Sept. 12, 1950 A. R. EBBERTS 2,522,216

APPLICATOR

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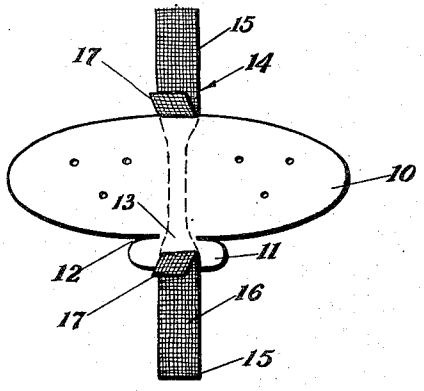


Fig. 1

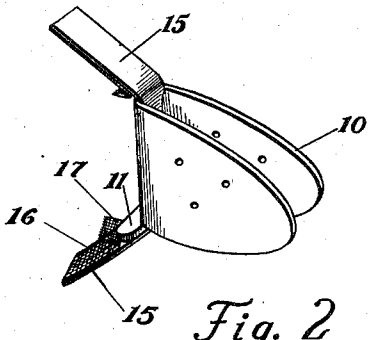


Fig. 2

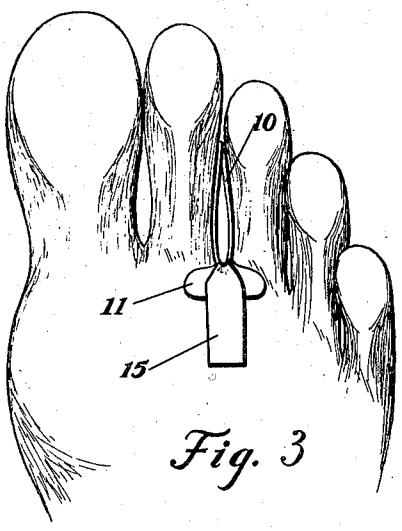


Fig. 3

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APPLICATOR

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2 Claims. (Cl. 128—153)

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This invention relates to medicated pads or medicament applicators, and more particularly to one for use between digits, such as the toes and fingers.

The applicator of the present invention, although particularly useful for applying medicaments to the contiguous surfaces of adjacent toes, is not limited to that use, for, as will be seen, it can be used with the same efficacy between the fingers. To simplify the disclosure of the present invention, however, the illustrated embodiment of the same has been shown and described as an applicator for use between the toes. When so used, the applicator of the present invention is particularly useful in the treatment of infections such as athlete's foot and the like usually occurring between the toes.

Other applicators have been heretofore proposed for the treatment of infections such as athlete's foot, but have not been adopted to any great extent. These prior devices in most instances have been difficult to apply and when applied were uncomfortable, either because they were easily displaced in use or created pressure on the toes when shoes were worn.

This criticism is not pertinent to the applicator of the present invention, for it is easy to apply in position between the toes, and as it is positioned solely between the toes there are no portions overlying surfaces of the toes which press upon the same when shoes are worn, with resultant discomfort to the user. The applicator, furthermore, can be securely anchored in position, and is not likely to become displaced in use as were prior applicators.

The applicator of the present invention, in the broadest aspects thereof, comprises a body member, preferably formed of an absorbent material, for receiving a medicament, and a strip of adhesive plaster of a length substantially greater than the width of the body member transversely extending across and secured to the medial portion of the body member. The opposite end portions of the strip, as they extend beyond the opposite edges of the body member, form anchoring tabs for holding the body member in position.

In use, the body member is folded upon itself to form a pair of pads, the oppositely facing surfaces of which, when the folded body member is placed between adjacent toes, engage the contiguous surfaces of the same. The fold or bow portion of the body member engages the surface of the foot lying in the region of the crease between the toes and very effectively maintains the medicament against this surface. The anchoring tabs formed by the oppositely extending end portions of the strip of adhesive plaster are adhesively secured to the instep and ball portions of the foot, respectively, to securely anchor the applicator in place. As the ball portion of the foot just behind the toes is not usually held against the sole of the shoe, this anchoring tab creates no discomfort to the user. This is also true of the anchoring tab secured to the instep just behind the toes, for here again a shoe ordinarily does not tightly press against this portion of the foot.

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The width of the strip of adhesive plaster is reduced throughout the extent of the same secured to the body member to reduce the bulk of the material disposed between the toes when the applicator is in use. As the body member itself is preferably formed of relatively thin material, there is thus no large mass of material between the toes to cause discomfort to the patient.

To further increase the efficacy of the applicator, the body member is formed at the one edge thereof with a laterally extending wing or ear portion provided at its opposite ends with inwardly extending slits aligned with and forming substantially continuations of the adjacent edge of the body member. This wing or ear portion, when the body member is folded along a line substantially coincident with the longitudinal axis of the strip of adhesive plaster, forms a relatively flat pad which engages the surface of the ball of the foot contiguous to the crease between the toes when the applicator is in use.

Other features and advantages of the present invention will be apparent from the following description taken in connection with the accompanying drawing, in which:

Figure 1 is an elevational view of the applicator of the present invention;

Figure 2 is a perspective view of the applicator showing the body member folded upon itself for insertion between the toes; and

Figure 3 is a view of the underside of a foot showing the applicator of the present invention in position between adjacent toes of the foot.

The applicator of the present invention, referring now to the drawing, comprises a sterile body member 10 of some suitable absorbent material such as felt or similar fabric. The body member is somewhat oval in plan, with the oppositely extending end portions progressively decreasing in width. If desired, the body member can be medicated during the manufacture of the applicator by impregnating the absorbent mate-

rial of the body member with a suitable medicament. To preserve the sterility of the member 10 as well as the medicament carried thereby the applicator would be sold in a sealed container as are conventional bandages today.

The body member is formed at the one side thereof with a small wing or ear portion 11 having at the opposite ends thereof, slits 12 extending inwardly thereof but terminating short of each other to form a relatively narrow integral connecting element 13. The slits 12, it will be noted, form substantial continuations of the defining edges of the body member, that is, the slits 12 are substantially in alignment with the defining edges of the body member contiguous to the wing or ear portion 11.

Although the body member might be anchored in position between the toes by any means desired, it is now preferred to anchor the body member in position by a strip of adhesive plaster 14 of a length substantially greater than the width of the body member 10. The strip 14 extends transversely across the medial portion of the body member and is secured thereto by the adhesive material carried by the strip. The oppositely extending end portions of the strip 14 form anchoring tabs 15 adapted to adhesively engage the foot and thus anchor the body member in position between the toes.

To preserve the adhesive surface of the anchoring tabs, protecting bands 16 of a gauze material are carried by the adhesive surface of each tab. To facilitate removal of the gauze from the adhesive surface, the bands are provided with laterally extending tab elements 17 which can be grasped between the fingers when it is desired to strip the protecting band from the adhesive surface of the anchoring tabs.

In the use of the applicator of the present invention, the body member 10 is folded upon itself, as best illustrated in Figure 2, to form a pair of pads integrally joined together at their roots by a bridge or bow element comprising the medial portion of the body member across which the strip of adhesive plaster is secured. After the body member has been folded upon itself to form the pads just described, the applicator is inserted between the toes with the strip of adhesive plaster facing outwardly, after which the protecting bands of gauze can be stripped from the anchoring tabs to allow the anchoring tabs to be adhesively secured to the instep and ball portions of the foot, respectively. This, as should now be understood, will securely anchor the applicator in position between the toes with the oppositely facing surfaces of the pads engaging the contiguous surfaces of the adjacent toes between which the applicator is mounted or positioned.

To increase the comfort of the user, the strip of adhesive plaster is considerably reduced throughout the extent or portion secured to the body member to thus decrease the bulk or mass which lies between the toes when the applicator is in use. The body member is preferably formed of a relatively thin fabric, so that it creates no annoying bulk between the toes.

The wing or ear portion 11, is clearly seen in Figure 3, forms a small relatively flat pad extending outwardly of the bow of the folded body member after the same is folded upon itself and disposed between the adjacent toes to be treated. The small pad formed by the ear or wing portion 11 extends rearwardly of the body member and thus engages the surface of the ball of the foot contiguous to the crease between the toes, an area of the foot which has been difficult to treat by previously proposed applicators.

As the body member 10, after it has been folded and positioned between the toes to be treated, does not overlie the top surfaces of the toes, it cannot be pressed upon the toes when a shoe is worn on the foot being treated. The anchoring tabs formed by opposite end portions of the strip 14 of adhesive plaster, as they are engaged with portions of the foot not ordinarily compressed by a shoe in use, are not likely to become displaced or create pressure areas on the foot which might become uncomfortable to a patient.

If desired, any salve or other medicament, in addition to the medicament impregnating the body member, can be applied to the surface of the same which in use will engage the areas of the toes being treated. As the pads formed by the folded body member are not likely to become displaced in use, the medicament will thus be effectively held against the surfaces of the toes being treated.

It should be seen now that the applicator of the present invention is not limited to the treatment of infections of the toes, and that it could be used for applying medicaments to the contiguous surfaces of adjacent fingers. If intended to be used between the fingers, the body member obviously would be longer in length so as to cover the longer area of the fingers to be treated. The applicator could be used between the fingers and anchored in position as has just been explained, with additional bandages being applied circumferentially of each of the adjacent fingers to more securely anchor the applicator in place between the same and to hold the pads in engagement with the contiguous surfaces of the fingers.

Although the now preferred embodiment of the present invention has been shown and described herein, it is to be understood that the present invention is not to be limited thereto, for it is susceptible to changes in form and detail within the scope of the appended claims.

I claim:

1. An applicator of the type described, comprising: a body member of absorbent material for receiving a medicament; an ear integrally joined with said body member at the one side thereof; said ear being formed with a pair of oppositely extending slits in alignment with the defining edge of said body member; and a strip of adhesive plaster of a length substantially greater than the width of said body member transversely extending across and secured to the medial portion of said body member and ear, said body member being adapted to be folded into a substantially U-shaped member for insertion between adjacent toes, the legs of said U-shaped member forming pads engaging the opposite surfaces of said toes, said ear forming a small, relatively flat pad for engaging the area of the ball of the foot contiguous to the crease between the toes, the extremities of said strip forming anchoring tabs for holding said applicator on the foot against displacement.

2. An applicator of the type described, comprising: an elongate, substantially oval-shaped body member of absorbent material for receiving a medicament; a relatively small, laterally extending wing integrally formed with said body member intermediate the ends thereof, said wing being partially incised at the opposite ends thereof with the incisions extending in substantial align-

ment with the adjacent edge of said body member; and a strip of adhesive plaster of a length substantially greater than the width of said body member and laterally extending wing transversely extending across and secured to the medial portions of said body member and wing, said body member being adapted to be folded along a line substantially coincident with the longitudinal axis of said strip, whereby said folded body member forms a pair of pads for insertion between adjacent toes with the oppositely facing surfaces of said pads engaging the adjacent surfaces of said toes; said laterally extending wing forming a small, relatively flat pad engaging the surface of the ball of the foot contiguous to the crease between the toes; the opposite end portions of said strip forming adhesive anchoring tabs engaging the instep and ball portions of the foot, respectively, to hold the applicator against displacement.

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