Patented Dec. 22, 1936 2,064,898

UNITED STATES PATENT OFFICE

2,064,898

ANTISEPTIC BANDAGE

Edward Fetter, deceased, late of Baltimore, Md., by Florence Kemler, administratrix, Baltimore, Md., assignor, by mesne assignments, to Henry V. Lucas, Baltimore, Md.

No Drawing. Application February 21, 1936 Serial No. 65,173

5 Claims. (Cl. 167—84)

This application is a continuation in part of the application filed August 8, 1932, Serial No. 627,830, entitled "Bandage", and a continuation in part of the application filed August 7, 1933, Serial No. 684,120, entitled "Antiseptic dressing" and a continuation in part of application #648,990, filed December 27, 1932, all said applications being in the name of Edward Fetter.

The invention relates to the treatment of sores, bruises, cuts and external injuries and the like where the continued application of a healing antiseptic is desirable. For this purpose the invention provides an antiseptic bandage which is particularly effective in the application of a healing antiseptic to the portion of the body being treated.

In accordance with the practice of the invention in the preferred form, raw rubber which is preferably clean, or which has been washed by the methods known to the rubber art, is masticated and mixed with oxyquinoline. The actual mixing of the antiseptic in and throughout the body of the rubber is of importance. The rubber thus mixed with said healing antiseptic is then rolled or otherwise formed into sheets of the desired width, thickness and length.

The rubber bandage material thus produced possesses elastic properties to a considerable degree which are useful in fitting the bandage and keeping it in contact with the injured portion. It is also self adhesive and preferably moldable to some degree, which self adhesive and moldable properties, as well as the elasticity, are effective in the application of the bandage.

In the use of the article of the invention, assuming that a finger is injured so that the skin is broken, a small portion of the bandage, is wrapped about the finger and sealed at all points by merely rubbing with a finger of the other hand and pressing together the contacting edges. If desired, any protuberances due to joining the edges or to excess material can be removed by means of scissors without causing leakage provided the edges of any openings which are left are merely brought in to contact with each other and pressed together.

The bandage material thus forms a liquid and gas proof antiseptic covering which protects the injury, the wound being so thoroughly and effectively protected that the injured person may continue with his work immediately. Instead of a plain sheet material, a porous sheet may be used which provides ventilation but still gives effective protection even from liquids.

The important feature of the invention resides in the manner of retaining and applying the healing antiseptic which is mixed in the body of the rubber and retained in the rubber when the surface of the same is protected or even under other circumstances at normal room temperatures, and is discharged from the bandage when applied due to the heat of the body so that the antiseptic is gradually released from the rubber and applied continuously to the portion of the body covered by the bandage, giving a continuous treatment of the wound.

It is also of interest that when the antiseptic bandage is enclosed in a transparent container and warmed to a temperature corresponding to the heat of the body, the antiseptic is gradually released and deposited on the sides of the container forming needles which seem to be of crystalline structure and which grow in length as the discharge of the antiseptic continues. Such crystalline needles of the length of one-half to three-quarters of an inch have been observed under these circumstances.

The bandage prepared as above has proved highly successful in use, the continuous treatment of the wound or sore with antiseptic in this way being very effective.

In addition to oxyquinoline, it is found that other healing antiseptics may be used in this way, particularly the one known as hexylresorcinol. This material has been mixed with raw rubber, as above described in connection with oxyquinoline. The material thus mixed is rolled into sheets which have the physical properties previously related, i. e., they are elastic to a degree, though they do not ordinarily have the resiliency of vulcanized rubber. They are also self adhesive and moldable to a greater or less extent and the hexylresorcinol, like the oxyquinoline is retained in the rubber at normal room temperatures or when suitably protected, being discharged by the heat of the body as above described when the bandage is applied to the wound, giving a continuous application of the antiseptic to the wound.

For commercial distribution the bandage is preferably made in thin sheets which are formed into strips. These strips are rolled up with a protective strip as paper or cloth with which a piece of gauze may be included, if desired. These details are no part of the invention. It is further of interest that while the bandage material is self adhesive to a high degree so that when pressed by the fingers it practically becomes welded, it is non adhesive as to the skin and after being applied it can be easily removed at any time without injury to the partially healed wound.

The invention has been described specifically in detail in order that the manner of producing the article and of applying it in use may be fully understood, however, the specific terms herein are used descriptively rather than in a limiting sense, the scope of the invention being defined in the claims.

What is claimed as new and desired to secure by Letters Patent is:

1. A bandage consisting of unvulcanized rubber which is self adhesive and moldable, the rubber having mixed therein throughout the body of the material oxyquinoline, in the form of an antiseptic which is solid at normal room temperatures, but gradually vaporized by the heat of the body and discharged from the rubber so that it is continuously supplied to the skin beneath the bandage when the bandage is in use.

2. A bandage comprising a sheet of self adhesive moldable unvulcanized sheet rubber, the rubber containing oxyquinoline mixed in the body of the rubber and throughout the same, the oxyquinoline being retained in the rubber when the surface is covered and protected and being discharged by the bandage due to the heat of the body when the bandage is applied so that the oxyquinoline is supplied continuously to the portion of the body covered by the bandage.

3. A bandage comprising a sheet of self adhesive moldable unvulcanized rubber containing hexylresorcinol mixed in the body of the rubber and throughout the same, the hexylresorcinol being retained in the rubber when the surface is covered and protected and being discharged by the bandage due to the heat of the body when the bandage is applied so that the hexylresorcinol is supplied continuously to the portion of the body covered by the bandage.

4. A bandage comprising a sheet of self adhesive unvulcanized rubber having mixed in the body of the rubber and throughout the same a healing antiseptic, which is adapted to be retained in the rubber when the surface of the same is covered and protected and is adapted to be discharged therefrom due to the heat of the body when the bandage is applied so that the antiseptic is applied continuously to the portion of the body covered by the bandage.

5. A bandage comprising a sheet of self adhesive unvulcanized rubber having mixed in the body of the rubber and throughout the same a healing agent adapted for external application, which healing agent is adapted to be retained in the rubber when the surface of the same is covered and protected and is adapted to be discharged therefrom due to the heat of the body when the bandage is applied so that the healing agent is applied continuously to the portion of the body covered by the bandage.

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