

[54] DISPENSING TREATED TOWELETTES

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[51] Int. Cl. B65h 1/00

[58] Field of Search 221/33, 41, 55, 63, 303, 221/306, 307, 309, 310, 27, 48

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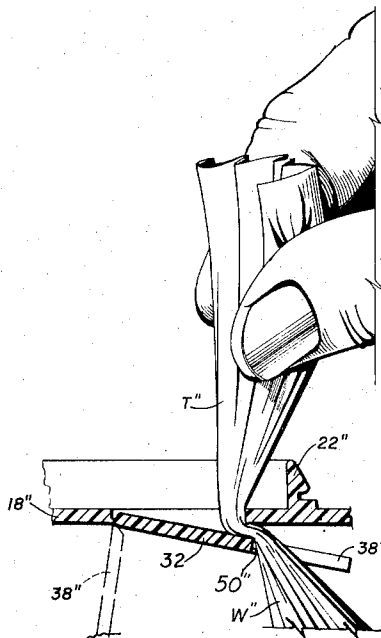
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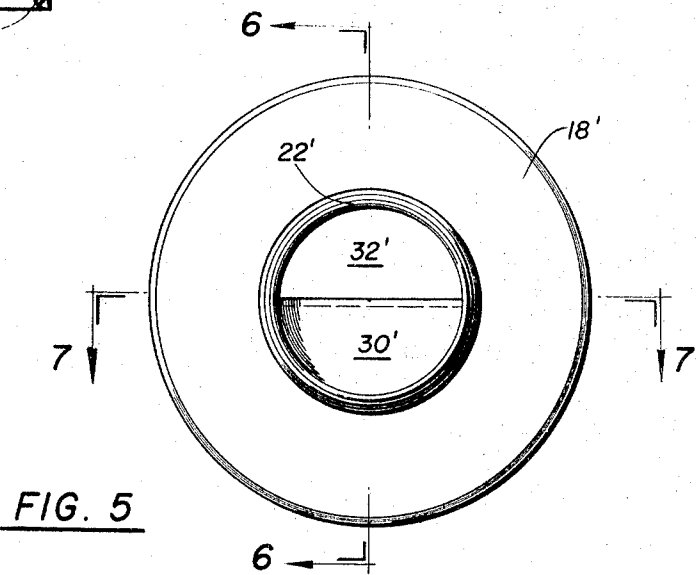
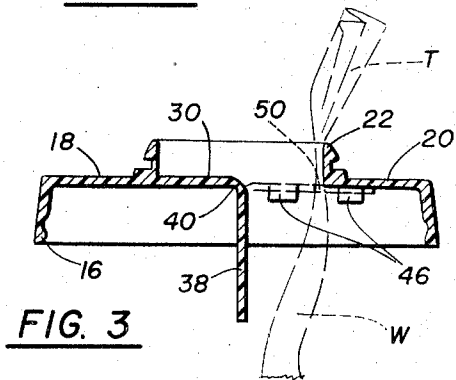
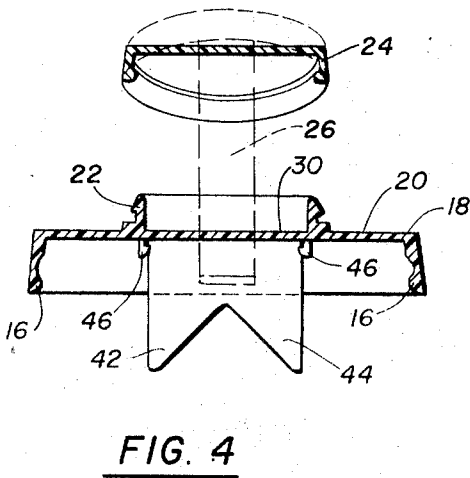
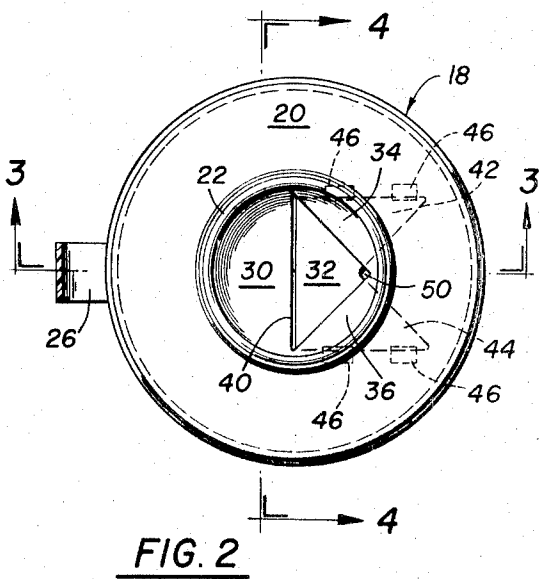
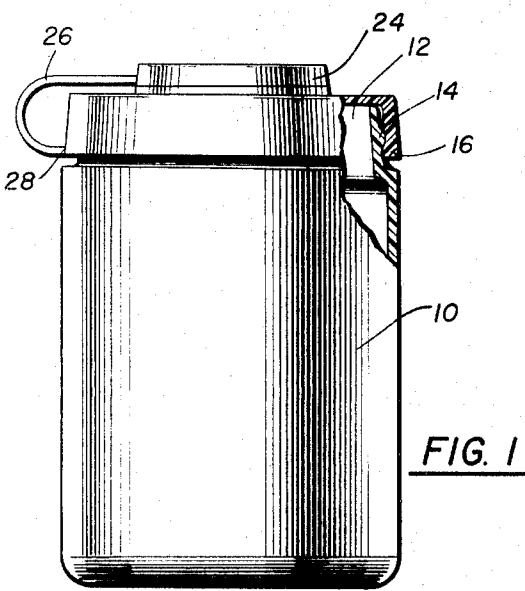
ABSTRACT

A dispenser for a treated perforated tissue web wherein said dispenser is provided with an opening for extraction of the web from the dispenser, said opening having associated therewith an interior flap which normally all but closes the opening through which the web is withdrawn thereby providing sufficient tension on the web to cause it to tear off at the perforations.

A variation includes a form in which the flap is such that it completely closes and overlaps the opening in the dispenser forcing the web to travel in a tortuous path.

15 Claims, 9 Drawing Figures





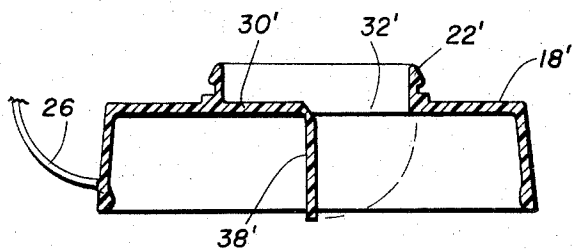


FIG. 6

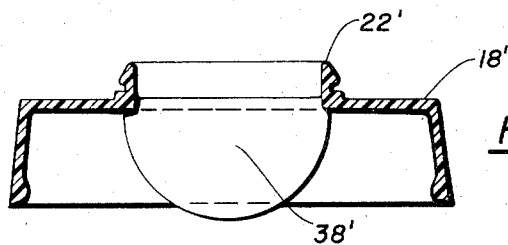


FIG. 7

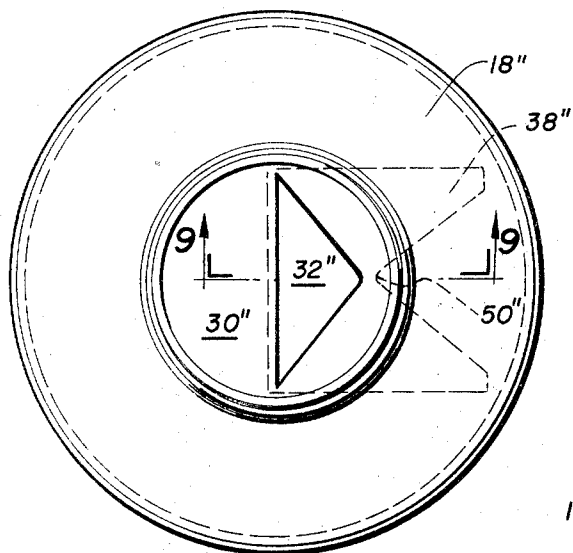


FIG. 8

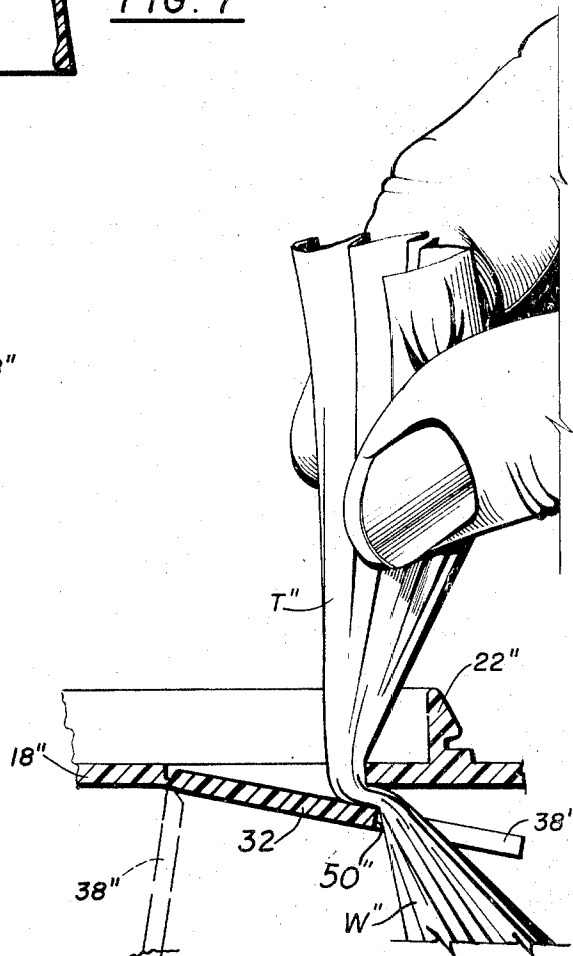


FIG. 9

DISPENSING TREATED TOWELETTES

BACKGROUND OF THE INVENTION

Reference is made to copending application Ser. No. 270,559 filed July 10, 1972, IMPROVED EXIT SLIT FOR BULK PACKAGE MOIST TOWELS OR TISSUES. In that construction it has been found that in some instances the slit renders it difficult for the user to extract the web in such a way as to cause even separation of the web at the perforations into single sheets for use, and the slit sometimes catches the finger used to thread the first sheet of the web through the exit slit.

It is the general purpose of the present invention to increase the tension by friction applied to the web so that it more positively separates at the perforations while still leaving the tip of the remainder of the web exposed at the outside of the dispenser for grasping for subsequent withdrawal and severance.

An opening is provided through which to thread the first sheet by the fingers. Adjacent this opening at the inside of the dispenser there is a flap which is hinged to the dispenser closely adjacent the opening and which substantially closes the opening and impinges upon the web. This results in a device which applies greater friction to the web as it is pulled out resulting in more positive severance of the sheets. The flap is operable to give easy access to the opening to thread the first sheet through the opening.

There is also a modification in which the flap is used to not only completely close the opening but to make a "negative" opening wherein the flap overlaps the entire opening so that the web must follow a tortuous path when the flap is in closed position of the opening, and this applies even greater tension by friction on the web as it is being withdrawn, increasing the degree of positiveness of severance where desired and also allowing for the dispensing of webs of greater durability and of stronger materials.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a view in elevation illustrating the dispenser, parts being shown in section;

FIG. 2 is a top plan view illustrating the opening for the web and showing the flap in closed position in dotted lines;

FIG. 3 is a section on line 3—3 of FIG. 2 showing the flap in open condition in solid lines and in closed condition in dotted lines;

FIG. 4 is a section on line 4—4 of FIG. 2;

FIG. 5 is a top plan view showing a modification;

FIG. 6 is a sectional view on line 6—6 of FIG. 5;

FIG. 7 is a cross sectional view on line 7—7 in FIG. 5;

FIG. 8 is a top plan view showing a further modification; and

FIG. 9 is a section on line 9—9 of FIG. 8.

PREFERRED EMBODIMENTS OF THE INVENTION

A container is indicated at 10. This container is preferably made in one piece and conveniently is of plastic. It has a top open end 12 having a peripheral bead 14 for the snap reception of a corresponding snap-in bead 16 on a cap 18 which closes the container 10. The cap may be manually removable and may be otherwise at-

tached as by screwthreads, etc., as may be desired or convenient. Cap 18 has a generally flat top surface 20 and centrally thereof there is a raised annular lip or flange which is undercut as at 22 for the snap reception of a cover 24 made captive by strap 26 which is connected to cap 18 at 28.

Within the lip 22 a portion of the top surface of the cap is solid, as shown in FIG. 2, in e.g., a semi-circular shape. This solid portion inside lip 22 is indicated by the reference numeral 30. It will be seen that in the form shown in FIG. 2 a triangular opening 32 is provided which has the points of the triangle adjacent to corresponding spaced parts of the lip 22. This leaves solid portions 34 and 36. A flap 38 is hinged preferably by a reduced thickness hinge at 40 to the edge of the solid portion 30. This flap preferably is formed with a pair of triangular leg portions 42, 44 which are normally held by snap-in bosses or lugs 46, 46 on the cap in parallel underlying condition with respect to the top 20 of the cap 18.

The legs 42, 44 form between them an apex 50 which overlaps the apex in the same location of the triangular shaped opening 32 thus leaving a very small opening for the web to be abstracted through, as is indicated at W in FIG. 3.

The result of this structure is that the back tension on the web being withdrawn is relatively great and when the sheet is withdrawn it easily tears off at the perforations. The opening formed by the apices of the triangular opening and the flap is very small and therefore the more efficient is the tear-off or severing operation.

At the same time it is very easy to manually push the flap down for threading or rethreading of the leading end of the web, whereas in the prior art devices, as identified above, the finger is sometimes apt to be caught because the slit was actually not enough for the finger to extend through for the purpose of threading. Once the web is threaded through the opening the flap is then snapped shut and a tug at the extending end of the web which is indicated at T causes the web to become abstracted and tears off at about the point shown in FIG. 3, i.e., approximate end of the web itself. That is, each time a sheet is torn off, the extending tip for manual grasping for the next tear-off action is about the size shown in FIG. 3 herein.

Referring to FIGS. 5, 6, and 7, the cap 18' is shown with a solid portion at 30' in the form of e.g., a half circle, the remainder of the space within the lip 22' being open as at 32'. The flap in this case is indicated at 38' and is of a size to just about close opening 32' when pivoted upwardly to the upward or closed position thus forming a semi-circular slit for the web to be abstracted through. In FIGS. 6 and 7 the flap 38' is shown in the down or open position for the threading operation of the web as described.

It must be pointed out that the shape of the opening is not material and shapes other than the depicted semi-circular and triangular shapes, can of course be used.

FIGS. 8 and 9 show another modification wherein the cap 18'' has a triangular opening as at 32'' for instance. In this case the flap 38'' is almost the same shape as in FIG. 2 and is hinged in a similar manner to the solid portion of the lid at 34'', but the proportions of the flap parts are such that when it is moved upwardly to the closed position shown in dotted lines in FIG. 8 and solid lines in FIG. 9, the apex as at 50'', actually overlaps the

material of the cap so there is no opening at all. In fact the web must pass through a tortuous, almost closed path as clearly shown in FIG. 9, in order to be abstracted from the dispenser. The flap is held in its closed position as before but it will be seen that in the case of FIGS. 8 and 9 a good deal more tension is placed on the web due to the tortuous path so that a stronger or heavier web can be utilized with a closure of this kind and the severance of the sheets is more positive.

I claim:

1. A dispenser for a web of perforated tissue-like material comprising a container including a wall, an opening in the wall, said opening including a fixed edge portion, means within the container normally substantially closing said opening, the web passing through the opening between the edge portion and the closing means, the edge portion and the closing means applying friction to the web to apply tension to the web as it is pulled from the container, the tension causing the web to separate at the perforations leaving a leading tip exposed exteriorly of the container,

said edge portion overlying the closing means and preventing motion of the latter past the edge portion, said closing means being movable to uncover the opening, providing for easy initiation of the passage of the web therethrough.

2. The dispenser of claim 1 wherein said closing means is a flap.

3. The dispenser of claim 2 including a hinge for the flap, said hinge being on the container wall adjacent the opening.

4. The dispenser of claim 1 wherein said means comprises a flap and including means for releasably holding the flap in its position substantially covering the opening.

5. The dispenser of claim 1 wherein said means completely covers the opening, but allows passage of the web between the opening covering means and the fixed edge.

6. The dispenser of claim 1 wherein said means for closing the opening closes it except for a relatively small passage for the web.

7. The dispenser of claim 1 wherein said means comprises a flap which when in its closed position completely covers and overlaps the opening whereby the web must pass through a tortuous path in order to be extracted.

8. The combination with an enclosed container having an opening therein, a cap closing the opening in the container, the cap including a substantially rigid top, an edged opening in said top, and movable means within the container substantially covering said opening, but being movable to uncover the opening, means holding the said movable means closely to an edge of the opening,

of a web in the container, said web being grasped between said movable means and an edge of the opening applying friction to the web thereby resisting extraction of the web from the container under tension imparted to the web by manually pulling on an exposed tip of the web.

9. The combination of claim 8 wherein said means is a flap hinged to the cap adjacent the opening, said flap being capable of hinging to uncover the opening.

10. The combination of claim 9 wherein said means in one position completely covers the opening but allows passage of the web between the opening closing means and the edge of the opening.

11. The combination of claim 8 wherein said means completely closes the opening except for a small passage through which the web passes under friction.

12. The combination of claim 8 wherein said means comprises a flap, means hinging the flap closely adjacent the opening, the flap being openable to provide for pushing the leading end of the web through the opening, and means holding the flap substantially in closed position relative to the opening and applying friction to the web.

13. A dispenser for a web of tissue-like material having spaced perforations along the same, said dispenser comprising a container having an open end therein, the container being otherwise closed, a removable cap closing the open end of said container, said cap having a top with an opening therein, said opening having a substantially fixed edge,

a depending flap hinged to the top of said cap at the underside thereof adjacent the opening, means to hold the flap in a position to close the opening, the flap retreating from the opening when released from the flap holding means, the flap when closing the opening leaving a small passage for the web to be drawn out of the container, through the passage, said passage being located between the fixed edge of the opening and an edge of the flap,

the edge of the flap and the edge of the opening grasping the web and applying friction thereto as it is being drawn out of the container, causing the web to disrupt at intervals at said perforations leaving a leading tip of the web extending through the opening in the top of the cap for manual grasping thereof to withdraw the web another length.

14. The dispenser of claim 13 wherein the flap flatly contacts the underside of the top of the cap and covers the entire opening in the top of the cap except for the small passage.

15. The dispenser of claim 13 wherein said flap completely overlaps the opening at the top of the cap but remains in slightly spaced relation with respect to the underside of the top of the cap leaving the small passage for the web.

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