July 5, 1955 A. LEVY 2,712,313

SURGICAL DRESSINGS

Filed Nov. 25, 1953

FIG. 1.

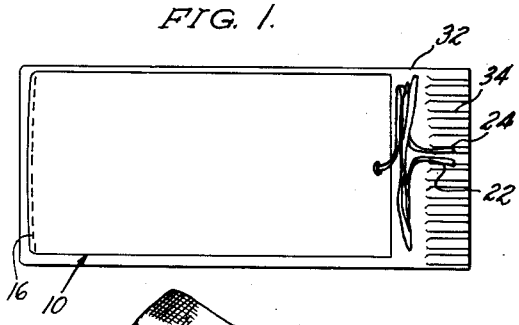


FIG. 2.

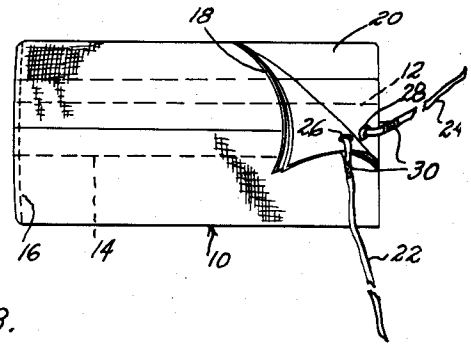


FIG. 3.

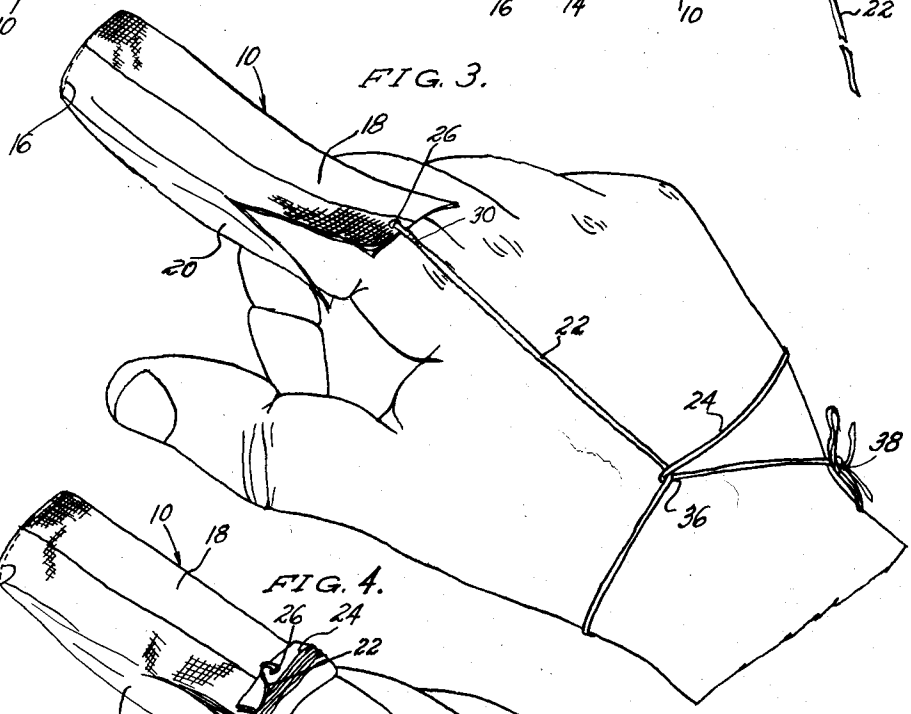
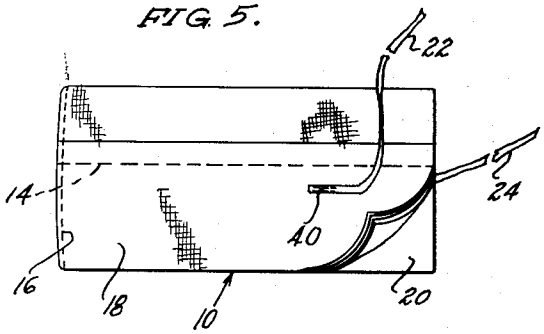


FIG. 4.

FIG. 5.



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SURGICAL DRESSINGS

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3 Claims. (Cl. 128—157)

This invention relates to improvements in surgical dressings and, more specifically, to an improved, preformed bandage for the finger or the like.

It is the general object of the invention to provide a simple and economical bandage which can be easily and quickly applied to an injured finger by even the most unskilled persons.

Another object of the invention is to provide a preformed finger bandage which can be packaged for storage and sale in a sterile condition and which includes easily operable self-contained means for securing the bandage to a finger.

An additional object of the invention is to provide a sterile packaged finger dressing which can be easily and quickly removed from the package and applied to a finger without destroying sterility.

Another object of the invention is to provide a finger dressing which can be conveniently applied to fingers of various sizes and in situations where the wound cannot otherwise be conveniently dressed.

A further object of the invention is to provide a finger dressing which is neat in appearance and which is not a source of discomfort to the person having the injury.

Other objects as well as advantages of the invention will become apparent to those skilled in the art from the following description of the annexed drawing which, by way of example only, illustrates two specific embodiments and in which,

Fig. 1 is a plan view of the sterile bandage and the package in which it is contained;

Fig. 2 is another plan view of the bandage illustrating details of construction thereof;

Fig. 3 is a perspective view of the bandage as applied to an injured finger;

Fig. 4 is a view similar to Fig. 3 and showing another way of securing the bandage to the injured finger; and

Fig. 5 is a view similar to Fig. 2 showing a modified construction.

As will be quite apparent from the aforedescribed figures of the drawing, the finger dressing **10** of the present invention is fabricated in the form of a cot having one closed end and which is adapted to be applied to an injured finger by inserting the finger therewithin.

I have found that the bandage can be conveniently formed from an elongated web of fabric, such as a closely woven gauze strip, by rolling the web into a tube having a wall defined by a plurality of fabric layers. Preferably, one transverse edge of the web, such as indicated by the numeral **12**, is folded upon itself, or tucked in as shown in Fig. 2, and then the fabric web is rolled to the other transverse edge **14** which is also tucked into the fabric so that no frayed edges of the fabric will be exposed. In rolling the elongated web into tubular form, it will probably be found convenient to roll the same over a cylindrical object of finger size or larger than the average finger. After the web has been rolled and the cylindrical object removed, the tubular bandage which is formed by the rolling is closed at one end as by stitching

thereacross in the manner indicated by the reference numeral **16**. Upon being stitched to close the said one end, the bandage will be transformed from the generally tubular shape to generally rectangular shape having two multilayer opposed generally flat sides **18** and **20**.

In accordance with the present invention, the bandage is cut or split along the longitudinal edges of the generally flat sides throughout a substantial portion of the length of the bandage to define "flaps" which are best shown in Fig. 3. In further accord with the invention, a pair of tapes **22** and **24** are secured to the flaps on the sides **18** and **20**, respectively, adjacent the open end of the bandage. While the tapes **22** and **24** may be secured by any convenient means such as by tieing, etc., I have shown the tapes as secured by being pressed through openings **26** and **28** in the flaps with the inserted ends of the tapes being enfolded upon the main portions of the tapes and stitched thereto as indicated at **30**, **30**. It should be understood that strings may be used in place of the aforedescribed tapes. As will be described in greater detail hereinafter, splitting the open end of the bandage facilitates application of the bandage to the finger and the tapes are utilized in securing the bandage after it has been applied.

I have found that a finger dressing which is formed in the aforedescribed manner can be easily packaged in a flat, generally rectangular envelope indicated by the reference numeral **32**. Preferably, the envelope is formed of transparent plastic material which can be sealed adjacent one edge **34** thereof by the application of heat or by the use of an adhesive in accordance with conventional practices. I have also found that the envelope can be easily opened and the bandage removed therefrom without inconvenience if the free ends of the tapes **22** and **24** are held between the sides of the envelope in the sealed portion thereof, as shown in Fig. 1. Then, in opening the envelope to remove the bandage, the sealed edge portion **34** of the envelope can be torn away and at the same time the tapes **22** and **24** will be accessible to pull the bandage from the envelope. While the particular method of sterilizing the bandage and the package or envelope is no part of the present invention, it is important to note that in all events the packaged bandage should be supplied in a sterile condition. It will probably be found preferable to seal the bandage within the envelope and then to sterilize the package.

Obviously, by removing the bandage from the envelope in the aforedescribed way, the bandage need not be handled or come into direct contact with any unsterile object. After the bandage has been removed, the injured finger can be inserted within the open end of the bandage, as shown in Fig. 3. After the finger has been inserted, one of the tapes, such as the tape **22**, is drawn over the back of the hand and around the wrist while the other tape **24** is drawn across the palm of the hand and around the wrist to be looped over the tape **22** on the back of the hand, as shown at **36**, and then the end portions of the tapes may be tied together at the wrist as shown at **38**. There are, of course, numerous other ways in which the tapes or strings may be tied on the hand to secure the bandage on the finger.

If preferred, after the finger has been inserted within the bandage **10**, the split portions or the flaps of the sides **18** and **20** can be enfolded upon themselves, as indicated in Fig. 4, and the tapes **22** and **24** wrapped around the enfolded portions of the bandage and the injured finger so as to secure the bandage to the finger in the manner shown.

It will be quite apparent that the tapes need not be employed in securing the bandage to the hand or to the finger. If the patient desires, the flaps may be trimmed or may be enfolded so as to reduce the overall length of

the bandage and thereafter adhesive tape or other means may be wrapped around the finger and the open end of the bandage to secure the same to the finger.

The modified structure shown in Fig. 5 is substantially identical to the previously described bandage with the exception that the tapes 22 and 24 are not passed through openings in the flat sides 18 and 20 but are stitched thereto as indicated at 40 in a position spaced a substantial distance from the open end of the bandage. This will permit the split portions or flaps to be trimmed as desired without trimming the tape securing means.

It will be understood that in all forms of construction the flaps are provided adjacent the open end of the bandage to facilitate application of the bandage to an injured finger. The tapes are also provided to facilitate application, as by providing means for separating the flaps without touching the bandage while inserting the finger, and the said tapes also provide means for easily and simply securing the bandage on the finger or the hand.

It should also be understood that the bandage may be adjusted to fit the different fingers and the thumb by changing the overall length thereof as by trimming the flaps adjacent the open end or by enfolding the flaps after the bandage has been applied. Therefore, the bandage need not be supplied in a wide variety of sizes to suit family needs. For example, a small size may be provided for application to the fingers of children, an intermediate size for application to the fingers of women, and a large size may be provided for application to the fingers of men.

It is believed that the aforedescribed bandage and the method in which it is applied will be fully acceptable to the medical profession. The usual and acceptable technique of dressing an injured digit where the injury involves the skin is to apply a dressing to the wound and to wrap the dressing with a bandage web. The material used in accordance with the accepted technique is untreated gauze which is known to absorb blood and discharge matter to thereby prevent these substances from macerating the skin. It requires considerable care and skill to apply the dressing and bandage and at the same time maintain sterility in accordance with the conventional techniques. A secondary consideration in the application of the dressing and bandage in accordance with the conventional technique is to avoid pain to the patient.

The finger bandage of the present invention constitutes an absorbent dressing as well as the bandage and it is preferred that the same absorbent untreated gauze be used in the construction of the bandage as is used in the dressing and bandage applied in accordance with the conventional practice. It is believed that multi-layer tubular bandage will absorb all of the blood and matter encountered with the usual finger injury, but in the event of a particularly serious injury, the bandage may be reenforced by wrapping additional gauze therearound. It may prove to be of particular advantage to wrap additional gauze around the bandage in cases where it is anticipated that the bandage will be subjected to a lot of abuse.

While two specific embodiments have been shown to indicate preference and to exemplify the invention, it is not the intent to limit the scope of the invention to the details of the bandages shown and described otherwise than indicated by the claims which follow.

I claim as my invention:

1. A preformed surgical dressing for the finger comprising a generally tubular fabric bandage, said tubular bandage being closed at one end by transverse stitching to define opposed generally flat sides on the tube, said bandage also being split through a substantial portion of its length along the longitudinal edges of the generally flat sides from the other end of the bandage to define a pair of flaps, said flaps being adapted to be separated to facilitate application of the bandage and also being adapted to be enfolded upon the finger of a patient, and a tape secured to each of said flaps, said tapes being adapted to secure the bandage on the finger of a patient by being wrapped around the finger and the enfolded flaps or by being tied together about the hand and wrist, and a package enclosing said bandage in a sterile condition, said package comprising a generally rectangular envelope sealed at one end and securing the free ends of said tapes in said sealed end.

2. A preformed finger bandage comprising a fabric tube which is closed at one end and split along a substantial portion of its length from the other end to define a pair of flaps, and a tape stitched to each of said flaps a substantial distance from said other end of the bandage, said tapes being adapted to facilitate application of the bandage and to secure the same on the finger of a patient and said flaps being adapted to be enfolded after the said bandage has been applied.

3. A preformed surgical dressing for the finger comprising a generally tubular fabric bandage, said tubular bandage being closed at one end by transverse stitching to define opposed generally flat sides on the tube, said bandage also being split through a substantial portion of its length along the longitudinal edges of the generally flat sides from the other end of the bandage to define a pair of flaps, said flaps being adapted to be separated to facilitate application of the bandage and to be enfolded after the bandage has been applied to the finger of a patient, and a tape stitched to each of said flaps a substantial distance from said other end of the bandage, said tapes being adapted to secure the bandage by being wrapped around the enfolded flaps or by being tied together about the hand and wrist.

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