June 20, 1939. A. L. SCHENK 2,163,012

TOE PAD

Filed Jan. 26, 1938

Fig. 1.

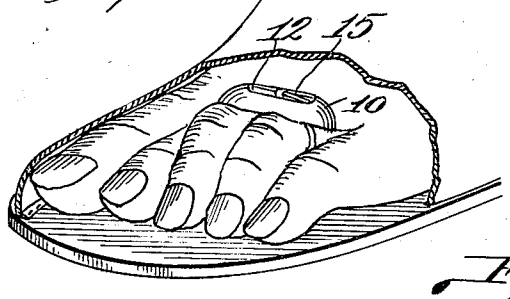


Fig. 2

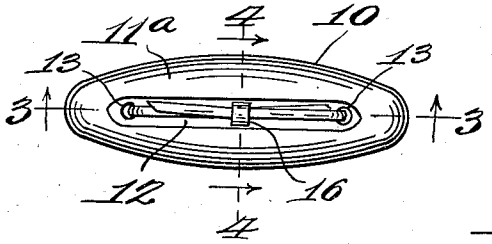


Fig. 5.

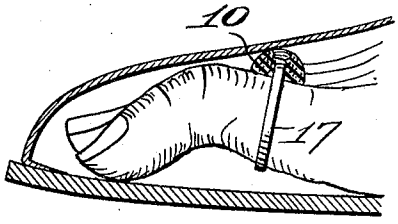


Fig. 3

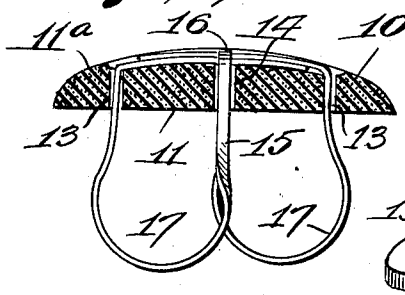


Fig. 6.

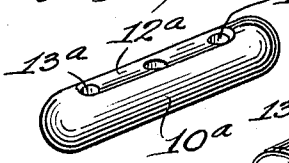


Fig. 7

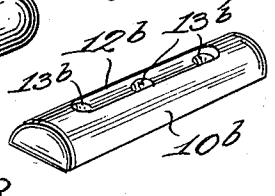


Fig. 8.



Fig. 4.

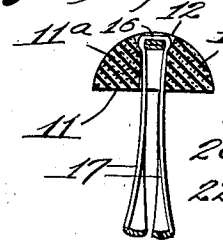


Fig. 9.

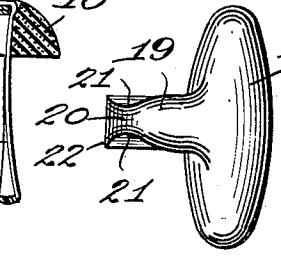


Fig. 10

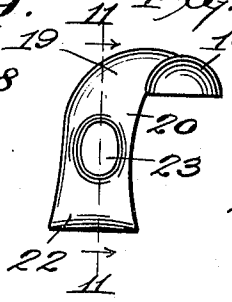
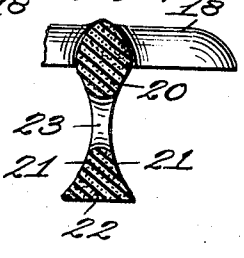


Fig. 11



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TOE PAD

Abraham L. Schenk, Los Angeles, Calif.

Application January 26, 1938, Serial No. 187,006

2 Claims. (Cl. 128—81)

My invention relates generally to toe pads, and more particularly to an elastic pad or cushioning member that is adapted to be positioned transversely on the toes directly over or to the rear of the phalangeal joints for the purpose of correcting certain deformities or irregularities of the toes, and likewise for the prevention and elimination of corns on the phalangeal joints and which corns, it will be understood, are generally caused by undue pressure and rubbing contact of the toes against the shoe.

Further objects of my invention are to generally improve upon and simplify the existing forms of similar toe pads; to provide a cushioning pad that may be easily and quickly applied to or removed from the toes and which is especially designed for correction of the irregularity generally known as "hammer" toes and further, to provide a device of the character referred to with simple and efficient means, capable of being easily and quickly adjusted for retaining the cushioning pad in the desired position upon the toes.

Further objects of my invention are, a toe pad of the character referred to that will be of a hygienic character, capable of being readily cleansed and sterilized and to provide a device that is relatively simple in construction and inexpensive of manufacture.

With the foregoing and other objects in view, my invention consists in certain novel features of construction and arrangements of parts that will be hereinafter more fully described and claimed and illustrated in the accompanying drawing in which:

Fig. 1 is a perspective view of the forward portion of a shoe with parts broken away to show the toes of the foot within the shoe and with a protective cushion in position upon the toes for the purpose of correcting upwardly arched or "hammer" toes.

Fig. 2 is a top plan view of one form of the cushioning pad.

Fig. 3 is a vertical longitudinal section taken on the line 3—3 of Fig. 2.

Fig. 4 is a cross-section taken on the line 4—4 of Fig. 2.

Fig. 5 is a vertical section taken through the toe-portion of a shoe and showing my improved cushioning-pad in position upon the toes.

Figs. 6, 7 and 8 are perspective views of modified forms of the cushioning-pad.

Fig. 9 is a top plan view of a further modified form of the pad.

Fig. 10 is a side elevational view of the form of pad illustrated in Fig. 9.

Fig. 11 is a vertical section taken on the line 11—11 of Fig. 10.

Referring by numerals to the accompanying drawing, and particularly to the form of pad illustrated in Figs. 1 to 5 inclusive, 10 designates the body of the pad which is preferably composed of sponge-rubber, having a thin velvet-like skin, and this body has the shape of an elongated semi-ellipsoid.

The under face 11 of the body is substantially flat, and the upper face 11*a* is convex both longitudinally and transversely.

Formed in the upper surface of the body 10 is a longitudinally disposed narrow, shallow channel 12, the ends of which terminate a short distance inwardly from the ends of the body 10. The purpose of the channel 12 is to receive portions of the tie so that the same will not project above the surface of the pad.

Formed vertically through the body 10 from the ends of this channel are apertures 13, and a similar aperture 14 is formed through the center of the body.

In order to retain the cushioning pad in proper position upon the toes, a lacing or tie 15 is formed in a single piece from soft flexible material such as leather or narrow tape, and the central portion of this tie is doubled and passes from the bottom upwardly through the aperture 14 and the end of the doubled portion of the tie that projects into the groove or channel 13 constitutes a loop 16 that receives the ends of the tie and retains the same in the groove or channel.

Portions 17 of the tie beyond the doubled central portion are adapted to pass beneath an adjacent pair of toes of the foot, and the ends of the tie extend upwardly through the apertures 13, thence toward each other through the groove 12 with the overlapping end portions of said tie engaged by the loop 16.

The construction just described, and particularly the flexible tie provides means whereby the pad may be firmly retained in its adjusted position upon the toes for, after adjustment, the ends of the tie are pulled outwardly away from each other until the loop portions of the tie fit snugly around the toes and the tie is held in such position by the eye or loop 16 that receives both ends of said tie.

In the modification illustrated in Fig. 6, the cushioning-pad 10*a* takes the form of a cylinder having rounded ends, and formed in said cylinder is a longitudinally disposed channel 12*a*,

and extending downwardly from the ends and central portion of said channel through the body of the pad, are apertures 13a.

In the modification illustrated in Fig. 7, the body 10b of the pad is half round in cross-section, and formed in the top thereof is a longitudinally disposed channel 12b leading from the ends and center of said channel downwardly through the body of the pad.

In the modification illustrated in Fig. 8, the body 10c of the pad takes the form of a fairly thick strip of compressible material having rounded ends and provided in its upper surface with a longitudinally disposed channel 12c and with apertures 13c extending downwardly from the ends and center of said channel.

Obviously, the body of the cushioning pad may take various other shapes and accomplish the same results that are accomplished by the particular form of pad illustrated in Figs. 1 to 5 inclusive.

In the modified construction illustrated in Figs. 9, 10 and 11, the body 18 of the pad is very similar in shape to the pad 11, but without the longitudinal channel and apertures.

Formed integral with one side of the pad body 18 at the center thereof is an outwardly projecting lug 10 from which depends a web 20 that is adapted to occupy a position between the toes that are engaged by the cushioning pad. In order that this web may fit conveniently between the toes, the side faces 21 of said web are made concave, as illustrated in Fig. 11, and the lower end of the web is widened, as designated by 22, so as to fit beneath the side portions of the toes between which the web is positioned.

Formed in the intermediate portion of web 20 is an aperture 23 which is for the purpose of eliminating any contact of the web with soft corns that might occur on the side faces of the toes between which the web is positioned.

In the use of my improved cushioning pad, the same is positioned on top of the toe or toes that are to be treated or corrected, with the tie passing around the toes to which the pad is applied. Where the pad is used for the relief and correction of "hammer" toes, said pad is positioned just to the rear of the joints that are elevated, and thus the pressure of the shoe is applied to the pad so as to force same downwardly and thus the "hammer" toes are urged toward their normal positions and the elevated joints of said "hammer" toes are prevented from contacting with the shoe, which condition would otherwise result in the development of corns.

In the event that corns have already developed on the "hammer" toes prior to the application of the cushioning pad, the latter will prevent the shoe from contacting with the corns with the result that the latter will, in due time, disappear.

Obviously, my improved cushioning pads may be made in various sizes to correspond to the various sizes of toes, and likewise said pads may be made in varying thicknesses to meet the requirements of individual cases and different conditions.

While my invention is particularly designed for the treatment and correction of "hammer" toes, the device may be utilized for straightening and rendering comfortable misshapen toes, and for counteracting the pressure and friction of the footwear which, as is well-known, tends to develop corns and the like.

Thus it will be seen that I have provided a toe-corrective device in the form of a cushioning pad that is relatively simple in construction, inexpensive of manufacture and very effective in performing the functions for which it is intended.

It will be understood that minor changes in the size, form and construction of the various parts of my improved toe pad may be made and substituted for those herein shown and described without departing from the spirit of my invention, the scope of which is set forth in the appended claims.

I claim as my invention:

1. A toe pad comprising a body composed of soft flexible material having a length sufficient to overlie the members of an adjacent pair of toes, the upper surface of said body being convex longitudinally and transversely, a web formed integral with and extending outwardly and thence downwardly from the central portion of said body and there being an aperture formed in the central portion of said web.

2. A toe pad comprising a body composed of soft flexible material having a length sufficient to overlie the members of an adjacent pair of toes, the upper surface of said body being convex longitudinally and transversely, a web formed integral with and extending outwardly and thence downwardly from the central portion of said body and the side faces of which web are concave and there being an aperture formed in the thin central portion of said web.

ABRAHAM L. SCHENK.