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SURGICAL PAD

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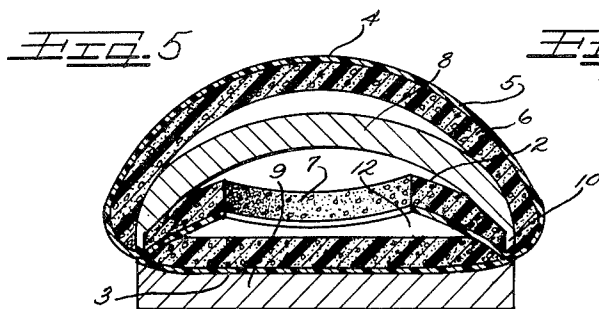
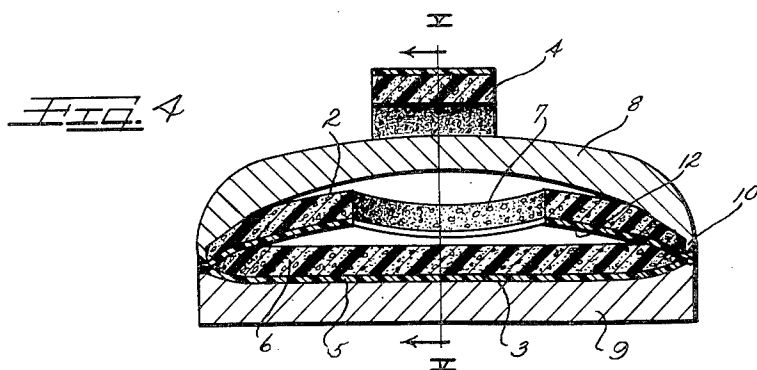
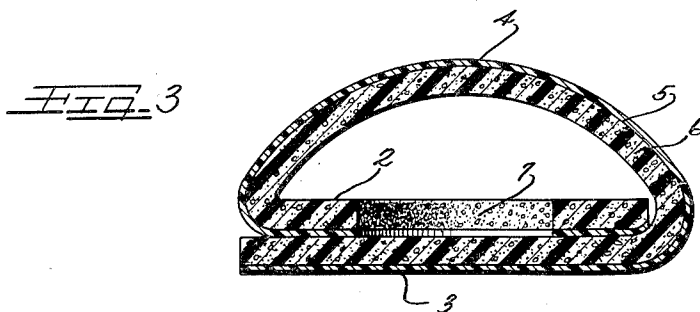
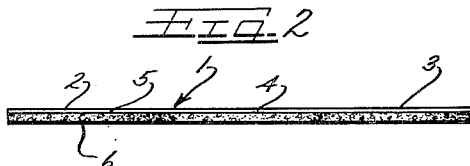
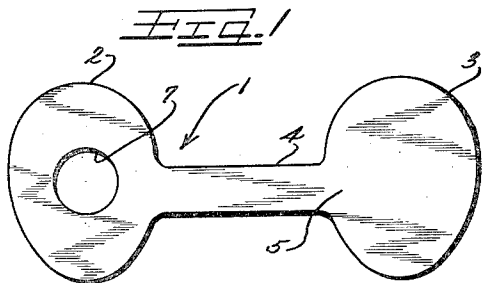
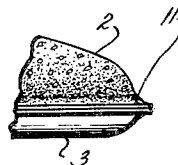


FIG. 6



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3,036,571

SURGICAL PAD

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1 Claim. (Cl. 128-153)

This invention relates to improvements in a surgical pad, and more particularly to a surgical pad having a digit loop thereon by means of which the pad may be attached to the body of the user, the pad being highly desirable for lending corrective aid to corns, hammer toes and similar afflictions of the foot, although it might also be employed on the hand of a user to protect and eliminate pressure and bumps from an afflicted area on the fingers and thumb, although the pad will have other and various uses and purposes as will be apparent to one skilled in this art.

In the past, many and various types of surgical pads having digit loops thereon have been provided, but in most cases such pads had to be removed when the patient bathed the afflicted hand or foot, and if not removed had to be replaced with a new pad by virtue of undue wetness. Formerly known pads of this character could not be laundered at will, were not as durable and long lasting as desired, were not adapted to contain a medicament or hold a relatively large quantity of exudation and so would have to be changed frequently if applied over a running affliction, would not maintain softness and yieldability after absorbing medicament or exudation, and were not as pleasing in appearance as may be desired especially when worn in a visible location.

With the foregoing in mind, it is an object of the instant invention to provide a simple form of surgical pad having a digit loop and which is constructed to overcome all the aforesaid disadvantages and objections.

Another object of this invention resides in the provision of a surgical pad having a digit loop provided with a pocket for the reception of medicament or exudation and which may be cleansed of such whenever desired and laundered at will, the pad being adapted for repeated use throughout an extremely long life.

Also an object of this invention is the provision of a surgical pad provided with a digit loop and made of material which resists body acids, cleansing compounds, inhibits the growth of fungus, and in which parts are united by a heat seal seam composed of fused material of which the pad is made, whereby the pad is clean and neat in appearance, and especially long lived since there is no stitching to deteriorate after relatively short usage.

It is also a feature of this invention to provide a surgical pad provided with a digit loop, which pad is made from a dumbbell shaped blank comprising a cover sheet laminated to a thicker sheet of cushioning material, the enlarged end portions of the blank being superposed and secured together at the bounding edges only with the narrow neck therebetween forming the digit loop, and the inner of the enlarged end portions having an aperture therethrough leading to a pocket between the superposed portions.

Still another object of the instant invention is the provision of a surgical pad equipped with an integral digit loop, and made of thermoplastic material, the blank having superposed body portions joined by a heat sealed seam at the bounding edges only, which body portions are connected by an integral narrow neck that forms the digit loop when the body portions are superposed and secured together.

Still another object of the instant invention is the provision of a surgical pad comprising a pair of superposed body portions connected by a narrow neck forming an integral digit loop, the body portions being made of

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thermoplastic foam material having intercommunicating cells and the inner body portion having an aperture therethrough leading to a pocket between the body portions, such body portions being secured together by a heat seal seam at the bounding edges only.

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 plan view of a blank utilized in making a surgical pad embodying improvements of the instant invention;

FIGURE 2 is a side elevational view of the blank of FIGURE 1;

FIGURE 3 is a greatly enlarged vertical sectional view through the blank assembled into pad shape ready for connection of the overlapping parts;

FIGURE 4 is a vertical sectional view transversely to the showing in FIGURE 3 illustrating the connection of the overlapping parts by means of electronic dies;

FIGURE 5 is a vertical sectional view taken substantially as indicated by the line V-V of FIGURE 4, looking in the direction of the arrows; and

FIGURE 6 is a greatly enlarged fragmentary side elevational view of the completed pad.

As shown on the drawings:

The illustrated embodiment of the instant invention is preferably formed from a blank, seen in FIGURES 1 and 2, and generally indicated by numeral 1. This blank is preferably of dumbbell shape including enlarged end portions or body parts 2 and 3 connected by a relatively narrow neck 4. The blank is preferably severed from a laminated stock sheet, and includes a cover sheet 5 which is preferably a thermoplastic film capable of being electronically heat sealed, a vinyl film among others being satisfactory for this purpose. Adhesively or equivalently secured in face-to-face relationship with the cover sheet is a thicker sheet 6 of cushioning material, preferably a thermoplastic foam having intercommunicating cells, a vinyl foam, polyester or polyurethane foam or the equivalent being satisfactory for this purpose.

Thus, it will be noted that the complete material from which the surgical pad is made is of a character that is unaffected adversely by medicaments, perspiration, body acids, cleansing compounds, and is also resistant and inhibitive to the growth of fungus. Such material may be laundered whenever desired, and even though it absorbs some moisture, slight pressure on the material is sufficient to remove such moisture, permitting the bandage to become sufficiently dry for further use in an extremely short length of time.

One of the body parts, in the illustrated instance the body part 2, is preferably provided with an affliction receiving opening or aperture 7 therethrough. This body part becomes the inner one when the bandage or surgical pad is formed.

In forming the pad with the digit loop, it is a simple expedient to fold the blank 1 so that the body parts 2 and 3 are in superposed position as seen in FIGURE 3, the body part 2 with the affliction receiving opening 7 therein being on the inner side to contact the body of the user, and the neck portion 4 forming a digit loop which extends over the inner body part 2. When in such folded condition, the bandage is placed on suitable electronic die members 8 and 9, which the die member 8 is preferably provided with a relatively sharp knife edge 10 therearound, and the die member 9 may be substantially flat and covered with any suitable buffer, if so desired. As seen in FIGURES 4 and 5, the upper die member 8 extends through the digit loop formed by the neck 4. When the parts are assembled as shown in FIGURES 4 and 5,

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the two body portions are electronically heat sealed together by sending a momentary charge of high frequency current through the die members. This not only provides a heat seal seam 11, FIGURE 6, which joins the body parts together at their bounding edges and defines the bounding edge of the resultant device, but also establishes a tear seam by which any waste material from the body portions may readily be removed externally of the heat seal seam 11. It will be noted that the heat seal seam 11 is preferably a fine line seam with the body portions of the pad rounded and curving inwardly toward the seam. Preferably, the foam layer 6 is caught in the heat seal seam and becomes an integral part thereof.

It will be noted that since the body parts are joined by the heat seal seam 11 only at their bounding edges, and are otherwise unsecured to each other, a pocket is formed between these body parts as indicated at 12 in FIGURES 4 and 5, where the showing is somewhat exaggerated. This pocket may contain medicament if so desired, and it is an advantage of the invention that by the peripheral heat seal seam thus provided, the inner body part 2 is bowed upwardly convexly away from the protective body part 3 to form a protuberance which will be engaged by the finger or the like in use so that the finger will depress or move outwardly the body part 2 to express medicinal material onto the afflicted part through the opening 7. The pocket, to which entrance is provided by way of the affliction receiving opening 7, also provides ample access room for the reception of any exudation from the particular affliction which the bandage or pad may cover.

The resultant surgical pad is extremely pleasing in appearance, since it may be given a flesh color or any other desired color, has a clean looking appearance, and the thermoplastic foam provides a comfortable clinging action to the body of the user without direct adherence, and the double layer of cushioning material is highly shock absorbing. The bandage may be left on the body

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while the afflicted part is being bathed, and slight pressure on the bandage removes any absorbed moisture. The bandage may also be removed and individually laundered to eliminate medicament or exudation therefrom at any time desired and replaced. Since the bandage incorporates no stitching of any kind and since there is no adhesive between the two body portions, the bandage is extremely long lived and retains its resiliency throughout its life, not even becoming objectionably unyielding even when exudation or medicament may dry and harden in the cushioning material.

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:

A corrective pad for afflictions comprising a cushioning pad including a closed outer body part, an inner body part having a central opening therethrough spaced from the periphery thereof and a loop overlying the inner body part, and an electronic seam binding the body parts so that the outer body part bows the inner body part convexly upwardly, said body parts thereby forming a pocket in cooperation with said opening, the upwardly bowed inner body part being yieldable in the direction of the outer body part when the corrective pad is mounted on a digit with the inner body part engaged thereby to gently and continuously express medicaments which may be retained in said pocket onto an affliction through said opening.

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