

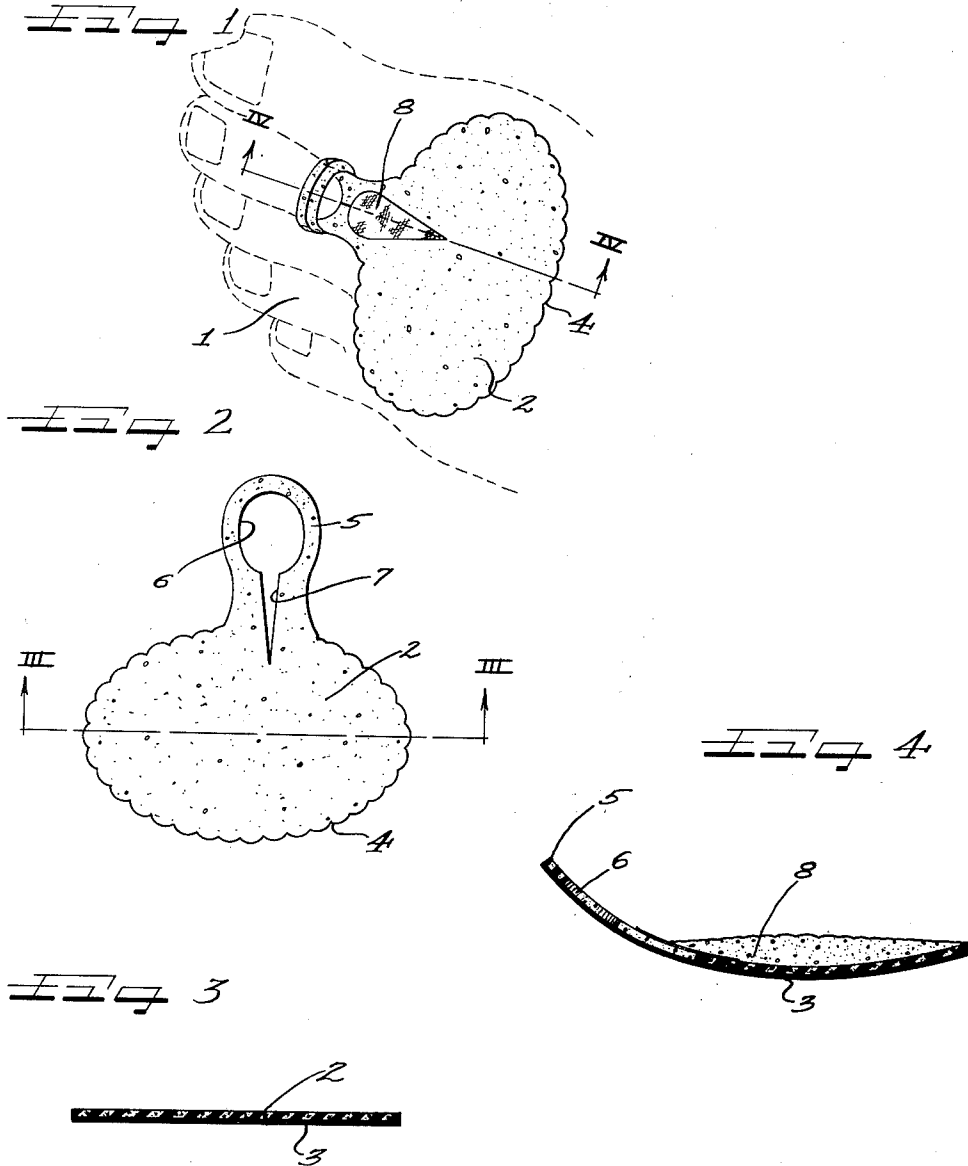
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SURGICAL CUSHIONING DEVICE FOR THE FOOT

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SURGICAL CUSHIONING DEVICE FOR THE FOOT

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3 Claims. (Cl. 128—80)

This invention relates to improvements in a surgical cushioning device, and more particularly to a device having a cushioning body part from which a digit loop extends, the device being highly desirable for application to either the hand or foot of the human body, with the digit loop encircling a finger or toe, although the device may have other uses and purposes as will be apparent to one skilled in the art.

In the past, many and various types of cushioning devices have been made for application to the hands or feet of a user, but extreme difficulty has been experienced in providing the devices at a desirable economical figure. This was especially true in connection with devices highly desirable for application to the plantar surface of the human foot beneath the metatarsal arch with the device equipped with a toe or digit loop to aid in maintaining the device in proper position during use. The most economical form of such device is stamped out in a single piece from a sheet of material, laminated or otherwise, and when so stamped it was extremely difficult to provide a satisfactory concavo-convex shape for the body part of the device.

With the foregoing in mind, it is an important object of the instant invention to provide a cushioning device embodying a digit loop which may be stamped out from a sheet of material, and which is so constructed as to have a pronounced concavo-convex shape in the body part thereof.

A further object of the invention is the provision of a cushioning device carrying a digit loop, which device is of an extremely economical character, and may be stamped out in pattern form and shaped by a simple operation so that the body part has a definite and pronounced concavo-convex form.

Still another object of the invention resides in the provision of an extremely economical cushioning device of the character set forth herein which may be stamped out of a single piece of material, and the body part given a definite concavo-convex shape by a simple operation, and which may also readily be made for specific application to either a right or left hand or foot.

While some of the more salient features, characteristics and advantages of the instant invention have been above pointed out, others will become apparent from the following disclosures taken in conjunction with the accompanying drawing, in which—

Figure 1 is a top plan view of a cushioning device embodying principles of the instant invention, illustrating the device in association with a human foot, which is shown in phantom outline;

Figure 2 is a plan view of the pattern prior to completion of the device;

Figure 3 is a transverse vertical sectional view through the pattern of Fig. 2 taken substantially as indicated by the line III—III of Fig. 2; and

Figure 4 is a transverse vertical sectional view through the completed device taken substantially as indicated by the line IV—IV of Fig. 1.

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As shown on the drawings:

While the instant invention is suitable for application to either the hand or foot of a user, with the digit loop encircling a finger or toe, for purposes of clarity it will be set forth and described herein in association with the human foot. When disposed beneath the plantar surface of the human foot 1 shown in phantom outline in Fig. 1, with the digit loop of the device encircling a toe of the foot, the device will be disposed beneath the metatarsal arch of the foot or the ball of the foot, and in that position will effectively cushion the foot of the user walking, especially when the user wears high heel shoes, will alleviate callosities on the bottom of the foot, and will otherwise give relief and beneficial aid to an afflicted foot.

The device is preferably stamped from a single sheet of material initially in the form of a pattern illustrated in Fig. 2. This pattern includes a body portion 2 which is preferably ovate in contour but which may have other and various shapes, if so desired, depending whether a particular function for the device is desired. The body portion 2 may be of any suitable material, such as soft felt, or the like, but is preferably of foam latex, because of the soft and comfortable feel of foam latex in contact with the skin of the user, and because of its resilience, high restorative powers, durability, and property of being launderable. In the event the cells of the foam latex are intercommunicative, some ventilative action results while the device is in use. Preferably, the underside of the body part 2 is provided with a cover 3 secured to the cushioning layer by a suitable adhesive, or if the cushioning layer is foam latex, that may be cured directly to the cover 3. This cover 3 may be of any suitable material such as rubber skin, or a suitable fabric on the order of cotton drill.

The body part 2 is preferably provided with a varied edge, serrated or scalloped, as indicated at 4. This is to prevent an abrupt edge contact of the device with the foot of the user, the varied edge permitting the cushioning material adjacent the edge to "flow" when under pressure of the foot so that the edge of the device comfortably and smoothly contacts the foot without any aggravation.

Extending from the body part 2 is a toe loop 5, integral with the body part, and from the opening 6 in the toe loop a notch 7 is provided in the pattern extending rearwardly partially within the body part 2. The side walls of this notch converge as seen clearly in Fig. 2.

With the pattern is severed from a sheet of stock material, it will be substantially flat, as evinced by the showing of Fig. 3. Thereafter, the side edges defining the notch 7 are brought together and cementitiously secured to each other, whereby the body portion 2 of the device is given a definite and pronounced concavo-convex shape, as evinced by the showing in Fig. 4. After the edges of the notch have been secured together, a thin silky fabric piece 8 may be cementitiously secured over the juncture of the notch edges so that the seam will not be felt by the user.

In use, the digit loop 5 may be drawn over a toe of the foot, preferably the second toe, and the body part 2 will underlie the metatarsal arch of the foot. It will be noted that the toe loop is near one end of the body part 2, which is preferably ovate in contour, so that the device is adapted for an individual left or right foot only, the structure shown in the drawings being for a left foot. When the device is used for a right foot, the pattern is cut so that the toe loop projects near the opposite end of the body part. With an ovate contour of the body part, the major axis substantially parallels the longitudinal arch of the foot when the device is in proper position. The digit loop 5 retains the device in position,

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and proper contact with the foot is also aided by the shoe or hosiery of the user.

From the foregoing, it will be apparent that I have provided an extremely economical cushioning device for use on either the hand or the foot, which is readily formed by a single pattern stamping from a sheet of stock material and which is given a desirable and definite concavo-convex shape by a very economical additional operation.

It will be understood that modifications and variations may be effected without departing from the scope of the novel concepts of the present invention as defined by the claims.

I claim as my invention:

1. In a cushioning device for application to an extremity of the human body, a body part of cushioning material, an apertured digit loop extending laterally from said body part, there being a notch with converging side edges extending from the aperture in the digit loop into said body part, and the edges of said notch being bonded together to close the notch and cause said body part to assume a concavo-convex shape.

2. In a cushioning device for application to an extremity of the human body, a body part of cushioning

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material, an apertured digit loop extending laterally from said body part, there being a notch with converging side edges extending from the aperture in the digit loop into said body part, the edges of said notch being bonded together to close the notch and cause said body part to assume a concavo-convex shape, and a covering over the joint between the notch edges on the skin contacting side of the device.

3. A cushioning device of the character described, comprising an initially flat blank of cushioning material including a generally oval body part and an integral flat digit loop projecting laterally therefrom and nearer one end of the body part than the other, said blank having a notch therein with side edges converging toward said body part and leading from the opening in said loop, said side edges being secured together to give said body part a concavo-convex shape.

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