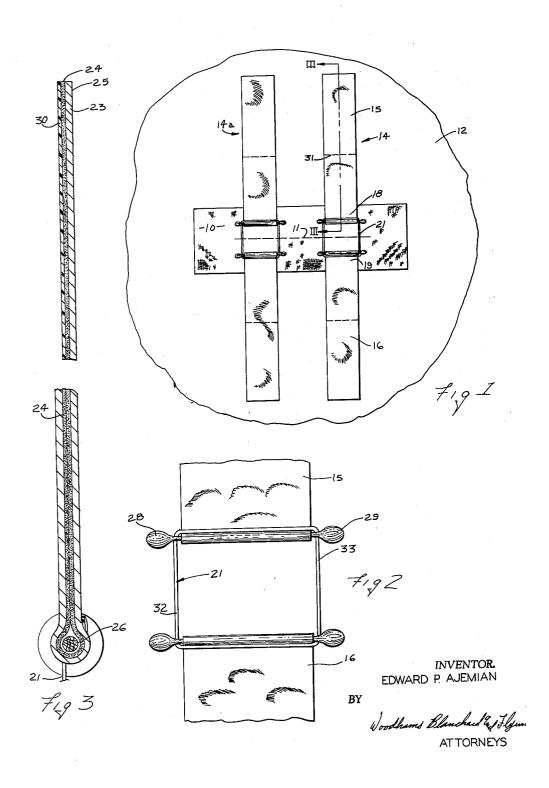
E. P. AJEMIAN

DRESSING RETAINER OR STRAP Filed July 11, 1962



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3.103.218 DRESSING RETAINER OR STRAP Edward P. Ajemian, 2528 Hill 'n' Brook Drive, Kalamazoo, Mich. Filed July 11, 1962, Ser. No. 209,055 6 Claims. (Cl. 128—171)

This invention relates to a dressing retainer and relates particularly to a dressing retainer which need not be removed from the patient's body in order to change a 10

dressing.

Several methods have been suggested in the art for holding a dressing in a desired position over a wound or an incision. The pressing may simply be taped in place using adhesive tape which adheres to the dressing and to the patient's body. In this case, changing of the dressing also requires removal of the tape from the patient's body which may cause considerable discomfort and pain as well as damage to tissue near or in the sensitive wound area due to movement thereof. Furthermore, frequently repeated dressing changes as required, for example, in the care of a dry or draining wound may, due to the frequent application and removal of adhesive tape, cause inflammation of the skin to which patient.

It has been previously suggested to use dressing retainers comprised of two adhesive tapes placed on opposite sides of the wound and permanently connected by rigid filaments or nonresilient threads or an elastic crosspiece which would bridge the wound. In these cases also, the adhesive tape must be removed from the patient's skin before the dressing can be removed and replaced, with the attendant pain and discomfort of the patient resulting therefrom as hereinabove described.

Rigid or nonelastic dressing retaining means are additionally disadvantageous in that movement of the area surrounding the wound, such as would be caused by the patient's breathing in the case of an abdominal wound, may result in patient discomfort if said movement 40 causes an effective tightening of the dressing retainer or may result in a displacement of the dressing if said movement causes an effective loosening of the dressing re-

tainer.

Previous dressing retainers have not been adapted for 45 manufacture quickly and easily by the doctor at time and place of application. Further, at least one of the prior retainers is difficult to apply due to the tendency of the several threads and tapes involved to become entangled. Moreover, previous multiple dressing retainers of a given size have been incapable of use with dressings of diverse sizes and this has necessitated keeping a stock of many different sizes of retainers.

Accordingly, the objects of the invention include:

(1) To provide an improved dressing retainer which 55 need not be removed from the body of the patient in order to remove or replace dressings.

(2) To provide a dressing retainer wherein the pain and discomfort due to frequent removal of adhesive tape

will be eliminated.

(3) To provide a dressing retainer which can be made quickly and inexpensively, which requires only readily available components, which can be made in any size desired, and which can be made easily without any tools

by the doctor or other applier at the time and place of use but which is also adapted to mass manufacture and distribution.

(4) To provide a dressing retainer wherein major components can be freely interchanged between retainers of different sizes to permit assembly of any desired retainer configuration.

(5) To provide a dressing retainer which can be easily and quickly applied and which requires no tools or

training for its application.

(6) To provide a dressing retainer which can be used singly or in groups in any desired arrangement.

(7) To provide a dressing retainer such that a retainer of a given size, without modification, can be so applied as to retain dressings of widely diverse sizes and when applied can be used with dressings of different

(8) To provide a dressing retainer which requires no contact with the wound or the area immediately sur-

20 rounding the wound.

- (9) To provide a dressing retainer which can be manipulated to retain or release a dressing quickly and easily, which can be so manipulated with one hand, which can be disposed entirely away from the wound area while the tape is applied, causing further discomfort to the 25 a dressing is being removed or replaced, and which will effectively hold the dressing in place when it is applied
 - (10) To provide a dressing retainer which is capable of achieving any desired degree of pressure on the dressing and which maintains said pressure within relatively close limits despite movements of the patient, thus avoiding any tendency for the dressing to become displaced or for the patient to experience discomfort or pain from excessive pressure on the wound area caused by such 35 movement.

(11) To provide a dressing retainer which is flexible and which will effectively fix a dressing in place regardless of irregular body contours around the wound.

(12) To provide a dressing retainer which may be so applied and used as to help hold the edges of the wound together to any extent desired.

(13) To provide a dressing retainer which is free of hard or sharp edges or projections which might irritate or disturb the patient.

(14) To provide a dressing retainer which is sturdily constructed and will not deteriorate in extended use.

Other objects and purposes of this invention will become apparent to persons acquainted with devices of this type upon reading the following disclosure and inspecting the accompanying drawings.

Referring to the drawings:

FIGURE 1 is a plan view of a portion of a patient's body illustrating a dressing retainer on a wound by two dressing retainers, each embodying the invention herein

FIGURE 2 is a plan view of a fragment of one of the dressing retainers shown in FIGURE 1.

FIGURE 3 is a broken, central sectional view, taken on the line III-III of FIGURE 1, on an enlarged scale, 60 of one-half of a dressing retainer.

Referring to FIGURE 1, there is shown a fragment of a patient's body 12 and a dressing 10 covering a wound 11 therein. The dressing 10 is held against movement relative to said wound by dressing retainers 14 and

14a. Two retainers 14 and 14a are here shown for purposes of illustration but it will be apparent that the dressing retainer embodying the invention may be used singly or severally, as desired, and that the use of two such retainers, as shown in FIGURE 1, is not limiting.

Since the retainers 14 and 14a are identical, only retainer 14 will be described in detail herein and it will be understood that such description applies equally to the other retainer. The retainer 14 is comprised of two strap portions 15 and 16 whose adjacent ends 18 and 19 $_{10}$ are releasably connected by a resiliently extensible connector, here a loop 21. Desirably, the loop 21 is a rubber band. The strap portions 15 and 16 may be of any convenient size and shape but are here shown as being substantially rectangular.

The strap portions 15 and 16 are preferably of the same construction, hence, a description of portion 15 will suffice to describe both. The strap portion 15 is comprised of a layer 23 of a flexible backing material to one side of which is adhered a layer of adhesive material 20 24, said backing layer and said adhesive layer forming an adhesive strip 25 which may be, and preferably is, ordinary adhesive tape, including non-allergenic, adhesive tape. Said strip 25 may be pierced with ventilation holes if desired. An elongated rod 26 is secured to the inner 25 end 18 of the portion 15 in any convenient manner, here by folding a suitable length of the adhesive strip 25 around said rod 26 and thence back upon itself. two adhesive layers adhere to each other and, thus, the rod 26 is maintained in place.

The length of the rod 26 is greater than the width of the strip 25, so that the ends of the rod 26 project beyond the lateral edges of the strip 25. Said rod ends are here shown as covered with and padded by enlarged masses gical cotton. Desirably, the rod 26 may be a cottontipped applicator which is a commonly available product used for swabbing and similar purposes. The rod 26 is held against substantial lateral movement with respect to the strip 25 by the enlarged masses 28 and 29 and also 40 by adhesion between it and the layers 24.

The strip 25 is folded back upon itself for a substantial distance, here to the line 31. Thus, the portion of the strip between the line 31 and the end 18 is not capable of adhering to the patient's body or to the dressing be- 45 cause the adhesive layers adhere to each other. Thus, the portion of the strip between line 31 and end 18 can be moved away from the dressing easily when necessary while the remainder of the strip 25 remains adhered to the patient's body.

If desired, the portion of the adhesive layer 24 between line 31 and the outward end of the strip 25 may be covered by a layer of protective, nonadherent material 30, such as polyethylene film, until the strap portion 15 is to be applied to the patient's body.

In use, the protective material 30 is removed from the strap portions 15 and 16 of the dressing retainer 14. The strap portions 15 and 16 are then adhered to the patient's body on opposite sides of the wound, said strap portions being in substantial alignment with each other 60 and with the rods 26 thereof adjacent each other. It will be noted that the strap portions 15 and 16 are adhered to areas of the patient's body well away from the area of the wound 11. If desired, other dressing retainers may be similarly applied side by side or in other man- 65 ners as may be desired.

After the dressing is applied the inner (rod) ends of the strap portions 15 and 16 are placed near to each other (and on top of the dressing if said dressing is of width greater than the distance between the adjacent ends 70 of the strap portions). The adjacent ends are then connected together by the resiliently extensible loop 21. Thus, one segment 32 of the loop 21 is placed under the corresponding ends of the rods and over the dressing, the loop is then stretched and another segment 33 thereof is 75 placed under the other corresponding ends of the rods and over the dressing. Thus, the loop 21 is positively secured to each of the two strap portions 15 and 16 and holds the dressing retainer 14 in position. The loop 21 is in a stretched condition and thus, urges the adjacent ends of the strap portions 15 and 16 toward each other and firmly but yieldably maintains the dressing in place.

To open the dressing retainer 14 so that the dressing 10 held thereby may be removed and/or replaced, the loop 21 is removed by reversing the steps described above. It is to be noted that removal of the dressing 10 does not require removal of the strap portions from the patient's

It will be noted that dressing retainers placed as above described will effectively hold dressings differing widely in size from the dressing which was originally used. It will also be noted that the force urging the adjacent ends of the strap portions 15 and 16 toward each other is capable of being varied over a wide range by varying the distance between the adjacent ends of the strap portions 15 and 16 and/or by varying the length or elasticity of the loop 21.

When the dressing retainer no longer is needed, it may be removed as desired, possibly by simply pulling it off. At such time the wound area, being presumably well along in the healing process, would be less tender than before and, furthermore, since the adhesive portions of the strap portions 15 and 16 are fixed to the body 12 at a relatively large distance from the wound, the patient would 30 experience short-lived and relatively minor discomfort occasioned by such removal of the dressing retainers.

Although the dressing retainer discussed herein and illustrated in the accompanying drawings is shown as using a single loop 21, it is apparent that two loops also can be 28 and 29 of a soft resilient material, which may be sur- 35 used, in which case each loop would extend between the corresponding ends of the two rods.

> While a particular preferred embodiment of the invention has been herein disclosed in detail for purposes of illustration, it will be understood that variations or modifications of such disclosure, which lie within the scope of the appended claims, are fully contemplated.

What is claimed is:

1. A surgical dressing retainer comprising:

a pair of elongated, flexible strap portions having an adhesive coating on the under surface thereof whereby they may be secured to a body on opposite sides of a wound;

anchor means secured to the adjacent ends of said strap portions and having portions which project laterally from both side edges of said strap portions; flexible, elongated, resiliently extensible, closed band means having portions looped around the projecting portions of said anchor means, said band means also having portions which extend between said

strap portions whereby said strap portions are inter-

connected by said band means.

2. A surgical dressing retainer according to claim 1, in which said anchor means on each strap portion comprises an elongated rod extending along the adjacent edge of its associated strap portion and having end portions extending laterally beyond both side edges thereof.

3. A surgical dressing retainer according to claim 2, in which the end portions of the rod both have enlarged heads thereon.

4. A surgical dressing retainer according to claim 2, in which the strap portions consist of adhesive tape and a portion of said tape encircles said rod and extends for a substantial distance along the remainder of the tape with the adhesive surfaces thereof being adhered to each other.

5. A surgical dressing retainer according to claim 2, in which said band means consists of a one-piece rubber band having two portions extending parallel with each other along the adjacent edges of the strap portions and having two further portions extending between the projecting portions at opposite sides of the strap portions.

6. A surgical dressing retainer comprising:
a pair of elongated, flexible strap portions having adhesive means thereon whereby they may be secured to a body on opposite sides of a wound therein; anchor means secured to the strap portions close to the adjacent ends thereof and having portions which project laterally from both side edges of said strap portions:

portions; connecting means releasably secured to and extend-

ing between the projecting portions of said anchor means whereby said strap portions are interconnected with each other.

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