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APPLICATORS FOR SUBSTANCES TO STRIP MATERIAL

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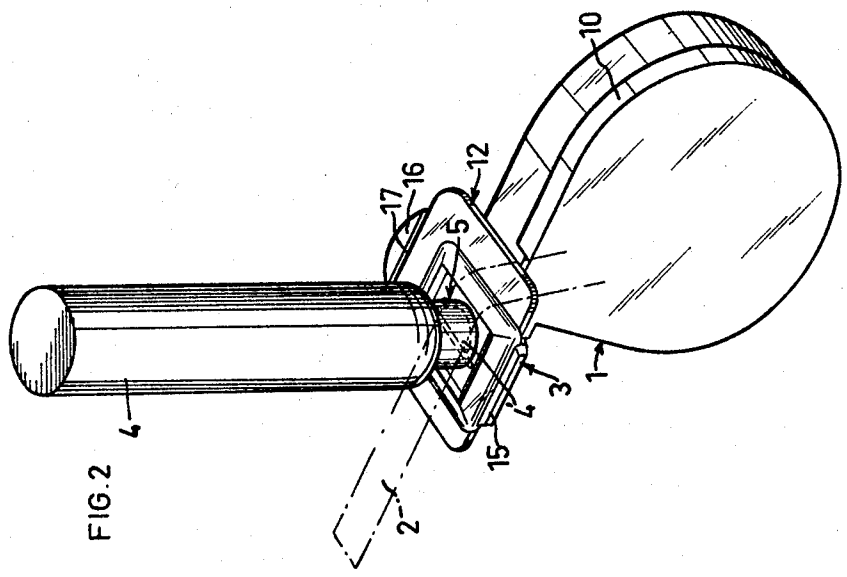

FIG. 2

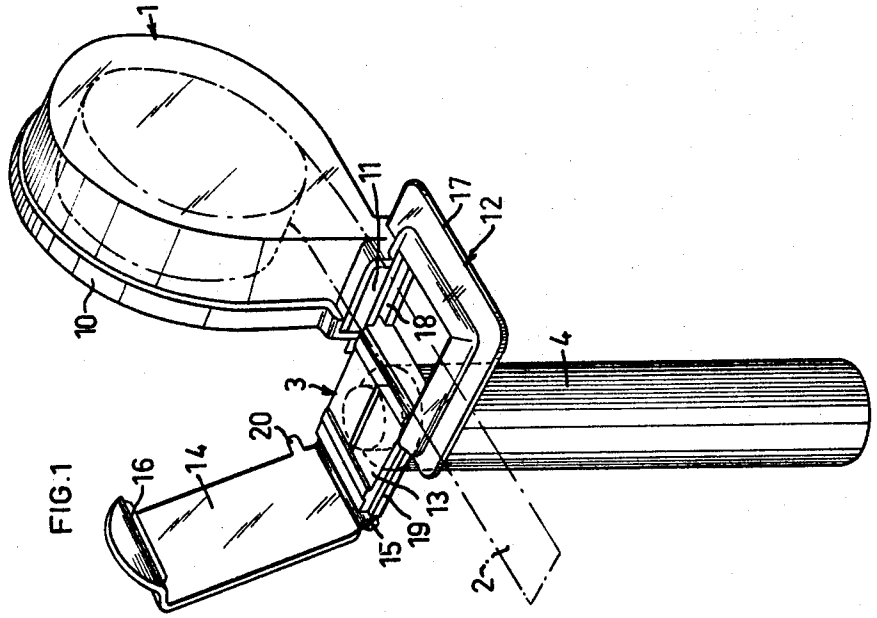

FIG. 1

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APPLICATORS FOR SUBSTANCES TO STRIP MATERIAL

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1 Claim. (Cl. 118—410)

ABSTRACT OF THE DISCLOSURE

An applicator for applying a paste-like substance to strip material. The strip is contained in a magazine with a U-shaped holder, and the paste-like substance is contained in a supply container which can be screwed into an internally threaded socket in a loose block which can be inserted in a guide in the holder. The block is provided with a cover which anchors the block to the holder and together with a path on the block defines a passageway for the strip. The block has an elongated passage between the socket and the path to supply the strip with the paste-like substance.

This invention relates to an applicator for salves, adhesives or like substances to strip material.

The invention has for its object to provide a simple practical apparatus for coating a synthetic plastic strip, paper strip or the like with a substance of some kind, such as adhesive or glue, the principal object being, however, to provide such an apparatus for applying antiseptic, salve or the like in a desired amount on a length of gauze or like material under such circumstances that the risk of infecting the gauze in pulling it forth and during application of the substance is eleminated.

This object is realized by the invention which is mainly characterized by the fact that the applicator comprises a magazine for a supply of strip material and a guide in which the strip can be pulled forth from the magazine, and a holder adapted to support a container for said substance which is provided with an outlet, said outlet being located on one side of the strip to permit supplying the desired amount of the substance to a desired length of the strip as the latter is pulled forth.

In a preferred embodiment the guide is constituted by a block having a cover, a passage for the strip and a slot opening into said passage for the discharge of substance from the container to one side of the strip. The container preferably is an ordinary compressible tube equipped with a threaded nozzle for a closure cap, and the holder for said tube is an internally threaded short sleeve which is secured to the block and is in communication with the slot and the passage.

According to the invention, the parts of the applicator are preferably conformed so as to permit assembly thereof to form a unit, the guide block being detachably mounted in a holder on the magazine at the delivery end thereof. A suitable material for the magazine and also for the guide block is synthetic plastic. The magazine may be made in the form of a box having a cover and suitably consisting of transparent synthetic plastic.

The above and further features of the invention and the advantages gained thereby will become apparent more in detail from the following description, reference being made to the accompanying drawing in which:

FIG. 1 is a perspective view of an applicator according to the invention in an embodiment chosen by way of example and intended for medical use, the guide block and a tube fixed thereto being shown in partly extracted position;

FIG. 2 is a view of the applicator in FIG. 1 in reversed position and with the guide block inserted in position.

In the embodiment illustrated, the applicator comprises a magazine 1 containing a roll of gauze 2, a guide block 3 for the guaze connected to the magazine, a tube 4 containing for example invert soap in salve form, and a holder 5 for the tube which is connected to the guide block.

The magazine 1 has the shape of a round or oval box one side of which is constituted by a removable cover 10. The peripheral wall of the magazine has a delivery nozzle 11 for the gauze 2, the lower edge of said nozzle carrying a holder 12 for the block 3. The holder 12 consists of a rectangular frame one side of which is removed to permit insertion of the block 3 in position in the frame 12. The block 3 is a plate 13 which on one side carries the holder 5 for the tube 4 (see FIG. 2). The holder 5 is a short internally threaded sleeve which meshes with the external threads of a nozzle 4' of the tube 4. Further, on the side opposed to the holder 5 the plate 13 has a cover 14 which has one edge pivoted to the plate 13 by means of a hinge 15. The opposite edge portion 16 of the cover 14 substantially is in Z-shape to permit fixation of the cover in closed position over the corresponding edge 17 of the plate 13.

The plate 13 and the cover 14, which together form the guide block 3 for the gauze 2, at closed cover define a slot-shaped passage for pulling forth the gauze 2 to the gauze delivery end of a guide block 3.

The guide block 3 in insertable in position (FIG. 2) in the block holder 12 in that the latter has the inner sides of its two opposite frame sides provided with guide slots 18 for guides 19 at the corresponding side edges of the plate 13. The cover 14 adjacent the hinge 15 has a projection 20 which is adapted, in the closed position of the said cover, to retain the removable cover 10 to the magazine 1. To permit removal of the magazine cover 10 the block 3 thus first has to be pulled slightly outwards, for instance to the position shown in FIG. 1.

A slot extends through the plate 13 of the block 3 from the tube holder 5 to the opposite side of the plate 13 to permit the contents of the tube 4 to flow to the passage beween the plate 13 and the cover 14 and as a consequence to one side of the guaze 2.

The magazine 1 and the block 3 preferably are made from transparent synthetic plastic which permits inspection of the contents of the magazine and the block, and the tube 4 preferably is a conventional compressible tube having a threaded nozzle for a closure cap. Of course, said closure cap is removed and instead the tube nozzle is screwed into the sleeve 5 so that it is in communication through the slot in the plate 13 with the passage for the gauze 2.

The roll of gauze 2 is loosely placed in the magazine 1 and passed with its end portion through the nozzle 11 in the peripheral wall of the magazine and also through the guide passage in the block 3, said gauze end portion resting in the guide block 3 between the plate 13 and the cover 14. At the use of the apparatus a suitable length of gauze is pulled forth simultaneously as pressure is applied to the tube 4, salve being pressed through the slot in the plate 13 to the gauze. After pulling forth a desired length of gauze it is separated from the remainder of the gauze supply by a cut made by a pair of scissors or a cutting device (not shown) at the extreme end of the guide 2.

It is possible to use, in lieu of the compressible tube 3 illustrated, another suitable container such as an aerosol container for salve, powder etc., in which case the holder for said container and the system of passages for establishing communication with the length of gauze or any other strip may have to be modified. It will not be

necessary to enter upon a detailed description of such modifications.

In the embodiment described above the applicator constitutes an assembled unit of elements which may be separated from one another. The block 3 may for instance be readily detached from the support plate 4, which may be advantageous from the point of view of cleaning and facilitates the mounting of a new tube 4 since the block can be connected more easily with the tube after removal from the applicator.

The applicator can be equipped with means for its mounting on a table, wall or any suitable place whatever where it is to be used.

What I claim and desire to secure by Letters Patent is:

1. An applicator for applying a paste-like substance to strip material, comprising a magazine for strip material, a mouthpiece on said magazine for dispensing strip material from said magazine, a substantially U-shaped holder attached with one arm to said mouthpiece, guide means on opposed edges of the arms of said U-shaped holder, a block for insertion in said guide means, means defining an internally threaded socket on said block for attachment of a supply container for the paste-like substance, means on said block defining a path for the strip material in line with said mouthpiece when said block is entirely inserted in said holder, means on said block defining a passage elongated in the plane of said path and

arranged with its main axis in said plane at an angle to the main direction of said path, said passage communicating with said socket and said path, a cover hingedly connected at one end to one marginal portion of said block and in a lowered position extending over said path to define together with said block a passageway for the strip material along said path, and locking means on the free end of said cover for engagement with the base of said U-shaped holder for holding said cover in a lowered position and securing said block to said holder.

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