

[54] **RECLOSABLE PACKAGE**

3,726,395 4/1973 Duhy..... 206/57 R

[76] Inventor: **John R. Anderson**, c/o Anderson Packaging, Inc., 1313 Samuelson Rd., Rockford, Ill. 61101

Primary Examiner—Stanley H. Tollberg
Attorney—C. Frederick Leydig et al.

[22] Filed: **Dec. 4, 1972**

[21] Appl. No.: **311,485**

[57] **ABSTRACT**

[52] U.S. Cl..... **221/46, 221/63**

[51] Int. Cl..... **A47k 10/20**

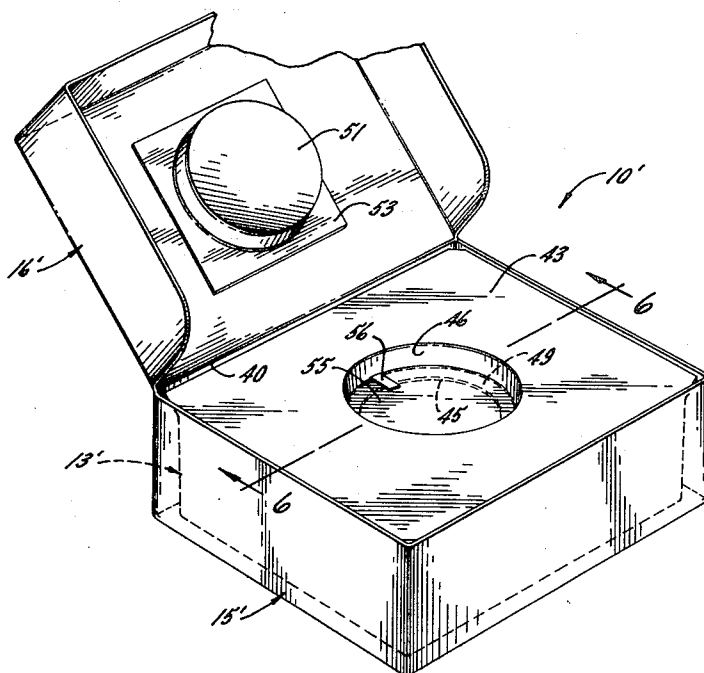
[58] Field of Search **206/57 R, 46 AC;**
221/63, 46, 65, 45, 49; 229/7, 11, 17

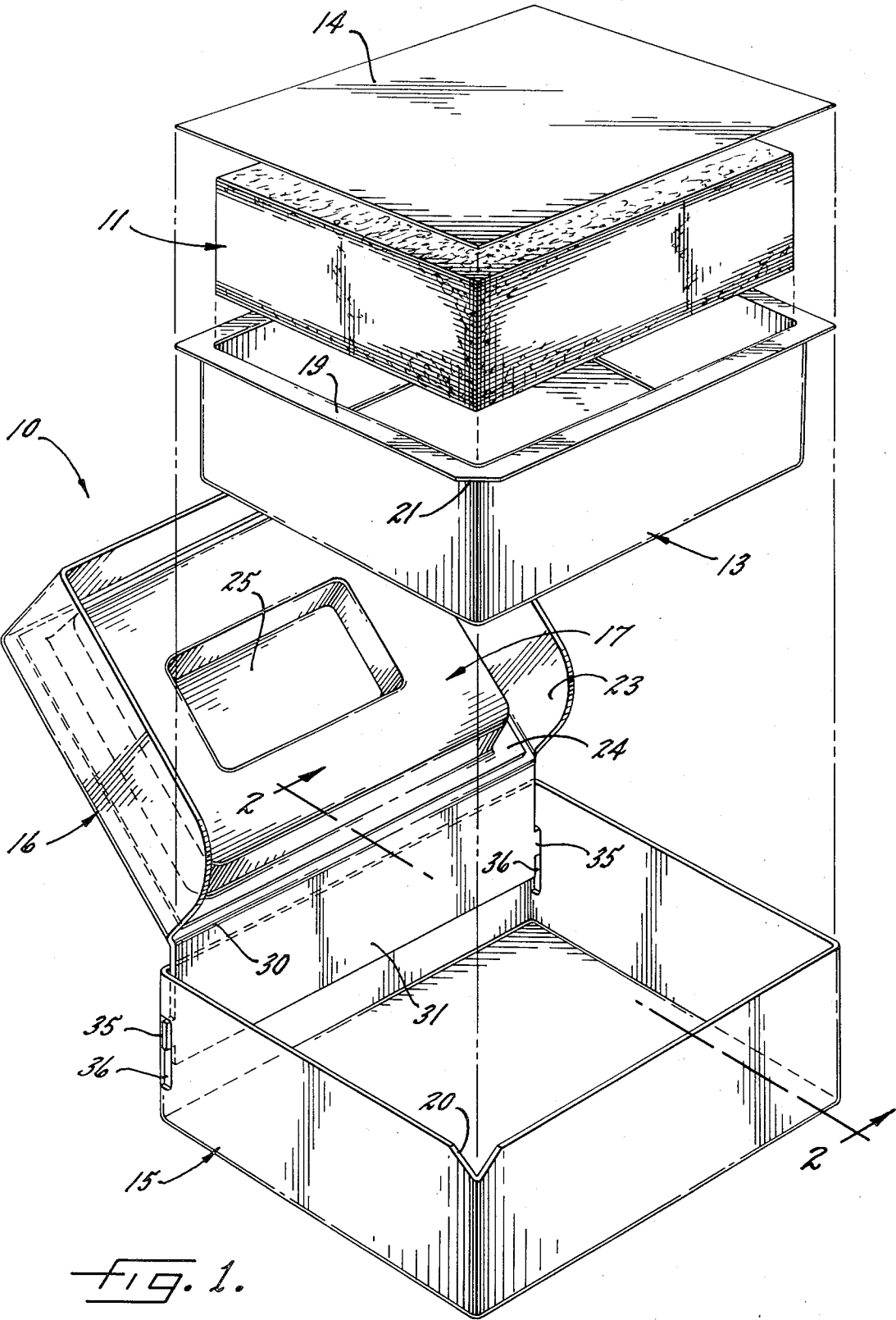
Alcohol-impregnated tissues are stacked face-to-face in a plastic dish-shaped container which is initially sealed air-tight by a peel-away sheet or film to prevent evaporation and leakage of the alcohol. The container is nested within a paperboard carton having a hinged cover whose underside carries a closure plug adapted to telescope into and reclose the container after removal of the sealing sheet.

[56] **References Cited**
UNITED STATES PATENTS

3,235,165 2/1966 Jackson 221/63

8 Claims, 7 Drawing Figures





SHEET 2 OF 3

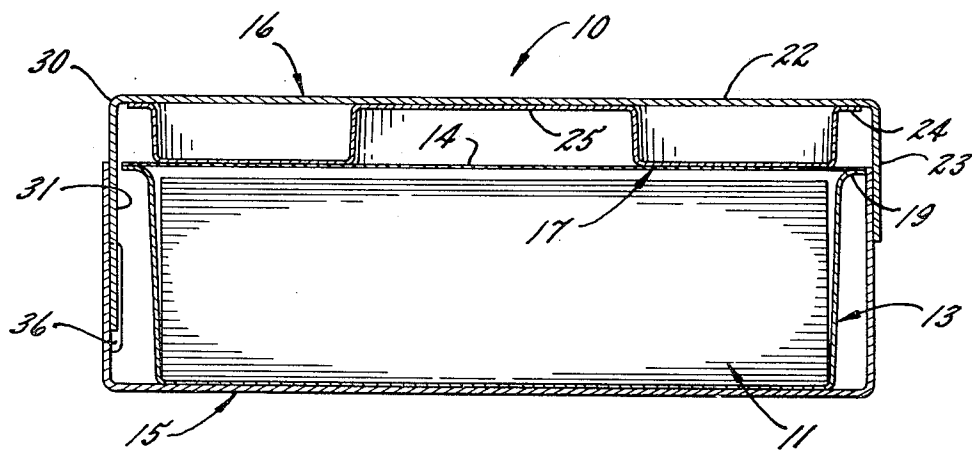


Fig. 2.

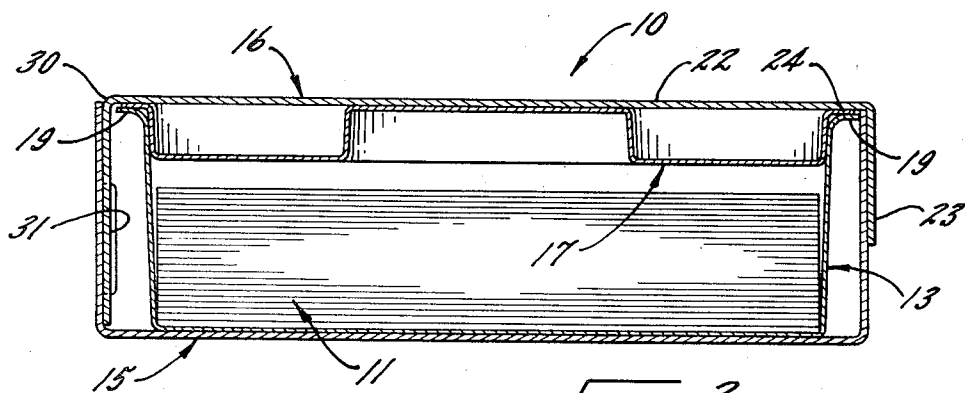


Fig. 3.

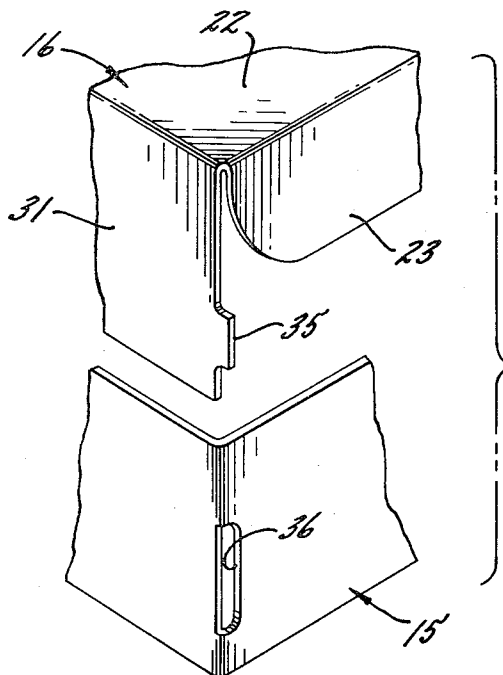


Fig. 4.

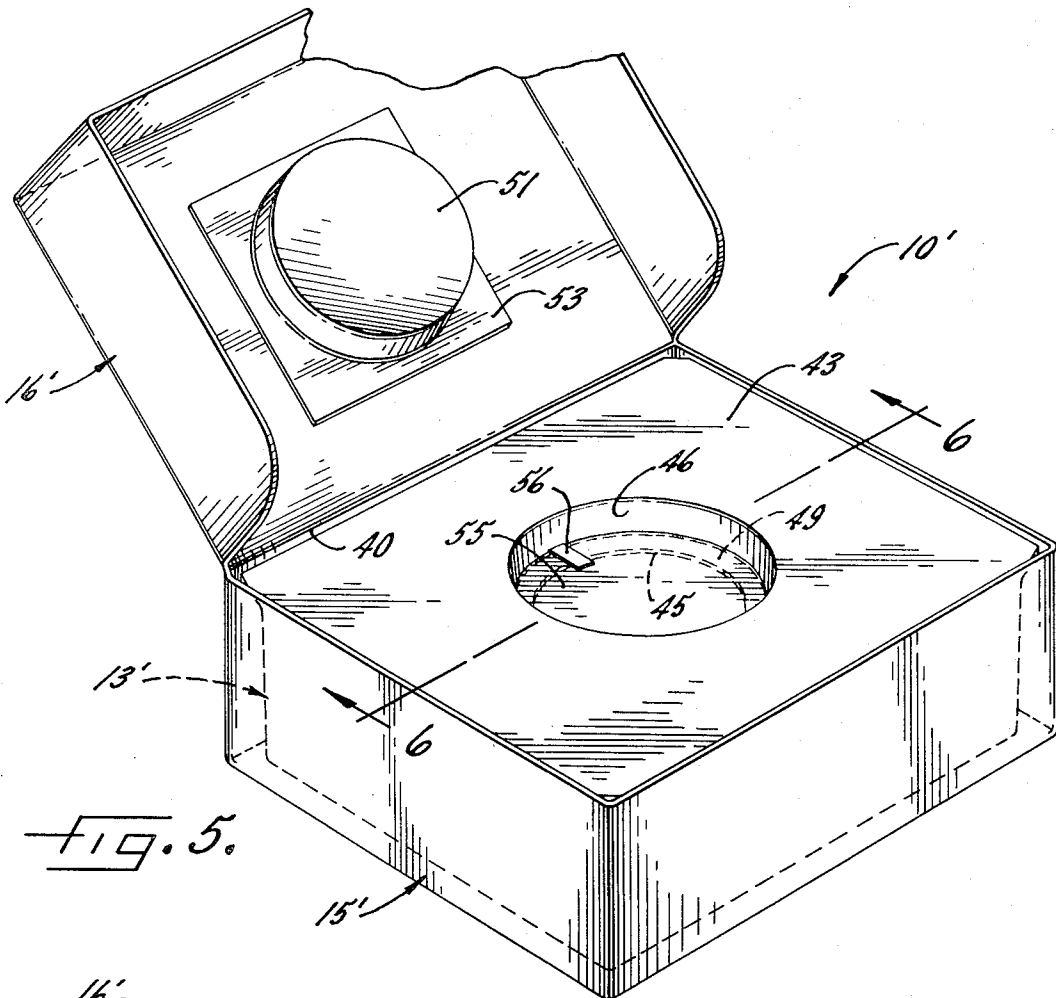


Fig. 5.

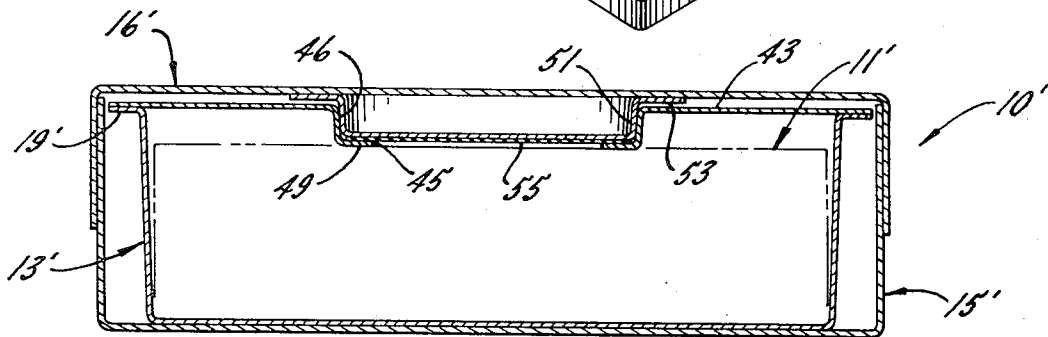


Fig. 6.

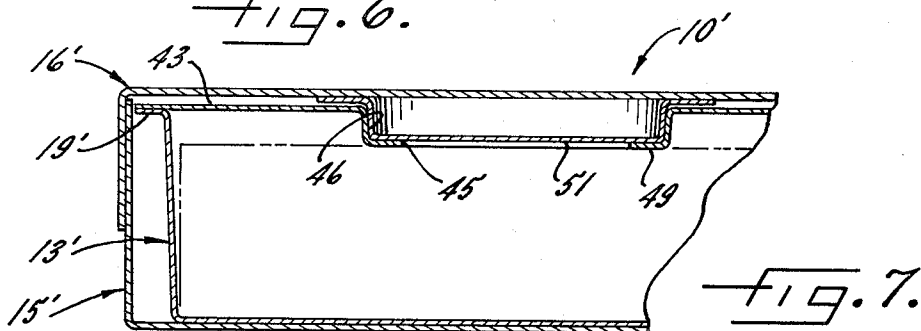


Fig. 7.

RECLOSABLE PACKAGE

BACKGROUND OF THE INVENTION

This invention relates to a package which may be used for holding various types of products but more particularly relates to a box-like package for holding a stack of initially flat tissues in face-to-face relation.

SUMMARY OF THE INVENTION

The general aim of the present invention is to provide a new and improved reclosable box-like package and more specifically to provide a unique package for holding a stack of cleansing tissues which are moistened with liquid, the package initially being sealed air-tight to prevent evaporation of the liquid and being capable of being easily re-sealed after each tissue is removed.

A more detailed object is to provide a package having a liquid-impervious container for holding the tissues and adapted to be protected by an outer carton having a swingable cover which serves to re-seal the inner container after the latter has been initially opened.

The invention also resides in the provision of a unique sealing plug on the underside of the carton cover and in the provision of a novel floating hinge between the cover and the carton to enable the plug to rest on the inner container before the latter is initially opened and thereafter to telescope into and reclose the inner container.

These and other objects and advantages of the invention will become more apparent from the following detailed description when taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is an exploded perspective view of one embodiment of a new and improved package embodying the novel features of the present invention.

FIG. 2 is a cross-section taken substantially along the line 2—2 of FIG. 1 but showing the package fully assembled and showing the carton cover in a closed position.

FIG. 3 is a view similar to FIG. 2 but showing the condition of the closed package after the inner container has been opened and some tissues have been removed.

FIG. 4 is a fragmentary exploded perspective view of part of the carton and the cover shown in FIG. 1.

FIG. 5 is a perspective view of a modified package incorporating the features of the invention, the carton cover being shown in an open position.

FIG. 6 is a cross-section taken along the line 6-6 of FIG. 5 and showing the carton cover in a closed position prior to opening of the inner container.

FIG. 7 is a fragmentary view similar to FIG. 6 but showing the carton cover in a closed position after opening of the inner container.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The present invention contemplates the provision of a reclosable box-like package 10 which may be used for various products but which is especially adapted to hold a flat stack 11 of tissues impregnated with alcohol or the like, the package being uniquely adapted to keep the tissues in a moist condition until the last of the tissues is used. In general, the package 10 comprises a liquid-impervious inner container 13 for holding the moistened tissues and originally closed with a substan-

tially air-tight seal by a liquid-impervious film or sheet 14 which is removably bonded to the container. The inner container 13 is nested within and protected by an outer container or carton 15 made of easily decorable sheet material and having a hinged cover 16 which is adapted to swing upwardly and downwardly between open and closed positions and which carries a unique liquid-impervious closure 17 on its underside. After being initially opened by removal of the cover sheet 14, the inner container 13 may be re-sealed by swinging the carton cover 16 to its closed position to telescope the closure 17 snugly with the container and thereby prevent the alcohol solution from evaporating out of the remaining tissues.

More specifically, the inner container 13 is thermal molded from a flexible but self-sustaining plastic such as polyethylene and is preferably but not necessarily shaped as a rectangular dish whose dimensions closely approximate those of the tissue stack 11. An outwardly projecting peripheral rim 19 is formed around the top of the container and defines a sealing surface for the cover sheet 14. In this particular instance, the sheet 14 is a flexible laminate of paper and foil, the foil having a coating of heat-sealable material and being bonded releasably to the upper surface of the rim 19 after the container has been filled with tissues and a suitable moistening agent such as an alcohol solution. Thus, the cover sheet securely closes the container with an air-tight seal to prevent both leakage and evaporation of the alcohol solution from the time the tissues are packaged until the container is initially opened by peeling away the sheet. Because the container is of a simple dish-like shape and is unencumbered by hinged covers or the like, the container readily lends itself to handling by high speed automatic packaging machinery.

The carton 15 is similar in shape to the plastic container 13, is approximately the same depth as the container and has a length and width just slightly greater than the corresponding dimensions of the rim 19 so as to enable the entire container to nest compactly within the carton after the container has been filled and closed. A spot of hot melt glue may be placed in the bottom of the carton to hold the container securely in the carton. One corner of the carton is notched as indicated at 20 in FIG. 1 and the adjacent corner of the container is relieved as indicated at 21 to enable easy access to the adjacent corner of the sealing sheet 14 and facilitate peeling away of the sheet from the container.

Preferably, the carton is made by folding and gluing an originally flat blank which is die cut from a paperboard sheet capable of being easily decorated by conventional printing prior to forming of the blank. The cover 16 also is made of paperboard and comprises a flat, rectangular top 22 having a continuous skirt 23 depending from its front margin and two side margins. When the cover is swung downwardly to its closed position, the skirt telescopes over the upper portion of the carton as shown in FIG. 2.

In keeping with the invention, the closure 17 on the underside of the cover 16 is in the form of a rectangular plug molded of polyethylene or other liquid-impervious material, the plug being generally dish-shaped and being formed with a peripheral flange 24 adapted to overlie the rim 19. In addition, the plug 17 is formed with a depressed surface 25 which is secured to the underside of the cover by hot melt. The length and width

of the plug are approximately equal to the dimensions of the top opening of the inner container 13 and thus the plug is capable of telescoping snugly into the container when the cover is swung to its closed position.

As shown in FIG. 2, the plug 17 projects downwardly through a distance equal to approximately one-half the depth of the skirt 23 and rests on the upper side of the sealing sheet 14 before the package 10 is initially opened by the user. After the cover has been opened and the sealing sheet has been peeled away to break the original seal, the inner container 13 may be re-sealed simply by swinging the cover to its closed position to telescope the plug downwardly into the open end of the container (see FIG. 3). The plug thus keeps the inner container closed to prevent the tissues from drying out from the time the original seal is broken until all of the tissues have been used.

According to another aspect of the invention, the cover 16 is supported by a novel floating hinge 30 which enables the plug 17 to rest in an upper position (FIG. 2) against the sealing sheet 14 before the latter is removed and then to move downwardly to telescope into and reclose the inner container 13 (see FIG. 3). In this instance, the hinge is defined by the junction between the top wall 22 of the cover and an integral flap 31 depending from the rear margin of the top wall. The flap is sandwiched slidably between the rear wall of the carton 15 and the rim 19 of the container and thus is capable of shifting downwardly within the carton to lower the hinge 30 from the position shown in FIG. 2 to the position shown in FIG. 3. Accordingly, the cover can be swung fully closed and the plug 17 may rest on the sealing sheet (FIG. 2) or may telescope into the inner container (FIG. 3). To captivate the cover on the carton, tabs 35 (FIGS. 1 and 4) are formed on the ends of the flap 31 and fit into slots 36 formed in the rear corners of the carton.

From the foregoing, it will be apparent that the present invention brings to the art a new and improved package 10 in which the cover sheet 14 keeps the alcohol-impregnated stack of face-to-face tissues in an extremely tightly sealed condition until the package is purchased and opened by the ultimate consumer. Thereafter, the plug 17 snugly closes the inner container 13 to keep the remaining tissues in a moist condition in spite of the breaking of the original seal. The easily decorable paperboard carton 15 and cover 16 provide a protective jacket around the inner container 13 and the sheet 14 and, being separate from the container, do not present an encumbrance to automatic packaging equipment for filling and sealing the container.

A modified package 10' incorporating the features of the invention is shown in FIGS. 5 to 7 in which parts corresponding to those of the first embodiment are indicated by the same but primed reference numerals. As before, a liquid-impervious inner container 13' is fitted within and glued to an outer paperboard carton 15'. In this instance, however, the cover 16' is integrally hinged to the rear wall of the carton 15' at 40 (FIG. 5) rather than being formed separately of the carton. Also, the inner container 13' is permanently covered by a relatively rigid polyethylene lid 43 which is bonded securely to the upper surface of the peripheral rim 19'.

As shown in FIGS. 5 and 6, two concentric holes 45 and 46 similar to a counterbore are formed in the center of the lid 43 by molding an apertured depression

therein. The smaller hole 45 extends completely through the lid and defines an opening through which the tissues may be withdrawn from the inner container 13'. Extending around the smaller hole 45 is a flange 49 which, in effect, defines the bottom of the outer hole 46. The latter is adapted to be closed by a circular polyethylene plug 51 which is molded integrally with a flat sheet 53 bonded to the underside of the cover 16'. The plug is approximately the same depth and diameter as the outer hole 46 and is considerably larger than the diameter of the inner hole 45.

Initially, the inner container 13' is sealed by a flexible peel-away sheet in the form of a circular disc 55 (FIGS. 5 and 6) which is bonded releasably to the flange 49 so as to cover the inner hole 45, the disc having a tab 56 to facilitate its removal. When the cover 16' is closed with the disc 55 in place, the plug 51 telescopes snugly into the outer hole 46 and rests on the disc as shown in FIG. 6. When the cover is closed after removal of the sealing disc, the plug 51 again telescopes snugly into the outer hole 46 and rests on the flange 49 (see FIG. 6) to reclose the inner container 13' and retard the evaporation of moisture from the tissues. Accordingly, the package 10' serves the same general purpose as the package 10 but does not require the floating hinge 30.

I claim as my invention:

1. A package comprising an outer container, a cover swingable upwardly and downwardly on the upper end of said container between positions opening and closing the container, an inner container nested within said outer container, a sealing sheet removably attached to the upper end of said inner container and covering the latter with a substantially air-tight seal, and a closure carried on the underside of said cover and sized to telescope snugly with and close said inner container when said cover is swung to said closed position after removal of said sheet from said inner container.

2. A package for holding moist tissues, said package comprising an outer container, a cover swingable upwardly and downwardly on the upper end of said container between positions opening and closing the container, an inner container nested within said outer container and adapted to hold a stack of said tissues, said inner container being made of liquid-impervious material, a liquid-impervious sheet removably attached to the upper end of said inner container and covering the latter with a substantially airtight seal, and a liquid-impervious closure carried on the underside of said cover and sized to telescope snugly with and close said inner container when said cover is swung to said closed position after removal of said sheet from said inner container.

3. A package as defined in claim 2 in which said plug and said inner container are similar in shape, said sheet covering the entire upper end of said inner container.

4. A package as defined in claim 2 further including a substantially flat lid secured to and covering the upper end of said container, a hole extending through the central portion of said lid and initially covered by said sheet, said closure being sized to close said hole when said cover is swung to said closed position after removal of said sheet from said hole.

5. A package as defined by claim 4 including an outer hole surrounding said one hole, a flange extending around said one hole and defining the bottom of said outer hole, said liquid-impervious sheet being removably attached to said flange and covering said one hole,

5

and said closure being sized to telescope snugly into said outer hole and rest on said sheet when said cover is swung to said closed position before removal of said sheet and to rest on said flange when said cover is swung to said closed position after removal of said sheet.

6. A package for holding tissues moistened with liquid, said package comprising an outer carton made of paperboard, a paperboard cover swingable upwardly and downwardly on the upper end of said carton between positions opening and closing the carton, said cover having a depending skirt located to telescope over said carton when said cover is in said closed position, an inner container nested within said carton and adapted to hold a stack of said tissues, said inner container being made of liquid-impervious material, a liquid-impervious sheet removably bonded to the upper end of said inner container and covering the latter with a substantially airtight seal, a liquid-impervious plug carried on the underside of said cover and resting against said sheet when said cover is in said closed position prior to removal of said sheet from said inner container, and said plug being sized to telescope into said inner container when said cover is swung to said closed position after removal of said sheet from said inner container.

7. A package as defined in claim 6 in which said cover comprises a substantially flat and rectangular top, said skirt depending from the front margin and from two side margins of said top, a flap depending from the rear margin of said top, an integral hinge lo-

6

cated at the junction of said rear margin and said flap to permit swinging of said cover between said open and closed positions, said flap being sandwiched between said inner container and the rear wall of said carton and being slidable vertically along said rear wall to enable lowering of said hinge after removal of said sheet from said inner container.

8. A package for holding tissues moistened with liquid, said package comprising an outer carton made of paperboard, a paperboard cover swingable upwardly and downwardly on the upper end of said carton between positions opening and closing the carton, an inner container nested within said carton and adapted to hold a stack of said tissues, said inner container being made of liquid-impervious material, a liquid-impervious lid permanently covering the upper end of said inner container, an inner hole extending through the central portion of said lid, an outer hole formed in said lid and surrounding said inner hole, a flange extending around said inner hole and spaced below the plane of said lid, said flange defining the bottom of said outer hole, a peel-away disc bonded removably to said flange and initially covering said inner hole with a substantially air-tight seal, and a liquid-impervious plug carried on the underside of said cover, said plug being sized to telescope snugly into said outer hole and rest on said disc when said cover is swung to said closed position prior to removal of said disc and to rest on said flange and close said inner hole when said cover is swung to said closed position after removal of said disc.

* * * * *

35

40

45

50

55

60

65