July 7, 1970 E. M. NAGLE ET AL 3,519,123

SWAB DISPENSING PACKAGE

Filed Aug. 19, 1968

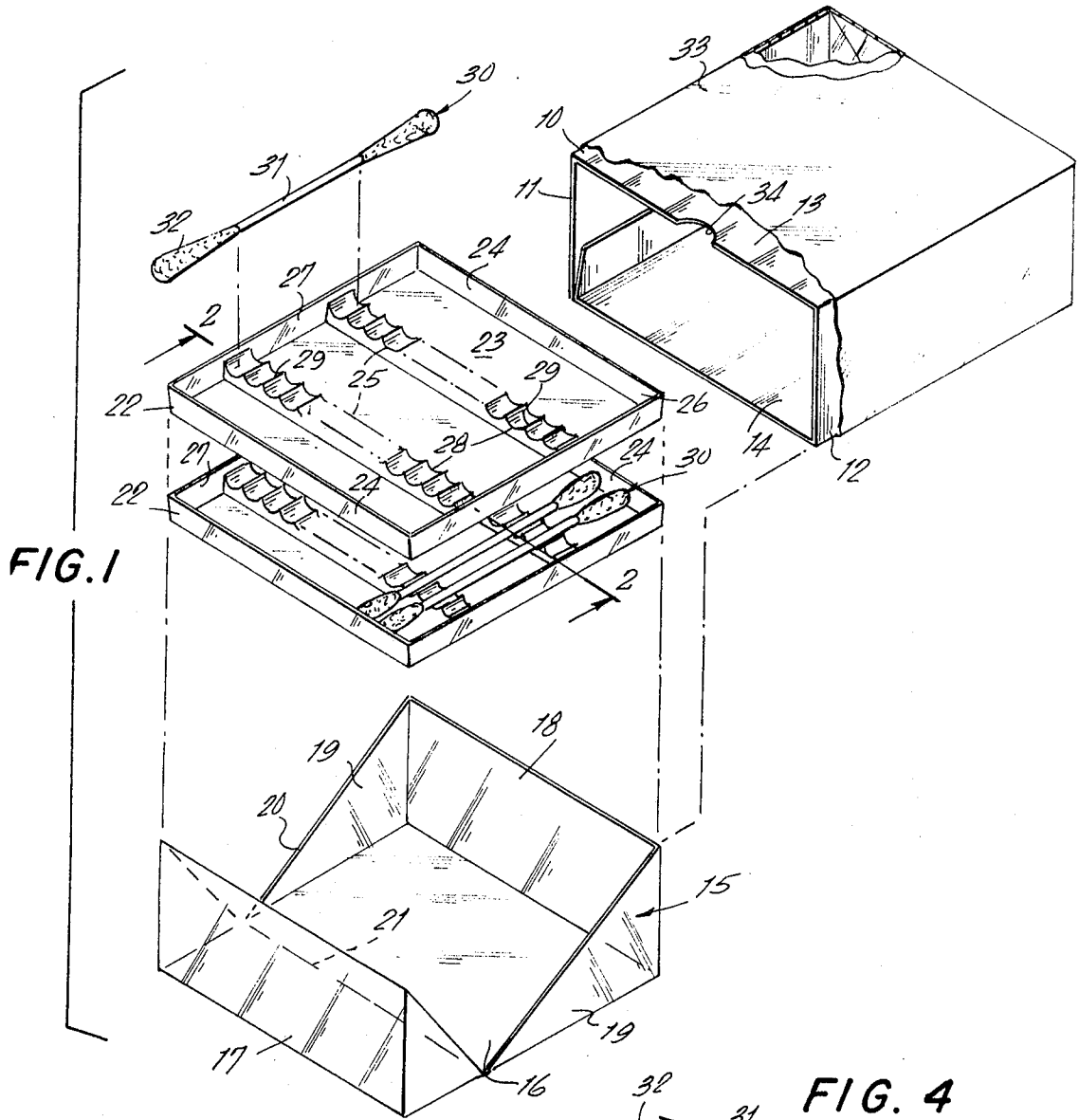


FIG. 1

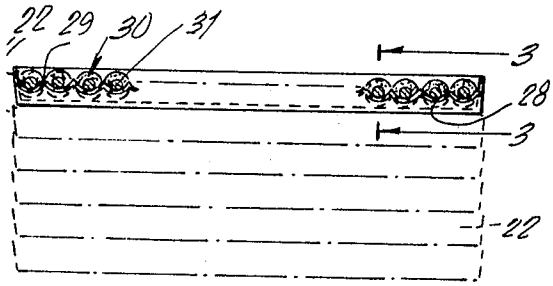


FIG. 2

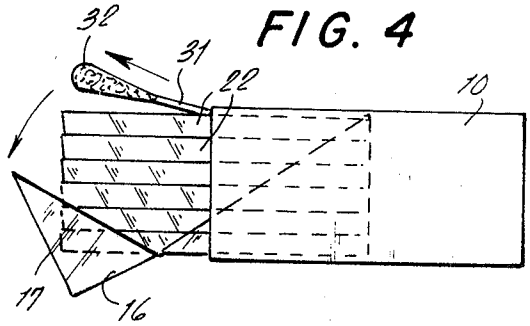


FIG. 4

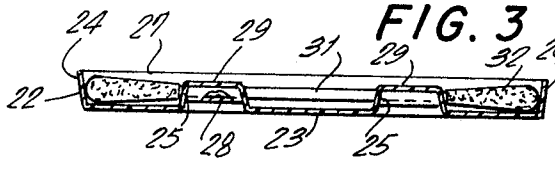


FIG. 3

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SWAB DISPENSING PACKAGE

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U.S. Cl. 206—45.34 3 Claims

ABSTRACT OF THE DISCLOSURE

A package for a plurality of double ended cotton swabs in which a plurality of stacked trays are removably carried within a box-like container. The bottom of each tray is embossed to form two parallel upwardly extending ridges. A plurality of transverse recesses in each of the ridges support the swabs in spaced parallel relationship. A carrier for the trays is slidable within the container to permit individual trays or swabs to be removed from the package.

BACKGROUND OF THE INVENTION

In packaging cotton swabs consisting of an elongated rod-shaped applicator and a wad of cotton covering each end thereof, it is essential that the original sterile condition of the swabs when packaged be maintained until used. In addition, present packaging practices require that the merchandise within the package be visible to the purchaser. One or more swabs are taken from the package at a time during use but it is highly desirable not to touch the remaining swabs nor disorient them.

Previously known packages for swabs initially held the swabs in an oriented position until the package was opened. Thereafter, the individual swabs became jumbled and often fell out of the package when others were extracted. Grasping individual swabs in prior art packaging was difficult due to the small space between the applicators and the packaging material.

SUMMARY OF THE INVENTION

The swab dispensing package according to the present invention employs a series of flat transparent plastic trays each having spaced parallel inwardly extending embossed ridges in the bottoms thereof. A series of transverse spaced recesses in the ridges serve to receive the applicators of the swabs and hold them in spaced parallel alignment within the trays. The trays are stacked, one upon the other and placed within a transparent plastic carrier which in turn is slidably received within a box-shaped container open at each end. The carrier is provided with a somewhat V shaped cut out at each side thereof to lend easy access to the individual trays.

DESCRIPTION OF THE DRAWINGS

In the accompanying drawing forming part hereof similar parts have been given the same reference numeral and in which:

FIG. 1 is a somewhat exploded view of a swab dispensing package according to the present invention,

FIG. 2 is an end view taken on line 2—2 in FIG. 1 in the assembled condition,

FIG. 3 is a cross sectional view taken on line 3—3 in FIG. 2 looking in the direction of the arrows,

FIG. 4 is a view in side elevation of a swab dispensing package according to the present invention showing the manner in which individual swabs can be removed.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the drawing, **10** indicates a box-like container made of some relatively rigid material such as

cardboard. The wrapper is provided with side walls **11, 12,** a top **13** and a bottom **14.** However, both ends of the wrapper are open.

A carrier **15** having a bottom **16,** a front wall **17** and a rear wall **18** is slidably received within the container **10** as shown in FIG. 4. The carrier **15** is preferably made of some suitable transparent plastic material such as acetate, styrene or the like. The side walls **19** of the carrier **15** are provided with substantially V shaped cut outs **20** which extend from the tops of the front and rear walls **17, 18** and terminate at the bottom **16** at a point approximately one-third of the distance from the front to the rear walls **17, 18.** The carrier **15** may be bent downwardly as shown in FIG. 4 along the dashed line **21** (see FIG. 1).

A plurality of trays **22** are received within the carrier **15.** The trays **22** are vertically stacked as shown in FIGS. 2 and 4. A suitable transparent plastic material such as acetate, styrene or nylon may be used to form the trays. Each tray consists of a bottom **23,** and upstanding front, rear and side walls **24, 26, 27.** The bottom of each tray **22** is embossed as shown at **25** in FIGS. 1 and 3 to provide two parallel upstanding ridges **28** inwardly spaced from the front and rear tray walls **24, 26.** The ridges **28** are formed with a series of laterally spaced recesses **29** in front to back axial alignment.

Individual swabs **30** consisting of a rod-like applicator **31** and a wad of cotton **32** at each end thereof are disposed within the trays in parallel orientation. The applicators **31** rest within the recesses **29** in the manner shown in FIGS. 1 and 3 to maintain swab orientation. The cotton wads extend beyond the ridges **28** in the space between the ridges and the front and rear trays walls **24, 26.** As a result of the axial spacing between adjacent recesses **29** and the distance between the ridges **28** as well as the relatively small diameter of the applicators **31,** it is quite simple to extract individual swabs from the topmost tray.

After the swabs **30** have been placed within the trays **22** and the trays stacked within the carrier **15,** the assembly is slipped within the container **10.** A transparent sealing wrapper **33** of cellophane is then placed around the container **10** and carrier **15** to complete the package. It will be apparent that even when sealed, the swabs **30** may be viewed through the ends of the container and carrier walls. The stacked trays **22** prevent the movement of the swabs **30** from their oriented position during shipping or handling so as to maintain their attractive appearance within the package.

When it is desired to extract swabs from the package the wrapper **33** is torn away from the front of the container **10** to expose the front wall **17** of the carrier **15.** The top edge of the carrier can then be caught, using the recessed portion **34** of the container **10.** The carrier **15** can then be pulled out of the container **10** a distance sufficient to expose the applicators **31** to permit individual swabs **30** to be extracted from the top tray **22.** When the desired number of swabs have been used the carrier **15** and its trays can be slid back into the container to cover the remaining swabs in the tray.

If desired, one or more trays **15** may be removed from the carrier **15** either to give more rapid access to the swabs or because they are empty. The front of the carrier **15** will swing downwardly in the manner shown in FIG. 4 for this purpose. The individual trays can then be slid out of or replaced within the carrier **15.**

From the foregoing it will be seen that there has been provided a swab dispensing package which is easy to use, will maintain the swabs in an attractive, accessible condition within the assembly and visible to the purchaser while sealed.

Having thus fully descirbed the invention, what is claimed as new and desired to be secured by Letters Patent of the United States, is:

1. A swab dispensing package comprising a box-like rectangular container, open at each end, a carrier of transparent material slidably received within the container having a bottom and upstanding front, rear and side walls, a plurality of flat, swab receiving trays of transparent material having a bottom and upstanding front, rear and side walls, received within the carrier in stacked relationship, spaced upstanding ridges between the tray side walls, normal thereto and inwardly spaced from the front and rear walls, and a plurality of spaced, transverse, swab receiving recesses in the top of said ridges, said swabs being visible through the transparent ends of the package.

2. A package according to claim 1 in which the carrier side walls are formed with substantially V shaped cut outs.

3. A package according to claim 2 in which the cut outs begin where the side walls meet the tops of the front and rear walls and converge at a point at the bottom inwardly spaced one third of the distance between the said front and rear walls.

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U.S. Cl. X.R.

206—65, 56; 229—9