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J. McC. PECK

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ADHESIVE BANDAGE

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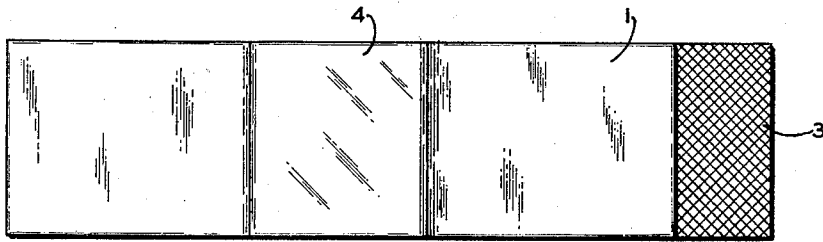


FIG. 1

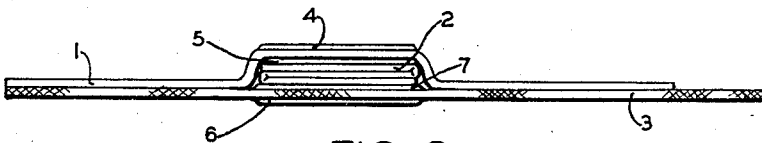


FIG. 2

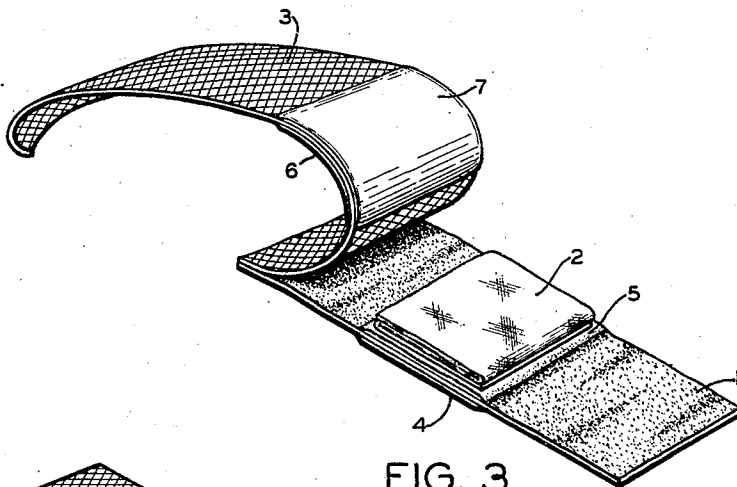


FIG. 3

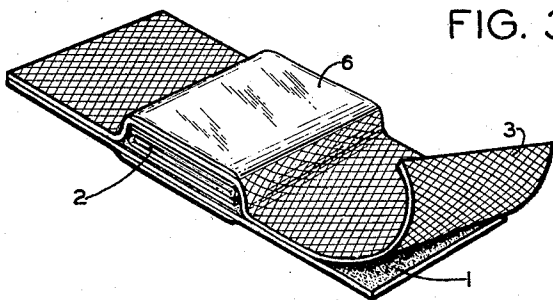


FIG. 4

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## ADHESIVE BANDAGE

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3 Claims. (Cl. 128—156)

(Granted under the act of March 3, 1883, as amended April 30, 1928; 370 O. G. 757)

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My invention relates to an adhesive bandage. It has to do, more particularly, with that type of bandage unit embodying an adhesive strip which carries a gauze pad that is protected by a removable crinoline backing.

One of the objects of my invention is to provide an adhesive bandage that carries an ointment impregnated pad which is particularly effective in the care of minor wounds to speed tissue repair and minimize scar formation.

Another object of my invention is to provide an adhesive bandage which carries an ointment pad, wherein the ointment pad is completely protected from contamination before and during use and wherein means is provided for preventing soaking of other parts of the bandage by the ointment carried by the pad and for preventing undesirable exudation of the ointment from the bandage unit before and during use.

The preferred embodiment of my invention is illustrated in the accompanying drawing wherein:

Fig. 1 is a plan view of the bandage.

Fig. 2 is a side elevational view of the bandage.

Fig. 3 is a perspective view of the bandage showing the backing strip being separated from the adhesive strip.

Fig. 4 is a view similar to Fig. 3 showing the backing strip almost completely removed from the adhesive strip.

With reference to the drawing, I have illustrated an adhesive bandage unit made according to my invention comprising a strip 1 of adhesive cloth. The adhesive substance is on the inner surface of the strip 1, as illustrated best in Figs. 3 and 4. Substantially midway between its ends the strip 1 carries a pad 2 which preferably consists of overlying layers of gauze. This gauze is of such a nature that it will absorb an ointment and is thoroughly impregnated with the ointment.

The gauze pad 2 is protected by a removable backing strip 3 which is preferably of crinoline material. This strip 3 completely covers the pad 2 and the adhesive surface of the strip 1 and adheres to such surface. One end of the strip 3 extends beyond the corresponding end of the strip 1, as shown best in Figs. 1 and 2, to facilitate separation of the strip 3 from the adhesive strip 1.

In order to prevent the ointment from exuding from the bandage unit in an undesirable manner, I provide areas on the strip 1 and on the strip 3, which areas overlie the pad 2, that are impervious to the ointment. These areas are preferably greater in extent than the area of the pad. Thus, in such areas the adhesive strip 1 is pro-

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vided with a coating 4 on its outer surface and a coating 5 on its inner surface. Similarly, the strip 3 is provided with a coating 6 on its outer surface and a coating 7 on its inner surface. The coatings may be of any suitable substance impervious to the ointment, such as paraffin, beeswax, or suitable resins. These coatings prevent the adhesive strip 1 and the backing strip 3 from becoming soaked with the ointment. They prevent the ointment from exuding through the strips 1 and 3 before the bandage is used and from exuding through the strip 1 after the bandage has been applied to the patient. The pad 2 will normally adhere to the coating 5 even as the strip 3 is being removed, due to the ointment, but if desired, the coating 5 may be covered with adhesive on its inner surface so that it will more firmly stick to the pad 2 and retain the pad on the strip 1.

Instead of using the crinoline backing 3 with the coatings 6 and 7, I may employ a strip of wax paper or similar ointment impervious material of the same area as backing 3. Also, as a substitute for the layers 4, 5, 6, and 7, I may employ layers of wax paper or similar material.

As stated above, the pad 2 is fully impregnated with an ointment. The ointment used may be of any kind such as white petrolatum, sulfa compound, boric acid, scarlet red, mercurous chloride, Whitfield's, salicylic, ammoniated mercuric, zinc oxide, or coal tar.

Each adhesive bandage should be wrapped in an individual envelope after forming and should then be sterilized. The ointment impervious coatings will prevent seeping of the ointment through the strips 1 and 3 during the sterilizing process.

Before the bandage is used, it will be in the condition illustrated in Figs. 1 and 2. To use the bandage the extending end of the strip 3 is gripped with the fingers and is separated from the adhesive strip 1, as shown by the successive steps indicated in Figs. 3 and 4. Then the pad 2 is placed in contact with the wound and the adhesive portions of the strip 1 are placed against the skin of the patient.

The ointment impregnated gauze pad represents a distinct advantage over the present type of adhesive bandage of commercial manufacture in that an ointment application is considered advisable in good surgical care of a minor wound to speed tissue repair and minimize scar formation by keeping the wound edges soft and preventing scab formation. Further, an ointment medium is the best present day method of continual exposure of the wound to the action of

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antiseptics, tissue growth stimulants and keratolytics. Drugs incorporated in a dry dressing are effective only if there is enough exudate in the wound to dissolve them. This is rarely the case in the size wound where the usual dry adhesive bandages are employed.

The invention described herein may be manufactured and used by or for the Government of the United States of America for government purposes without the payment of any royalty thereon or therefor.

What I claim is:

1. An adhesive bandage comprising an adhesive strip, a gauze pad carried by said strip intermediate its ends and being impregnated with an ointment, the inner and outer surfaces of said adhesive strip being provided with an ointment impervious coating throughout an area greater than that occupied by the gauze pad, and a removable backing strip covering said ointment pad and overlying said adhesive strip and adhering thereto, said backing having an area extending over at least the area of said pad which is impervious to the ointment.

2. An adhesive bandage according to claim 1 wherein the ointment is one selected from the group consisting of white petrolatum, sulfa com-

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pounds, boric acid, scarlet red, mercurous chloride, Whitfield's, salicylic, ammoniated mercuric, zinc oxide, and coal tar.

3. An adhesive bandage comprising an adhesive strip, a gauze pad carried by said strip intermediate its ends, said pad being impregnated with an excess of an ointment, the inner and outer surfaces of said adhesive strip being provided with a resinous coating impervious to said ointment throughout an area greater than that occupied by said gauze pad, and a removable backing strip covering said gauze pad and overlying said adhesive strip and adhering thereto, said backing strip having a resinous coating thereon extending over at least the area of said pad, said coating being impervious to said ointment.

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#### REFERENCES CITED

The following references are of record in the file of this patent:

#### UNITED STATES PATENTS

Number	Name	Date
2,226,546	Bower	Dec. 31, 1940
2,233,209	Herzog	Feb. 25, 1941