Nov. 10, 1964 T. S. HARRISON ETAL 3,156,240

SUPPOSITORY APPLICATOR

Filed Sept. 8, 1961

FIG. 1.

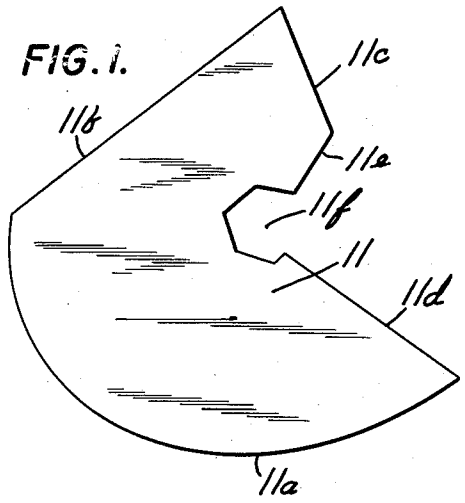


FIG. 2.

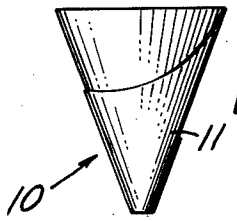


FIG. 3.

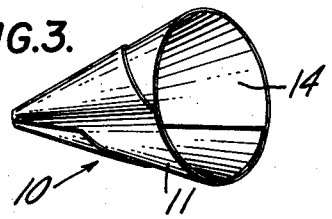


FIG. 5.

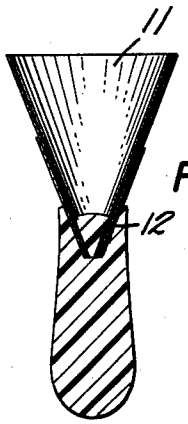
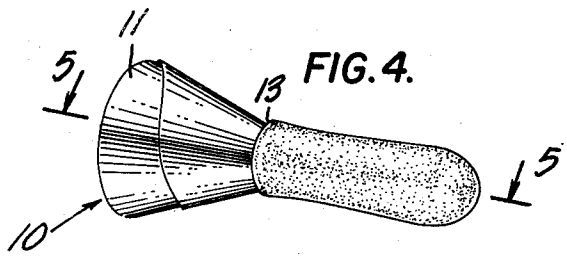


FIG. 4.



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United States Patent Office 3,156,240 Patented Nov. 10, 1964

3,156,240

SUPPOSITORY APPLICATOR

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Filed Sept. 8, 1961, Ser. No. 136,873
3 Claims. (Cl. 128—271)

This invention relates to a new and useful improvement in suppositories, and more particularly, to a suppository having a detachable applicator to facilitate the handling and use of the suppository.

Suppositories are widely used in connection with a variety of medical and health problems. Inasmuch as suppositories usually are compounded of solid substances which melt at body temperature, the heat of the hands tends to melt them. Further, a suppository must be inserted far enough into body cavity so that it will be properly positioned and retained therein. Without the use of an applicator, insertion frequently is difficult and unpleasant.

Suppository applicators in the past have had a number of disadvantages. Some prior applicators are constructed so that a cap or cup holding the suppository material is left in the body cavity after insertion and must be removed thereafter. In other devices the suppository is introduced by means of wooden sticks or plunger devices which are difficult to dispose of and may not be available when needed.

In accordance with the present invention a combined suppository and applicator are provided which facilitate the insertion of the suppository into a body cavity. More particularly, the suppositories embodying the present invention are provided with a disposable applicator handle attached thereto which can, nevertheless, be readily detached after the suppository has been applied. Inasmuch as the applicator is fixed to the suppository, it provides an optimum amount of finger control of the suppository without touching the suppository, thereby avoiding danger of possible contamination of the suppository and resulting infection.

For a better understanding of the invention, reference may be had to the accompanying drawings in which

FIGURE 1 is a plan view of a blank from which an applicator for a suppository embodying the present invention is formed;

FIGURE 2 is a side elevational view of a completed applicator;

FIGURE 3 is a perspective view of the applicator;

FIGURE 4 is a perspective view of the suppository and applicator embodying the invention; and

FIGURE 5 is a view in section taken on line 5—5 of FIGURE 4.

A typical applicator in accordance with the invention includes an applicator or handle **10** which is suitably formed by rolling a blank **11** of paper or other suitable material into a cone or other similar geometrical form. A typical blank **11** is shown in FIG. 1. It has one arcuate edge **11***a* of suitable curvature to form the base of the cone and other straight edges **11***b*, **11***c*, **11***d* and **11***e*, which conform to the cone and form a neat spiral pattern on the exterior of the cone. A polygonal recess **11***f* is formed at the junction of the edges **11***d* and **11***e* to provide the applicator **10** with an open upper end. While the applicator preferably is of conical shape as illustrated because of its freedom from corners or edges, other tapered geometrical forms of applicators may also be used. A typical applicator **10** is approximately three-quarters to one and one-quarter inches long. The preferred diameter of the cone at its base is approximately one-half to three-quarters of an inch.

The applicator **10** is embedded to a depth of approximately three-eighths of an inch in one end of the suppository **12**. Attachment of the applicator to the suppository is accomplished during the molding of the suppository and while the suppository mass is still molten or plastic. Some of the molten mass projects into the cone. On solidification the suppository and applicator are firmly joined on the outside and inside of the cone.

To use the suppository, a finger is inserted into the base of the applicator **10** while the outside is engaged by the tip of the thumb. The suppository can then be inserted into a body cavity to a required depth. Contraction of the muscles around the cavity when used in the rectum easily separates the suppository from the applicator which is then discarded. From the foregoing it will be clear that combined suppositories and applicators embodying the present invention provide a sanitary unit capable of convenient and easy use. They can be packaged in sealed containers to prevent contamination and can be used without touching the suppository itself or the body. The applicators and the composition and shape of the suppositories are susceptable to considerable modification. Thus, the applicator can be formed of paper, sheet plastic, or even molded of palstic or fibrous materials. The shape of the applicator can be modified so long as it provides a satisfactory union with the suppository and is readily gripped between the tips of the fingers and controlled thereby.

Accordingly, it will be understood that the form of the invention disclosed herein is illustrative.

We claim:

1. A combined suppository and applicator comprising an elongated suppository capable of melting at body temperature and a hollow, substantially conical applicator member having its smaller end embedded in said suppository, said smaller end being open and containing a portion of said suppository for securing the latter to said applicator member.

2. A combined suppository and applicator comprising an elongated suppository capable of melting at body temperature and a hollow conical applicator having its smaller end embedded in said suppository, said applicator being composed of thin sheet material and having open large and small opposite ends, said large end being shaped to receive a finger and said small end receiving a portion of said suppository to secure the applicator member to said suppository.

3. A combined suppository and applicator, said suppository comprising an elongated suppository capable of melting at body temperature and a tapered hollow applicator member having open smaller and larger opposite ends, said smaller end being embedded in said suppository and having an opening thereon receiving a portion of said suppository for securing said suppository to said applicator member, and said larger end being open to receive a finger.

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