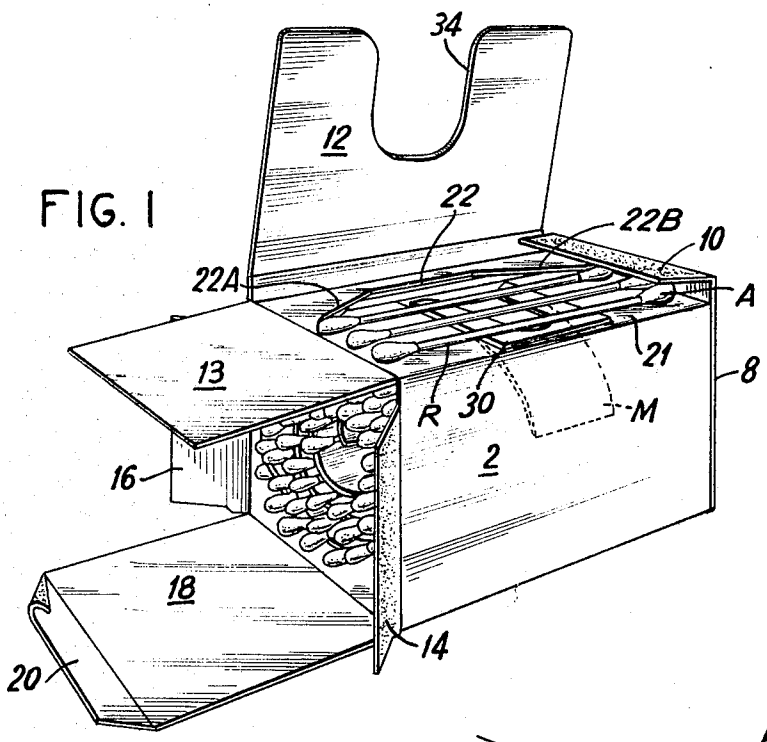
Nov. 18, 1969 R. FISHER 3,478,923

DISPENSER FOR COTTON SWABS

Filed Jan. 30, 1968

FIG. 1



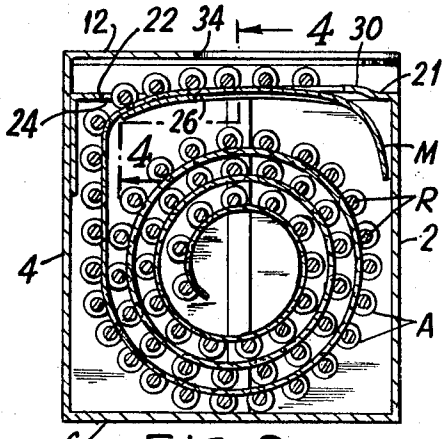


FIG. 3

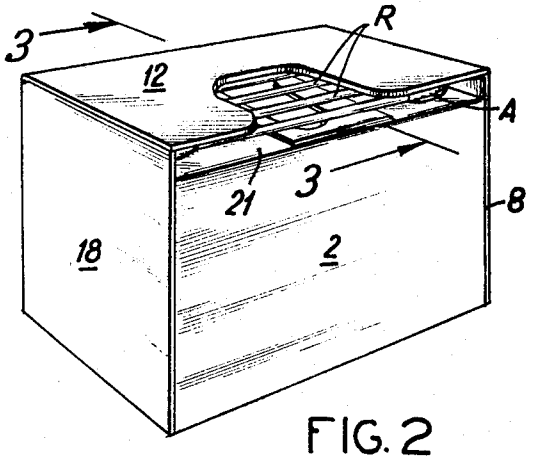


FIG. 2

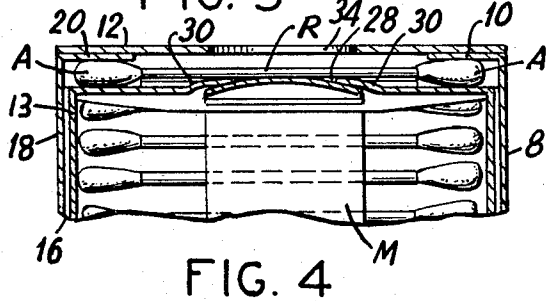


FIG. 4

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DISPENSER FOR COTTON SWABS

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U.S. Cl. 221—70 8 Claims

ABSTRACT OF THE DISCLOSURE

A dispenser for dispensing swabs one at a time from within a container so that dispensing of one swab automatically positions another swab for dispensing. The swabs are adhesively mounted or attached to a strip of material which is wound about itself and positioned within a box or container. The container has a top surface or panel with first and second openings. The first and second openings are arranged so that the strip of material with the swabs attached thereto pass through the first opening and are directed towards the second opening. The top surface or panel of the container is arranged so that the swabs are removed from the strip as the strip and the swabs pass from the first to the second opening. The first opening is constructed so that the swabs after pasing therethrough from the container do not regress into the container. The top panel and a top cover are cooperatively arranged to prevent contamination of the swab ends.

BACKGROUND OF INVENTION

This invention relates to a dispenser and more particularly to a cotton swab dispenser capable of maintaining a supply of cotton swabs in a sanitary condition and dispensing them one at a time.

Typically, cotton swabs are packaged in vertical layers with the swabs in side by side position within a square or rectangular package. Generally, however, the swabs are so tightly packed that when a user attempts to remove one swab a plurality of swabs are displaced. Then it is necessary for the user to repack the displaced swabs resulting in annoyance of the user. Moreover, frequently in such cases the sanitary cotton ends become contaminated thus reducing the effectiveness and safety of the swab.

There have been other efforts to package swabs but such arrangements have been found undesirable in that they resulted in a bulky package with the result that relatively few numbers of swabs could be effectively packaged. Moreover, in some instance it was necessary that the strip be torn from time to time as the swabs were removed from the package.

With the foregoing in mind, it is an object of this invention to provide a new and improved cotton swab dispenser.

Another object of this invention is to provide a new and improved cotton swab dispenser wherein the swabs are dispensed one at a time and wherein the sanitary ends of the swabs are protected against contamination.

Another object of this invention is to provide a new and improved cotton swab dispenser wherein the swabs are connected to a strip which is wound within a package and adapted to be dispensed from the package one at a time.

A still further object of this invention is to provide a new and improved cotton swab dispenser wherein the swabs are mounted on a strip wound within a container and wherein the strip remains within the container even after the swabs are removed one at a time and the ends of the swabs are protected against contamination.

Additional objects and advantages of the invention will

be set forth in the description which follows and in part will be obvious from the description or may be learned from practice of the invention, the objects and advantages being realized and obtained by means of the step or instrumentalities particularly pointed out in the appended claims.

Briefly described, the present invention includes a container or package within which is positioned a plurality of swabs connected intermediate their ends to a strip of material.

The strip which may be made of paper or plastic may have an adhesive coating on at least one side or alternatively may be of the type which can be connected to a swab by the application of heat and pressure. The strip with the swabs connected is wound around itself and positioned within the container. The container includes an upper panel or surface having at least two openings so that the strip can pass through one of the openings where it is positioned outside of the container and then after the swab has been removed the strip passes through another opening to be returned to the container. The first opening cooperates with stop means to prevent the strip having swabs connected thereto from regressing into the container.

The invention consists in the novel parts, steps, construction and improvements shown and described.

The accompanying drawings which are incorporated in and constitute a part of this specification illustrate an embodiment of the invention and together with the description serve to explain the principles of the invention.

Of the drawings:

FIGURE 1 is a perspective view of a dispenser according to the present invention showing the dispenser before certain flaps are connected.

FIGURE 2 is a perspective view showing the dispenser in accordance with this invention ready for use.

FIGURE 3 is a vertical sectional view taken along lines 3—3 of FIGURE 2.

FIGURE 4 is a partial sectional view taken along line 4—4 of FIGURE 3.

It is to be understood that both the foregoing general description and the following detailed description are exemplary of, but not restrictive of, the invention.

Reference will now be made to the drawings where identical reference numerals are used to designate identical elements in the drawings.

Referring to FIGURES 1 and 3 there is shown a front panel **2**, and a back panel **4** and a bottom panel **6** and a side panel **8** and a top cover **12**. As shown, the side panel **8** includes a flap **10** which is adapted to adhesively engage the top cover **12**.

In accordance with this invention means are provided for closing the container after the swabs have been positioned within the container.

As embodied, the side opposite from the side panel **8** is formed from a plurality of flaps which are adapted to be connected to form a side panel after the swabs have been placed within the dispenser.

After the swabs have been positioned within the container, the flap **13** is folded downwardly along its horizontal fold line and the side flaps **14**, **16** are folded towards one another along their vertical fold lines. The flap **18** is then folded upwardly along its horizontal fold line so that flap **18** is parallel to panel **8**. It will be noted that the outer surfaces of flaps **14**, **16** are coated with an adhesive and engage flap **18**. The flap **18** has connected to it a cap **20** having an adhesive surface on its upper surface. At this time the top cover **12** is folded downwardly to a position parallel to the bottom panel and into engagement with the flaps **10** and **20**. As noted, the mating surfaces of the panels and flaps may include an adhesive thereon to permit connecting of various panels.

The present invention is particularly adapted for dispensing swabs of the type having cotton A or other similar substances attached to opposite ends of a rod-like member R which may be made of wood, paper, plastic or the like (FIG. 4).

In accordance with this invention the swabs are mounted on a strip of material when assembled within the dispenser.

The strip of material M can be made of any convenient material which is sufficiently flexible to be wound about itself and which is adapted to be adhesively connected to the cotton swabs. Thus the strip may be made of paper with an adhesive coating thereon so that the swabs can be connected thereto. Alternatively, the strip may be made of a plastic material whereby the swabs may be connected thereto by applying a combination of heat and pressure to the swab and sheet.

As can best be seen in FIGURES 1 and 3 the strip with the swabs connected thereto is wound about itself so that a large number of swabs can be positioned within the package.

In accordance with this invention means are provided for dispensing the swabs one at a time in a manner so that as one swab is removed from the dispenser another swab is positioned for immediate removal.

As embodied, the container is provided with an inner top panel **21** which extends from the top of the front panel **2** towards the rear panel **4.**

Means are provided in accordance with this invention for preventing retrogression of the swabs into the container.

As embodied, this means is formed by the interconnecting slit lines **22**, **22A** and **22B** wherein line **22A** and **22B** form an obtuse angle with the slit line **22**, thus forming a first opening **4** through which the strip and swabs pass from within the container. Thus the surfaces in top panel **1** formed by slits **22A** and **22B** function as stop means and impede any tendency of the swab to move rearwardly or regress into the container.

The top panel is provided with a second opening **26** spaced from the first opening and adjacent front panel **2** through which the strip passes as the swabs are being dispensed from the container after the swabs have been removed from the strip. The second opening **26** is transverse of the panel and wide enough to receive the strip of material as it is fed back into the container during the dispensing operation.

In accordance with this invention means are provided for automatically removing the swabs from the strip as they are dispensed from the container. As embodied, the top panel includes an embossed or raised portion cooperating with a slot to assist in disengaging the strip and the swabs.

Referring to FIGURE 4, there can be seen a longitudinally extending slot **28** which begins adjacent front panel **2** and extends rearwardly to merge with the transverse slot **26** described previously. The portion of the panel around the longitudinal slot **28** is embossed or raised at **30** having its high point intermediate the transverse slot **26** and the front panel **2.** (FIG. 4).

The top panel **12** is provided with a longitudinal opening **34** to permit observation of the swab and so that the user's finger engages the center of the swab when the package is in the closed position illustrated by FIGURE 2. The cover also protects the ends of the swabs from contamination as can be seen in FIGURE 2.

OPERATION

The operation of a dispenser can be readily understood. In order to dispense the swabs, the user places a finger into opening **34** and engages the center portion of one of the rods. The finger is then moved through the opening and towards the front panel **2** with the finger in engagement with the swab. This movement causes the entire strip to move so that swabs annexed to the strip and located within the container pass through the first opening **24.** When the swab engaged by the finger reaches the high point of the embossed portion, the swab is sheared from the strip while the strip without the swab passes through the second opening **26,** and returned to the container. Of course, at the same time, one swab is removed, the next swab is in a position for ready removal.

It is to be understood that the invention in its broader aspects is not limited to the specific elements shown and described, but also includes any departures made from such elements which do not sacrifice their chief advantages.

What is claimed is:

1. A dispenser package for dispensing elongated articles one or more at a time comprising:

(a) a package,

(b) a strip of material positioned within said package and wound about itself, said strip having articles to be dispensed removably connected thereto,

(c) directing means for directing said strip with the articles attached thereto to a position of exposure to the user and for directing the strip back into the package as the articles are removed from the strip one or more at a time.

(d) said package including a top panel and said directing means including a first opening and a second opening in said top panel and a slot extending between the first and said second opening in said top panel.

2. A dispenser package for dispensing elongated articles one or more at a time comprising:

(a) a package,

(b) a strip of material positioned within said package and wound about itself, said strip having articles to be dispensed removably connected thereto,

(c) directing means for directing said strip with the articles attached thereto to a position of exposure to the user and for directing the strip back into the package as the articles are removed from the strip one or more at a time.

(d) said package including a top panel and said directing means including a first opening and a second opening in said top panel and wherein said first opening is sufficiently wide to permit the strip and said elongated articles to pass therethrough and said second opening is adjacent the point of removal of said elongated articles from the strip and wherein said top panel includes raised portion adjacent said second opening which tend to shear said elongated articles from said strip.

3. A device as defined in claim **2** wherein said elongated articles are adhesively connected to said strip.

4. A device as defined in claim **2** wherein said raised portion reaches its ultimate height adjacent said second opening whereby as the elongated articles are moved towards said raised portion they are sheared from said strip and whereby removal of one elongated article from said strip positions the next elongated article in position for removal.

5. A dispenser package for dispensing elongated articles one or more at a time comprising:

(a) a package,

(b) a strip of material positioned within said package and wound about itself, said strip having articles to be dispensed removably connected thereto,

(c) directing means for directing said strip with the articles attached thereto to a position of exposure to the user and for directing the strip back into the package as the articles are removed from the strip one or more at a time.

(d) said package including a top panel and said directing means including a first opening and a second opening in said top panel, said first opening comprising a narrow strip which includes means for preventing regression of the elongated article into the

package, and wherein said first opening consists of three interconnected slits and said first slit is intermediate said second and third slits and said first slit is substantially parallel to the front panel adjacent the point of removal of said elongated articles from said strip and said second and third slits form an obtuse angle with said first slit whereby said second and third slits form stop means preventing regression of said elongated articles into said package after passing from said package through said first opening.

6. A dispenser package for dispensing elongated articles one or more at a time comprising:

(a) a package,

(b) a strip of material positioned within said package and wound about itself, said strip having articles to be dispensed removably connected thereto,

(c) directing means for directing said strip with the articles attached thereto to a position of exposure to the user and for directing the strip back into the package as the articles are removed from the strip one or more at a time.

(d) said package including a top panel and said directing means includes a first opening and a second opening in said top panel,

(e) a top cover adapted to overlie said top panel, said top cover including a slot providing access to the elongated articles as they pass through said first opening.

7. A device as defined in claim 6 wherein one of said side panels consists of a plurality of flaps adapted to be

adhesively connected to each other and to said top cover after the wound strip with said elongated articles have been placed within the package.

8. A dispenser package for dispensing elongated articles one or more at a time comprising:

(a) a package,

(b) a strip of material positioned within said package and wound about itself, said strip having elongated articles to be dispensed removably attached to said strip.

(c) a top panel having a first opening and a second opening,

(d) means for directing said strip with an elongated article through said first opening and out of said package to a position of exposure to the user and after said elongated articles have been removed from said strip directing said strip through said second opening and into said package.

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