

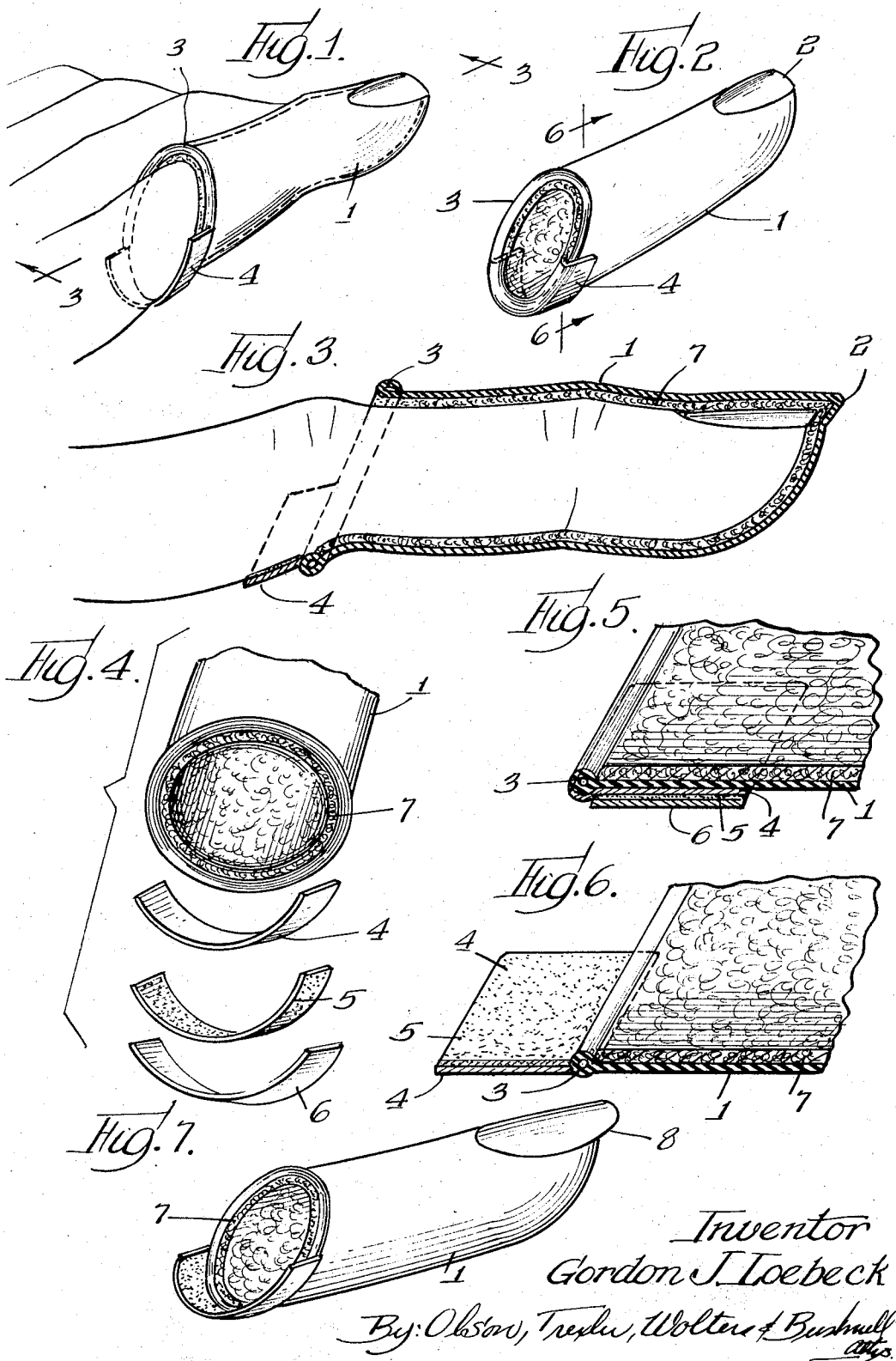
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FINGER BANDAGE

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FINGER BANDAGE

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ABSTRACT OF THE DISCLOSURE

A prepared bandage shaped complementary to the end of a finger including at least the first joint thereof, and having an adhesive strip for holding the bandage on the finger.

This invention relates to a finger bandage and more particularly to a bandage for the tip of the finger such that the entire tip of the finger will be covered.

Conventional prepared adhesive bandages leave much to be desired when it comes to bandaging a finger. Such a bandage cannot adequately protect a cut on a fingertip close to the nail as it simply bridges the area adjacent to the nail. Furthermore, a conventional prepared adhesive bandage tends to come loose when applied over the end of a finger unless an additional strip of adhesive tape is applied to encircle the finger.

Such a bandage also presents problems when encircling a finger. The small size bandages generally are too short to overlap and quickly loosen, while the larger size bandages often are too long, whereby the adhesive tip may underlie part of the gauze and engage the wound. Such conventional bandages simply cannot simultaneously protect wounds more-or-less diametrically opposite to one another on a finger, and such bandages almost always inhibit joint movement.

The principal object of the present invention is to provide an improved bandage which permits the entire tip of the finger to be covered while retaining finger joint flexibility.

Another object of the present invention is to provide an easily applied bandage which is air and water tight.

Another object of the present invention is to provide a bandage which completely covers the fingernail and fingertip of the wearer, thereby providing a sterile covering for both the fingernail and the finger.

A further object of this invention is to provide a prepared finger bandage wherein only gauze or the like engages the finger over most of the extent of the bandage, the bandage being retained in place by its complementary shape and a narrow adhesive band.

The present invention provides for a more efficient and complete bandage than the prior art devices, since the entire tip of the finger is covered while the flexibility of the finger joint is retained. The bandage itself may be placed on the finger, and once it has been satisfactorily adjusted, an adhesive flap of the bandage may be placed around the lower part of the finger. This feature of having an adhesive flap which is applied to the finger after the bandage has been positioned allows the wearer of the bandage to apply and adjust the bandage more easily than in prior art devices, since the adhesive does not contact the finger until after the bandage itself has been fully adjusted.

For a fuller understanding of the nature and objects of the invention, reference should be had to the following detailed description, taken in connection with the accompanying drawings, wherein:

FIGURE 1 is a perspective view of the bandage as worn on a finger;

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FIG. 2 is a perspective view of the bandage before placement on the finger of the wearer;

FIG. 3 is a cross-sectional view of the bandage on the finger of the wearer;

FIG. 4 is a fragmentary view of a portion of the bandage;

FIGS. 5 and 6 are enlarged fragmentary sectional views of the adhesive flap portion of the bandage; and

FIG. 7 is a modified form of the bandage.

Referring now to the drawings in greater detail, there is shown in FIGURE 1 one preferred embodiment of the present invention. As seen in FIGURE 1, the bandage is applied to the tip of the wearer's finger, and the upper body portion of the bandage terminates just short of a knuckle or joint, illustrated as the second knuckle, while the lower body portion of the bandage and adhesive strip extend past this knuckle. It should be noted that the entire tip of the finger outwardly of the knuckle is covered by the bandage.

The bandage itself before application to the finger of the wearer is shown in FIG. 2. The body portion of the bandage 1 is of a flexible material which may be composed of rubber or a suitable plastic material. It may be perforated for ventilation or imperforate for waterproofness as required. As shown in FIGS. 2 and 3, there is a protuberance forming a fingernail recess 2 in the exterior body portion of the bandage. This recess, as seen in FIG. 2, is formed completely to envelop both the upper and lower exposed surfaces of the fingernail. It should be noted that the body portion 1 is formed in such a manner that it covers the upper surface of the finger and nail and extends around the end of the fingernail, following the under edge of the extended nail and then around the finger itself and back to the knuckle joint. The plastic material is sufficiently resilient or "stretchy" as to conform to nails of different lengths and shapes.

As is best shown in FIG. 3, the body portion 1 of the bandage terminates at an O-ring 3 which goes completely around the finger of the wearer. This O-ring 3 formed as a continuous part of the body portion 1. The body portion 1 and the O-ring 3 are terminated in the illustrative embodiment at the middle knuckle (or, alternatively, at the first knuckle), at an oblique angle to the longitudinal axis of the finger of the wearer. This angle is such that the upper portion of the O-ring 3 is located in front of the knuckle of the wearer while the lower portion of the O-ring 3 is located behind the knuckle of the wearer. Thus, the upper surface of the knuckle of the wearer is not covered, while the lower surface is. This permits the knuckle to be flexed easily when the bandage is worn. Although the outermost knuckle of the finger is completely covered by the bandage the flexible nature of the body portion 1 of the bandage permits movement of this knuckle.

A flap 4 is formed as an integral part of the O-ring 3. The flap 4, as is shown in FIG. 2, lies flat against the body 1 of the bandage within the outline thereof before the bandage is placed on the finger of the wearer. After the bandage has been placed on the finger of the wearer and adjusted so that it is comfortable for the wearer, the flap 4 is pivoted at the O-ring to the extending position shown in FIGS. 1 and 3. It should be noted that the flap 4 extends for less than one-half of the circumference of the O-ring 3 and on the inner side of the knuckle. By having this relatively limited circumferential length, the flap 4 does not interfere with the flexing of the finger at the middle knuckle joint.

Since the flap 4 is a unitary part of the O-ring, there is no joint in the bandage itself at the flap where dirt may enter between the flap and the O-ring. The body of the bandage 1 and the flap 4 provide a continuous surface which is uninterrupted and does not have any joint at

which dirt may enter to contaminate the interior portion of the bandage. The O-ring 3 provides a seal at the knuckle of the wearer which seals out the air, water and any dirt or any other foreign material which may come into contact with the finger of the wearer. The O-ring 3 is of a flexible material and therefore conforms to the shape of the middle knuckle of the wearer when the knuckle is flexed, while at the same time permitting easy flexing of the knuckle, as previously explained, and while acting with the general fit of the bandage to hold the bandage on the finger.

The flap 4, as is best seen in FIG. 4, has an adhesive layer 5 placed on the surface of the flap which will come into contact with the finger of the wearer when the flap has been positioned as shown in FIGS. 1 and 3. This adhesive strip 5 has a protective strip 6 of paper, plastic, or the like which may be removed to expose the adhesive so that it may be affixed to the finger of the wearer. As is seen by contrasting FIGS. 5 and 6, when the adhesive flap is in its initial position for placement on the finger of the wearer, the paper strip 6 is in position over the adhesive and protects the adhesive from adhering to any surface which might otherwise come into contact with it. The bandage is placed on the finger of the wearer with the adhesive strip in the position shown in FIG. 5. After the bandage has been placed on the finger of the wearer in position for the desired location, the protective strip 6 is removed from the adhesive, the flap 4 is pivoted to the position shown in FIG. 6, and the adhesive 5 contacts the finger of the wearer and anchors the bandage in place (see FIG. 3).

The interior of the bandage has a sterile lining 7 of gauze or other suitable absorbent material and which extends completely around the interior of the body portion 1 of the bandage. As is clearly shown in FIG. 3, the sterile lining 7 completely covers all exposed surfaces of the finger (including the nail) of the wearer and conforms closely thereto. The lining 7 as shown in FIGS. 5 and 6 terminates just before the O-ring 3. Thus, the O-ring 3 forms a seal against the finger of the wearer and protects the edge of the lining from coming in contact with any foreign materials. The lining may be formed from a mat and placed in the body portion 1, or the lining may be of a loose material which is suitable for pneumatic application to the interior portion of the body 1 of the bandage.

As shown in FIG. 3, the lining not only covers the nail of the wearer, but it also covers the entire tip of the finger and thus would protect any injury to the nail and to the fingertip of the wearer. It should be noted that the lining would protect injuries to the upper, lower and side surfaces of the fingertip of the wearer of the bandage. As will be clearly recognized by those of ordinary skill in the art, the above described bandage may be easily applied to the finger and would cover several injuries to the tip of the finger of the wearer and would also cover the nail of the wearer. In covering the entire tip of the finger of the wearer, the bandage also seals the finger of the wearer against any foreign material whether of a liquid or solid type. This bandage when in place is particularly comfortable to wear, in that the knuckle of the wearer may be flexed, due to the flexibility of the bandage, and in that the bandage does not extend over the upper surface of the knuckle (see FIG. 3). The pivoting adhesive strip which covers the lower portion of the finger allows the bandage to be completely adjusted before it is adhered to the finger itself.

The fingernail of a woman often extends relatively further beyond the tip of the finger than the fingernail

of a man. The modified embodiment of the invention shown in FIG. 7 is particularly suitable for a woman's finger. The fingernail protuberance 8, formed in the body portion 1 of the bandage, is shaped to receive the longer fingernail of a woman. The lining 7 in this embodiment extends the entire length of the fingernail receiving portion, as in the embodiment shown in FIGS. 1-6. However, it is contemplated that the lining may terminate just before the very end of the fingernail receiving portion. To so terminate the lining would avoid any tendency, of the edge of a relatively long nail, to damage the lining.

While the invention has been shown as applied specifically to the finger portion of the body, it would be within the ability of one skilled in the art to which the invention relates to apply a similar bandage to other portions of the body. It should be understood that the invention is not limited to the particular embodiment shown but is contemplated to cover, by the present application any modifications which fall within the true spirit and scope of the claims.

What is claimed is:

1. A sterile bandage for a fingertip comprising
 - (a) a flexible cylindrical body portion substantially complementing in shape to a finger, said body portion having a longitudinal axis and further having a tip and a rear margin remote relative to said tip,
 - (b) a sterile lining in said body portion, and
 - (c) an adhesive flap which is fixed to said body portion and extending therefrom longitudinally beyond said rear margin for retaining said body portion on the finger of the wearer.
2. A sterile bandage as set forth in claim 1, wherein:
 - (d) said cylindrical body portion is completely closed at said tip, and
 - (e) said closed end has an integrally formed fingernail receiving portion.
3. A sterile bandage as set forth in claim 2, wherein:
 - (f) said sterile lining extends into and completely lines said fingernail receiving portion, and
 - (g) said adhesive strip is at the end of said cylindrical body portion opposite from said fingernail receiving portion.
4. A sterile bandage as set forth in claim 1, wherein:
 - (d) said adhesive strip is connected to said body portion by a flexible ring, and
 - (e) said adhesive strip is pivotable at said ring, from a position adjacent said body portion to a position extended from said body portion and adjacent the finger of the wearer.
5. A sterile bandage as set forth in claim 1, wherein:
 - (d) said body portion terminates at one end at an angle to the axis of said body portion, and
 - (e) said angle being such that, when the bandage is worn on the finger, said body portion terminates outwardly of the top of the knuckle of the finger, and
 - (f) said body portion covers the bottom of the knuckle of the finger so that the knuckle may be easily flexed.
6. A sterile bandage as set forth in claim 5, wherein:
 - (g) said adhesive strip, when extended to a position adjacent the finger of the wearer, covers only the lower portion of the wearer's finger.

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