, 1938, Serial No. 199,268

2 Claims. (Cl. 36—8.5)

This invention relates to an arch support and it is one object of the invention to provide a device of this character so constructed that while it will serve very effectively to support the arch of a foot, it will be sufficiently flexible to permit it to conform to the shape of the instep and heel of the foot and fit comfortably in a shoe.

Another object of the invention is to so form the support that when it is worn in a shoe it will fit about the sides and back of the heel and thus be prevented from sliding forwardly out of its proper position.

Another object of the invention is to provide the support with an extension at its front which may fit over the front portion of a foot transversely to assist in holding the support in its proper position without applying pressure to a bunion.

Another object of the invention is to provide an arch support which is of simplified construction and capable of being easily shaped to conform to the contour of the foot to which it is applied.

The invention is illustrated in the accompanying drawing, wherein:

Fig. 1 is a perspective view of the improved arch support looking at the inner side thereof and showing the support applied to a foot, indicated by dotted lines.

Fig. 2 is a perspective view of the support looking at the outer side thereof.

Fig. 3 is a sectional view taken transversely through the support along the line 3—3 of Fig. 2.

Fig. 4 is a sectional view taken along the line 4—4 of Fig. 2.

This improved arch support consists of a hollow body 1 formed of upper and lower sheets 2 and 3 of leather or other pliable material which is of such texture that it will be soft and non-porous. While it has been stated that the material from which the sheets are formed is soft, it is to be understood that it will be form-retaining after being shaped while moist and then dried. The leather sheets forming the walls of the body are cut to form a support of the proper outline and their marginal edges are secured to each other by glue or in any other suitable manner, and referring to Figs. 3 and 4, it will be seen that the margins of the body are gradually reduced in thickness to form feathered edges about the body.

A spongy filling 4 of flaky, finely ground material is provided between the walls of the hollow body and fills the entire space between the walls. This material is preferably vermiculite but other materials found suitable may be used. Since the sheets 2 and 3 are of leather and the filling is a

spongy material, the device may absorb moisture and may be shaped by pressure before being used and also reshape itself during use, so that it will conform to the shape of a person's foot when subjected to the pressure of a person's weight and fit comfortably in a shoe. The fact that it will shape itself when subjected to the pressure of a person's weight will also cause the support to provide support where needed. The inner and outer side portions of the body are curved upwardly about the heel as shown at 7. Therefore, the support will be formed with upturned flanges along its sides and back, which flanges merge into each other and provide means for fitting about the foot and preventing the support from shifting transversely in a shoe or longitudinally toward the front. The inner flange is of appreciably greater depth than the outer flange and extends upwardly to provide a portion 8 which fits snugly against the instep and terminates in a tongue 8' which extends transversely of the body toward the outer side thereof. This tongue is curved longitudinally, as shown in Figs. 2 and 3, and fits snugly over the front portion of the foot to act as a brace and maintain the support in proper engagement with the foot. It should also be noted that at its front end the body has its inner side portion cut to form a curved recess 9 so that in case a person has a bunion, the front edge of the body will extend about margins of the bunion instead of overlying the same and pressure will not be applied to the bunion. The bunion will thus be relieved of pressure by the arch support and, in addition, the inner side portion of the support may serve to prevent a shoe from pressing against the bunion. I have, therefore, provided an arch support which will fit properly and be self-shaping when moist but retain the imparted shape when it dries.

Having thus described the invention, what is claimed is:

1. An arch support comprising a body having upper and lower walls formed of sheets of pliable material having their marginal edges secured to each other and forming feathered edges for the body, a filling of flaky absorbent material for the space between the walls of said body adapted to be compressed when moistened, the rear end of said body and opposite side edge portions thereof being curved upwardly to form flanges for preventing transverse and forward shifting of the support when in use, said inner flange gradually increasing in height toward the front end to provide an instep-engaging portion, a tongue carried by the front end of the instep-engaging portion

and extending therefrom transversely across the body and curved longitudinally for engaging across the front portion of a foot, and the said instep-engaging portion having its front edge
5 formed with a curved recess for accommodating a bunion.

2. An arch support comprising a body of pliable material adapted to fit in a shoe under the heel and instep portion of a foot and conform
10 to the contour thereof, said body having marginal portions extending upwardly to engage the foot

and prevent transverse and forward shifting of the support when in use, the upwardly extending inner marginal portion increasing in height towards its front end, and a tongue extending from the front end of the said inner marginal portion
5 at an upward incline and curved longitudinally for extending across the front portion of a foot at substantially the base of the instep in close contacting engagement therewith.

ADELARD J. COTE.

10