United States Patent

[11] 3,626,946

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[21] Appl. No. **2,070**
[22] Filed **Jan. 12, 1970**
[45] Patented **Dec. 14, 1971**

[54] **EAR CLEANER**
3 Claims, 8 Drawing Figs.

[52] **U.S. Cl.** **128/304,** 15/210, 15/225
[51] **Int. Cl.** **A61b17/22,** A47k 7/02, A47l 1/06
[50] **Field of Search** ..... 15/208, 209, 210, 225, 226; 128/269, 270, 304; 131/184 B, 245, 246

[56] **References Cited**
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ABSTRACT: An ear cleaning device including a nonwoven fabric twisted and pressed about a cigar-shaped mandrel to form a member which can be inserted safely into the human ear.

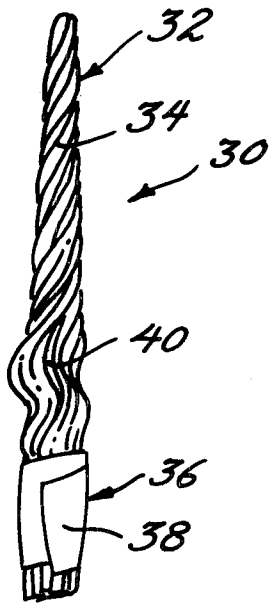


Fig. 1.



Fig. 4.

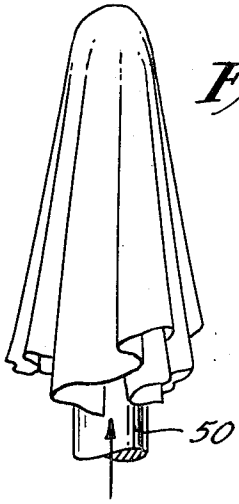


Fig. 5.

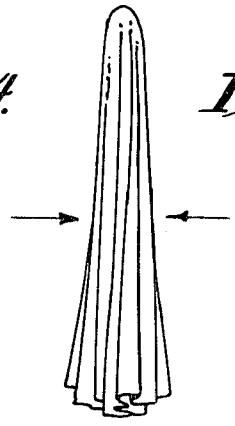


Fig. 2.

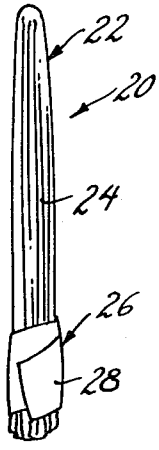


Fig. 6.



Fig. 7.

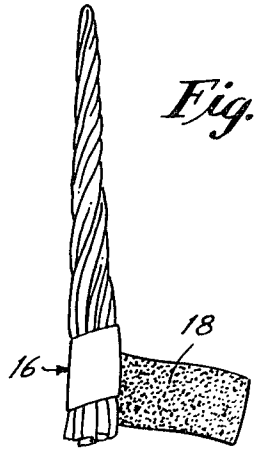


Fig. 3.

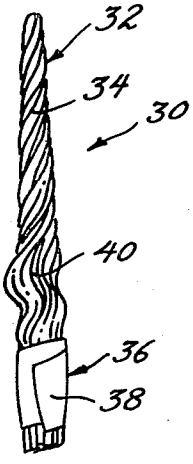
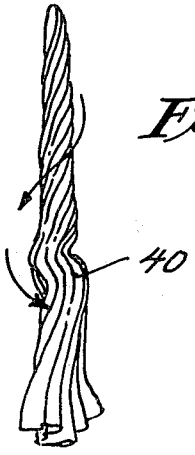


Fig. 8.



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EAR CLEANER

The invention relates to an ear cleaner and more particularly to a stickless ear cleaner which can be safely inserted into the human ear.

In the past, swabs of the type described in the U.S. Pat. to Deford, No. 2,006,539, Glickston, No. 2,876,501 and Forbis, No. 2,261,058 utilized a stick having a mass of cotton secured at either end. The faults of these prior art devices are obvious. One false move on the part of the patient might result in an ear injury. These devices could not be entrusted to children because of the inherent danger of poking a stick into their ears. The use of a swab or ear cleaner will help decrease the disease of Otitis Externa or in laymen's terms, swimmers' ear. If the swimmers could clean the water from his ears after swimming the disease could be eliminated.

The present invention eliminates the aforementioned problems by providing an ear cleaner which does not utilize any stiff material which might harm the inner portions of the body. An ear cleaner which is made of a nonwoven fabric, and which will remove wax, water and other foreign matter and can also be used for cleansing the ear. The instant device can also be used in other sensitive parts of the body such as the nose and eyes.

Accordingly, the object of the present invention is to provide an ear cleaner which is made substantially from a nonwoven fabric.

Another object is the provision of an ear cleaner which is safe for children to use.

A further object is to provide an ear cleaner which is inexpensive to produce and safe to use.

The above objects as well as others together with the benefits and advantages of the invention will be apparent upon reference to the detailed description set forth below, particularly when taken in conjunction with the drawings annexed hereto in which:

FIG. 1 illustrates a first embodiment of the invention in side elevation.

FIG. 2 illustrates a second embodiment of the invention in side elevation.

FIG. 3 illustrates a third embodiment of the invention in side elevation.

FIGS. 4–8 illustrate in side elevation, the method of manufacturing all of the three embodiments of the invention.

Referring now to FIG. 1, this figure shows the first embodiment of ear cleaner 10 having a tip portion 12, made of twisted nonwoven material 14 and secured at the handle portion 16 by tape 18.

FIG. 2 illustrates the second embodiment of ear cleaner 20 having its tip portion 22 made of pressed nonwoven material 24 and secured at the handle portion by tape 28.

FIG. 3 illustrates the third embodiment which is similar to the first embodiment of FIG. 1 in that the ear cleaner 30 having a tip portion 32 is made of twisted nonwoven fabric 34 secured at the handle portion 36 by tape 38. The twisted nonwoven fabric 34 is reverse twisted as at 40 to provide a buffer zone.

In the production of the ear cleaner a nonwoven fabric such as tissue paper, is wet and then placed over a mandrel 50 such as is seen in FIG. 4, to form a cigarlike projection of material. The projection of material is then removed and packed in the direction of the arrows as seen in FIG. 5. To produce the second embodiment as seen in FIG. 2, a piece of tape 28 is then placed about the handle portion 26. In producing the first embodiment as seen in FIG. 1 the packed projection of FIG. 5 is then twisted in the direction of the arrow in FIG. 6 and a piece of tape 18 is placed about the handle portion 16, as seen in FIG. 7. The third embodiment is produced by adding a reverse twist, see arrows in FIG. 8, and continuing as in FIG. 7.

In use, the ear cleaner can be first sterilized or medicated. The cleaner is then inserted into the ear canal, straight or maneuvering it to follow the curvature of the outer ear canal or it may be twisted in a rotary fashion into the outer ear canal so as to follow the normal curvature.

I wish it to be understood that I do not desire to be limited to the exact details of construction shown and described, for obvious modifications will occur to a person skilled in the art.

I claim:

1. An ear cleaner comprising:

An elongated slender twisted article having,

a tip portion,

a handle portion integral with said tip portion, and

a buffer zone separating said tip portion and said handle portion, said buffer zone comprising a reverse twist portion.

2. A cleaner of type described in claim 1 wherein said twisted article is held together by having a piece of adhesive tape located in the handle portion.

3. A cleaner of the type described in claim 2 wherein said elongated article is made of a twisted and nonwoven material.

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