

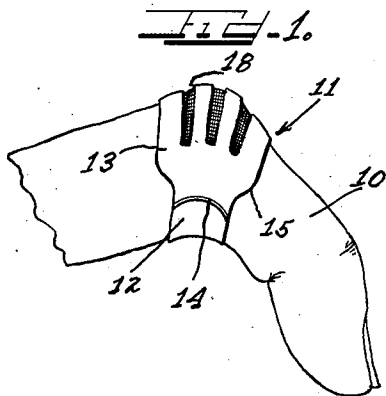
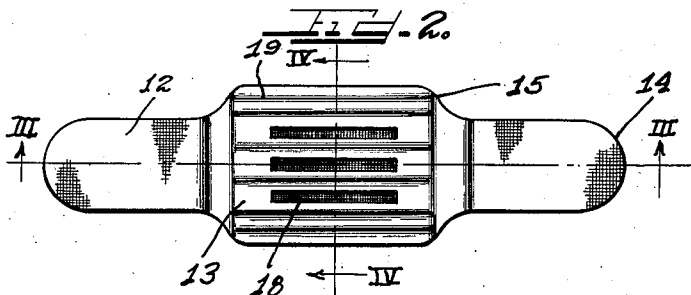
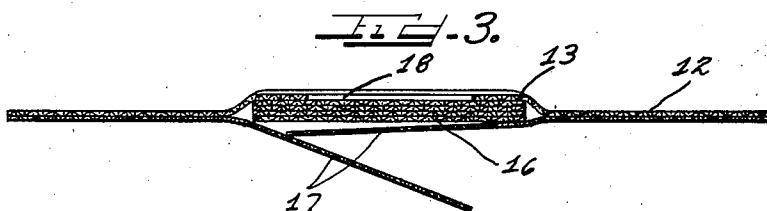
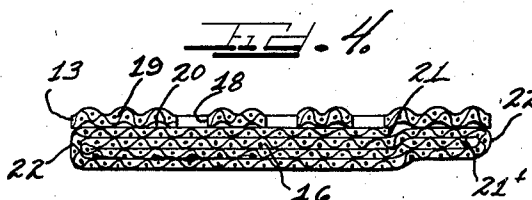
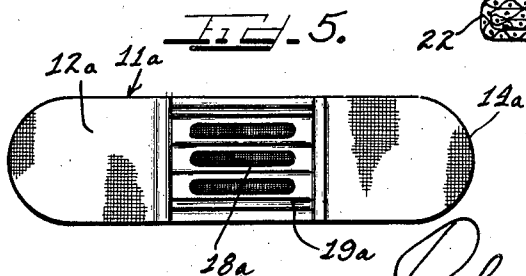
June 1, 1937.

W. M. SCHOLL

2,082,219

SURGICAL DRESSING

Filed Aug. 3, 1934



WILLIAM
William M. Schott.

Charles W. Atts.

UNITED STATES PATENT OFFICE

2,082,219

SURGICAL DRESSING

William M. Scholl, Chicago, Ill.

Application August 3, 1934, Serial No. 738,187

1 Claim. (CL 128—156)

This invention relates to improvements in medical or surgical dressings, and more particularly to dressings or bandages of the character which are adhesively applied to an external portion of a body over an afflicted or injured part, although the invention may have other and various uses and purposes, as will be apparent to one skilled in the art.

The present invention is a continuation in part of my application entitled "Surgical dressing", filed October 26, 1933, Serial No. 695,225.

In the past, many and various types of dressings and plasters have been developed for adhesive applications to external portions of the human body, and have proven objectionable in various ways. For example, these formerly known dressings were not constructed so as to expand or give properly with the flexing of a joint, such as a finger or toe joint, over which the dressing might have been applied. In other words, the dressing itself would not compensate for the added area caused by the flexing of the joint, and would tend to become loosened from the body of the user. Furthermore, dressings of this character heretofore were made with corners on the adhesive member, and these corners, especially when applied to the foot of a user, were inclined to catch upon articles of apparel drawn over the dressing, and thus cause a loosening of the dressing as well as injury to the article of apparel. Another objectionable feature of the dressings known heretofore was due to the fact that the pad, customarily of folded gauze carried by the adhesive member of the dressing, would fray and leave unsightly strands or threads in the pad projecting outwardly from beneath the adhesive. Upon an endeavor to remove these threads by breaking them off, quite frequently the adhesive pad would be disrupted from the surface of the body and the thread, instead of breaking, would pull forth more thread, causing an unravelling of the gauze pad. Furthermore, dressings of this character have proven objectionable to ladies in that the dressings would show too prominently through silk hosiery and other like garments, presenting an unsightly appearance. In addition, it might be noted that in most cases requiring use of dressings of this character, ventilation of the afflicted area is to be desired, and all former dressings of which I am aware are not capable in every instance of providing an adequate amount of ventilation.

With the foregoing in mind, it is an object of this invention to provide a surgical dressing capable of sufficient expansion when applied over

a body joint to compensate for the added tension upon the bandage and thus eliminate loosening of the bandage.

Another object of this invention is the provision of a surgical dressing wherein the adhesively surfaced member is cut so as to eliminate all corners on the outer edges of this member, permitting a tight fitting article of apparel to be drawn over the dressing without loosening the same or injuring the apparel.

A further object of this invention is the provision of a surgical dressing provided with adequate ventilating means, including air channels disposed between the adhesive member of the dressing and the pad carried thereby.

Still another object of this invention is the provision of a surgical dressing having openings in the adhesive backing over the pad carried by the backing, these openings permitting flexing of the dressing as well as providing ventilating spaces, and the dressing further having integral grooves therein to add to the flexing of the dressing and provide interior channels between the adhesive backing and the pad.

It is also an aim of this invention to provide a dressing of the character set forth having the externally visible portions thereof tinted or colored in accordance with the human body, whereby the dressing will be substantially unnoticeable through relatively transparent articles of apparel.

It is a further object of this invention to provide a medical or surgical dressing comprising an adhesive member carrying a pad of folded gauze thereon, said pad being folded in such a manner as to eliminate any fraying of the pad beyond the confines of the adhesive member.

Also an object of this invention is the provision of a medical or surgical dressing of the character described herein, wherein a gauze pad is attached to an adhesive member, the lines of fold of the pad running parallel to the longitudinal axis of the adhesive member, leaving the frayable edges of the pad disposed beneath relatively long strips of the adhesive member by which the dressing is attached to the body of a user.

While some of the more salient features, characteristics and advantages of the present invention have been above pointed out, others will become apparent from the following disclosures.

The invention includes these and other features of construction and combinations of parts hereinafter described and shown in a preferred

form in the drawing, as more particularly indicated by the claim.

On the drawing:

Figure 1 is a fragmentary elevational view of a human finger, showing applied thereto over a joint thereof a dressing or bandage embodying principles of the present invention.

Figure 2 is an enlarged plan view of the dressing or bandage shown in Figure 1.

Figure 3 is an enlarged vertical sectional view through the bandage taken substantially as indicated by the line III—III of Figure 2.

Figure 4 is a greatly enlarged transverse vertical sectional view of the structure of Figure 2, taken substantially as indicated by the line IV—IV of Figure 2, with the crinoline base members of the dressing removed.

Figure 5 is a plan view of the character of Figure 2, showing a dressing embodying the principles of the present invention but in a slightly different form.

As shown on the drawing:

While the present invention incorporates certain of the features shown in my issued United States Letters Patent No. 1,845,630, entitled "Medical dressing", issued February 16, 1932, it also includes many features not present in said Letters Patent, as will be more apparent hereinafter.

This invention may be applied easily and with great facility to substantially any external portion of the human body. As seen in Figure 1, the bandage is shown as applied directly over the second joint of a finger, the bandage circumscribing the finger. However, it will be apparent that the bandage may equally as well be applied longitudinally of the finger if necessitated by any peculiar affliction.

It will be noted that the joint of the finger is flexed and the dressing, generally indicated by numeral 11, flexes readily with the bending of the joint so that there is no tendency for the bandage to become loosened from the finger, and the bandage will not cause any uncomfortable feeling due to extra binding as a result of the flexing of the joint.

The bandage proper comprises a strip of flexible fabric material 12 having an adhesived under-surface by means of which the bandage is attached to the body of a user. As noted more clearly in Figure 2, the material 12 is cut so as to provide an enlarged central portion 13, which portion overlies the afflicted area, leaving relatively narrow end portions for attachment to the body of a user, thereby adding to the comfort of the bandage when attached. It will be noted that the ends of the bandage are cut rounded as at 14, and that arcuate cuts 15 are provided between the narrow end portions and the enlarged central portion 13, whereby there are no square corners on the outer edge of the bandage or such as are likely to catch upon the apparel of a user.

A suitable pad 16 for directly overlying the afflicted area is attached immediately beneath the enlarged central portion 13 and is held in position by the adhesive under surface of the flexible material 12. As seen best in Figure 3, the bandage is initially prepared with the customary strips 17 of crinoline or similar material to protect the adhesive surface and the lower surface of the pad until it is desired to use the bandage, when the crinoline strips are removed and thrown away.

The enlarged central portion 13 of the bandage is provided with a plurality of longitudinally extending slots 18, and these slots provide great flexibility, so that the bandage may compensate

with relative movement upon the flexing of a joint, thereby adding to the comfort of the user and eliminating a tendency of the bandage to become loosened. Adjacent to and between the slots 18, the adhesive material 12 is also provided with pressed ribs 19 which add to the flexibility of the bandage. As seen best in Figure 4, the pad 16 being substantially flat does not contact the undersurface of the ribs 19, and thus suitable air channels 20 are provided to augment the openings 18 in ventilating the afflicted area.

Heretofore, in forming or making a bandage of this character, it has been customary to attach a long piece of folded gauze to a relatively wide piece of adhesive material. Then, by cutting through the composite structure at spaced intervals, bandages of suitable size were provided. However, the lines of fold of the pad forming gauze would be transverse to the longitudinal axis of the adhesive material, thereby leaving opened frayable ends of the gauze disposed immediately adjacent the side edges of the bandage. Consequently, strands of the gauze material would project outwardly beneath the bandage giving an unsightly appearance and annoying the user. These frayings could not readily be removed and attempts to remove them very frequently resulted in a loosening of the bandage or a further fraying of the gauze pad.

In the present instance, such objectionable fraying is effectively overcome by folding the gauze strip into the pad 16 so that the end edges 21 and 21', respectively of the gauze strip are disposed in intermediate position within the boundaries of the adhesive material, and the gauze strip is so folded as to provide lines of fold 22 parallel with the side edges of the adhesive material. Obviously, the lines of fold will not fray, and the free edges of the gauze material will be disposed directly beneath the relatively long projecting portions of adhesive material which are attached to the body of a user. Obviously, with these end edges contacting the adhesive material, fraying cannot result. Consequently, when the dressing or bandage is attached to the body of a user, it will present a clean and neat appearance with nothing projecting outwardly from beneath the adhesive material.

It will also be noted that while the bandage is herein described as being provided with a pad 16 made of a strip of gauze-like material folded, the pad 16 might equally as well be made of any other suitable material.

In addition, at least the exposed surface of the bandage is preferably provided with a flesh tint or color so that there will be less likelihood of the bandage being discernable through relatively transparent articles of apparel.

In Figure 5, I have shown a bandage generally indicated by numeral 11a, but in this instance the adhesive material backing 12a is of nearly the same width throughout substantially its entire length. This bandage embodies all the features of the bandage 11 above described, including the rounded ends 14a, the open slots 18a, the ribs 19a, and the pad is attached beneath the central portion of the bandage in substantially the same manner as above described. This pad is also folded so as to provide lines of fold parallel to the side edges of the adhesive material 12a identical with the aforesaid pad 16.

From the foregoing, it will be apparent that I have provided a medical or surgical dressing capable of adequately flexing or moving in a way

to compensate for the flexing of a joint over which it may be applied. Further, the dressing is substantially unnoticeable through thin articles of apparel, affords no corners to cause a loosening of the device or injury to apparel when clothing is drawn thereover, and provides adequate ventilation for an afflicted area. In addition, it will be noted that the pad carried by the adhesive backing in the bandage cannot fray and provide unsightly threads projecting from underneath the adhesive backing. It is obvious that the bandage is neat in appearance, easy and effective to use and may be economically manufactured.

15 I am aware that many changes may be made and numerous details of construction may be varied through a wide range without departing from the principles of this invention and I, therefore, do not purpose limiting the patent granted

hereon otherwise than necessitated by the prior art.

I claim as my invention;

As an article of manufacture, a surgical dressing comprising an elongated strip of material having an adhesived undersurface and rounded ends, said strip having pressed ribs therein transversely spaced and running longitudinally of the strip to add to the flexibility of the dressing especially when the dressing is applied over a joint, said strip also having spaced slots extending longitudinally of the strip between said ribs to further permit flexing of the dressing, and a pad of folded fabric attached to said strip by means of said adhesived undersurface, said pad being folded with the line of fold disposed longitudinally of the strip.

WILLIAM M. SCHOLL.