Nov. 6, 1962 W. M. SCHOLL 3,062,208

SURGICAL PAD

Filed Nov. 12, 1959

Fig. 1

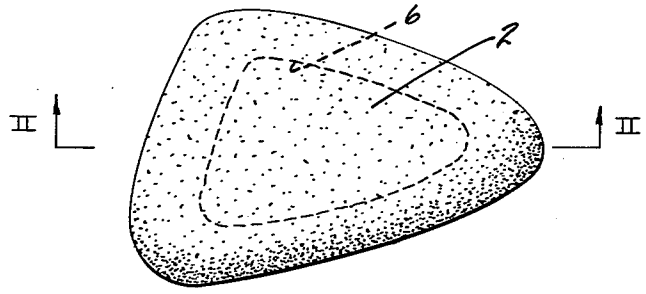


Fig. 3



Fig. 2

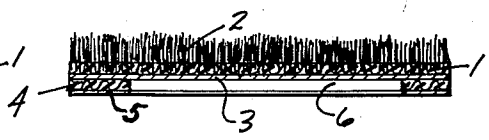


Fig. 4

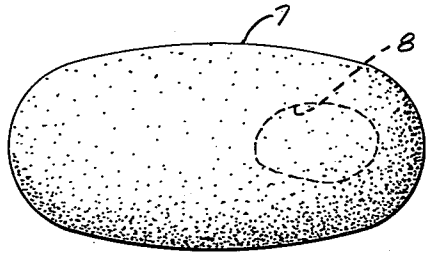


Fig. 5

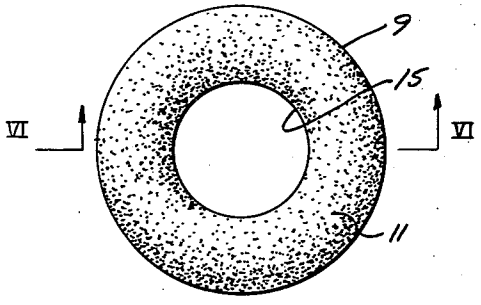
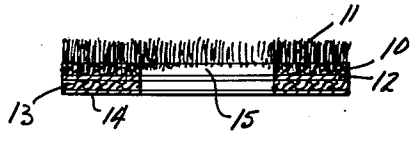


Fig. 6



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3,062,208

SURGICAL PAD

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3 Claims. (Cl. 128—153)

This invention relates to improvements in a surgical pad of the type that is adhesively attached to the body of a user and of the character to transfer pressure of wearing apparel to healthy tissue surrounding an affliction as well as protect the affliction or hold a medicament against it, the device being highly desirable for use in connection with cuts, abrasions, lacerations, etc. on various parts of the body, and particularly desirable for use as a corn, callus, or bunion pad for use on the human foot, although the device will have many other uses and purposes as will be apparent to one skilled in the art.

In the past, various types of surgical pads have been developed which pads were made of various materials, including cloth, organic and inorganic fabrics, felt, foam latex, and plastic films and foams. In many cases, cushioning pieces or laminations of foam latex or plastic foam are not indicated by the particular afflictions, injuries, or disorders. Some persons are definitely allergic to plastics and, therefore, could not use a surgical pad with plastic material in it. Others are allergic to rubber, and others are allergic to wool. Frequently, in the past, surgical pads of the character herein set forth were made of cotton napped cloth, but such material, if worn in a region of pressure such as in a shoe, or beneath the plantar surface of the foot, matted down and became ineffective after relatively short usage. Consequently, such formerly known pads were not capable of providing a live cushioning effect in a relatively thin surgical pad.

With the foregoing, it is an important object of the instant invention to provide a surgical pad of relatively thin material carrying a pressure-sensitive adhesive spread on one face thereof, and having a myriad of relatively long fibers extending from the other surface thereof, which fibers do not mat down after long usage, and provide a desired cushioning and pressure relieving effect.

Another object of the instant invention is the provision of a surgical pad comprising a sheet of fabric, shaped to substantially any desired configuration, and having a myriad of relatively long fibers of wool, nylon, acrylic or other plastics, stitch locked in the fabric and extending away from one face of the fabric, with the fabric carrying pressure-sensitive adhesive on its other face for attachment to the body of a user.

It is also an object of this invention to provide a surgical pad dependent upon relatively long free fibers extending from one face of the pad for a cushioning and pressure relieving effect, and which can be provided in a substantially flat shape or with a lamination on its under surface to provide a shoulder for the better removal of pressure from articles of wearing apparel.

Still another object of the instant invention resides in the provision of an economical surgical pad comprising a piece of fabric with long free fibers projecting from one side thereof, and which may be provided with either an under lamination having an affliction receiving opening, or with or without an under lamination and an opening or aperture entirely through the structure to receive the affliction.

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 surgical pad embodying principles of the instant invention;

FIGURE 2 is a vertical sectional view through the structure of FIGURE 1, taken substantially as indicated by the line II—II of FIGURE 1, looking in the direction of the arrows;

FIGURE 3 is a view similar in character to FIGURE 2, but showing a slightly different form of construction for the pad;

FIGURE 4 is a top plan view of a pad having a different shape or contour;

FIGURE 5 is a top plan view of a pad having a still different contour; and

FIGURE 6 is a vertical section through the structure of FIGURE 5, taken substantially as indicated by the line VI—VI of FIGURE 5.

As shown on the drawing:

In that illustrated embodiment of the instant invention seen in FIGURES 1 and 2, there is shown a surgical pad of the general shape for disposition on the plantar surface of the foot beneath the metatarsal arch for the alleviation of calluses on the ball of the foot and to lend some cushioning support to the intermediate joints of the metatarsal arch. The pad comprises a sheet of fabric **1** having a high pile or myriad of fibers **2** extending away from one face thereof, these fibers being relatively long in comparison to the thickness of the fabric, the fabric itself being shown somewhat exaggerated in the drawings for purposes of clarity. The fibers are preferably stitch locked in the fabric and extend on their respective axes freely away from one side of the fabric. These fibers may be of wool, nylon, acrylic or other synthetic fibers, of suitable character to afford a long lived live cushioning effect without matting down so as to lose their resiliency throughout long usage. Wool fibers would be highly satisfactory for those allergic to plastic, while the plastic fibers would be highly satisfactory for those allergic to wool.

The under or opposite face of the fabric **1** is preferably provided with a pressure-sensitive adhesive spread as indicated at **3**. In many cases, it is desired to provide a shoulder effect to assist in taking pressure of wearing apparel off corns, calluses, tender joints such as bunions, etc. To that end, another sheet **4** of any suitable material may be laminated to the underface of the fabric **1** by way of the adhesive spread **3** or in any other suitable manner. This sheet **4** may satisfactorily be a fabric such as thin felt, heavy cotton drill, or any other suitable material. The sheet **4** is coextensive with the sheet **1**, and on its opposite face carries a pressure-sensitive adhesive spread indicated at **5** by means of which the device may be attached to the body of a user. Preferably, also, the sheet **4** has an opening or aperture **6** therein of any suitable shape and location for the reception of the particular affliction, so that pressure from wearing apparel will be transferred to the healthy tissue around the affliction. Obviously, the adhesive **3** may be omitted inside the affliction receiving opening **6**, if desired, to avoid possible irritation on an open wound or the like.

In FIGURE 3 I have illustrated the pad as comprising only the fabric **1**, the fibers **2**, and the adhesive undersurface **3**. This is desirable for such afflictions as a mild sagging of the metatarsal arch with the possible formation of a callus on the sole of the foot which has not as yet grown to the stage where shoulder means are required to eliminate pain causing pressure. When so positioned, the structure seen in FIGURE 3 will afford a mild cushioning support to the longitudinal arch and relieve small calluses at the same time if any are present.

In FIGURE 4 I have shown a form of surgical pad, made substantially as described in connection with FIGURE 2, but of a shape more adaptable for the treatment of a bunion or enlarged joint on the side of the

foot. In this connection, it is preferable to have an opening 8 in the under sheet of the structure disposed nearer one end of the pad than the other as shown by dotted lines in FIGURE 4.

In FIGURES 5 and 6 I have illustrated a pad 9 which is circular in shape and is highly desirable for disposition around a relatively deep corn or callus. In this instance, a fabric layer or sheet 10 is provided having fibers 11 extending from one face thereof and a pressure-sensitive adhesive spread 12 on the opposite face. Laminated to this sheet is a coextensive sheet 13 having an exposed pressure-sensitive adhesive face 14. An aperture 15 is provided through the entire structure to receive the affliction and cause a transference of pressure to healthy tissue surrounding the affliction.

In use, the long fibers effectively provide a cushioning effect for the affliction or tissue therearound and relieve pressure from apparel without matting down through long usage. Further, bathing with the pad on the body does not adversely affect the springiness or resiliency of the fibers.

From the foregoing, it will be noted that a surgical pad embodying principles of the instant invention may be made in substantially any desired size and shape, without or with an affliction receiving opening provided in any desirable location. In addition to the particular uses mentioned herein by way of example, numerous other uses for pads of this character will occur to those skilled in the art.

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

I claim as my invention:

1. A surgical pad comprising a shaped piece of woven fabric with long fibers stitch locked in the fabric substantially throughout the face of said fabric and extending on their respective axes away from one face only thereof, and a pressure sensitive adhesive spread carried by the opposite face of the fabric to attach the pad to the body of a user with the fibers exposed to act as cushioning and pressure relieving means.

2. A surgical pad comprising a sheet of woven fabric with a myriad of long wool fibers stitch locked in the fabric substantially throughout the face of said fabric and extending freely away from one face only thereof, and a pressure sensitive adhesive spread carried by the opposite face of the fabric to attach the pad to the body of a user.

3. A surgical pad comprising a sheet of woven fabric with a myriad of long plastic fibers stitch locked in the fabric substantially throughout the face of said fabric and extending freely away from one face only thereof, and a pressure sensitive adhesive spread carried by the opposite face of the fabric to attach the pad to the body of a user.

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