United States Patent [19]

Duhy

[11] **3,726,395**

[45] **Apr. 10, 1973**

[54] **CONTAINER OF TREATED DISPOSABLE TOWELS**

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[73] Assignee: **Pfizer Inc.,** New York, N.Y.

[22] Filed: **Dec. 22, 1971**

[21] Appl. No.: **210,875**

[52] **U.S. Cl.** .....**206/46 ST,** 206/57 R, 229/2.5, 229/43

[51] **Int. Cl.** **B65d 1/00,** B65d 5/64, B65d 85/62

[58] **Field of Search** .....206/46 ST, 46 PV, 206/46 R, 57 R, 63, DIG. 24, DIG. 17, 45.14; 229/2.5, 43; 150/.5; 221/63, 48

[56] **References Cited**

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Primary Examiner—William T. Dixson, Jr.
Attorney—Arthur G. Connolly et al.

[57] **ABSTRACT**

A stack of liquid saturated disposable towels is enclosed within a sealed container including a shallow tray and a replaceable lid which is trapped within a foil-backed paper cover sealed to an outwardly extending lip on the tray. The tray and lid are a thin plastic material, such as polystyrene, which is shaped for structural rigidity and functional purposes. The tray includes outwardly projecting corners for stiffening it and facilitating internal access to the corners of the towels for grasping and obtaining uniform saturation. Outwardly projecting legs extend from one side of the tray at the corners for standing the containers on end for display. The formed lid with handle is received within a peripheral well within the lip of the tray for covering the container after the seal is removed. The foil-backed sealing cover is easily removed with a peelable tab scored from one of the corners of the lip.

10 Claims, 8 Drawing Figures

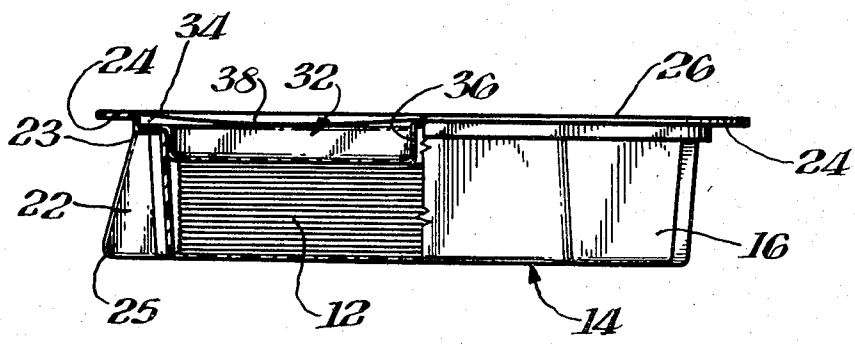


Fig. 1.

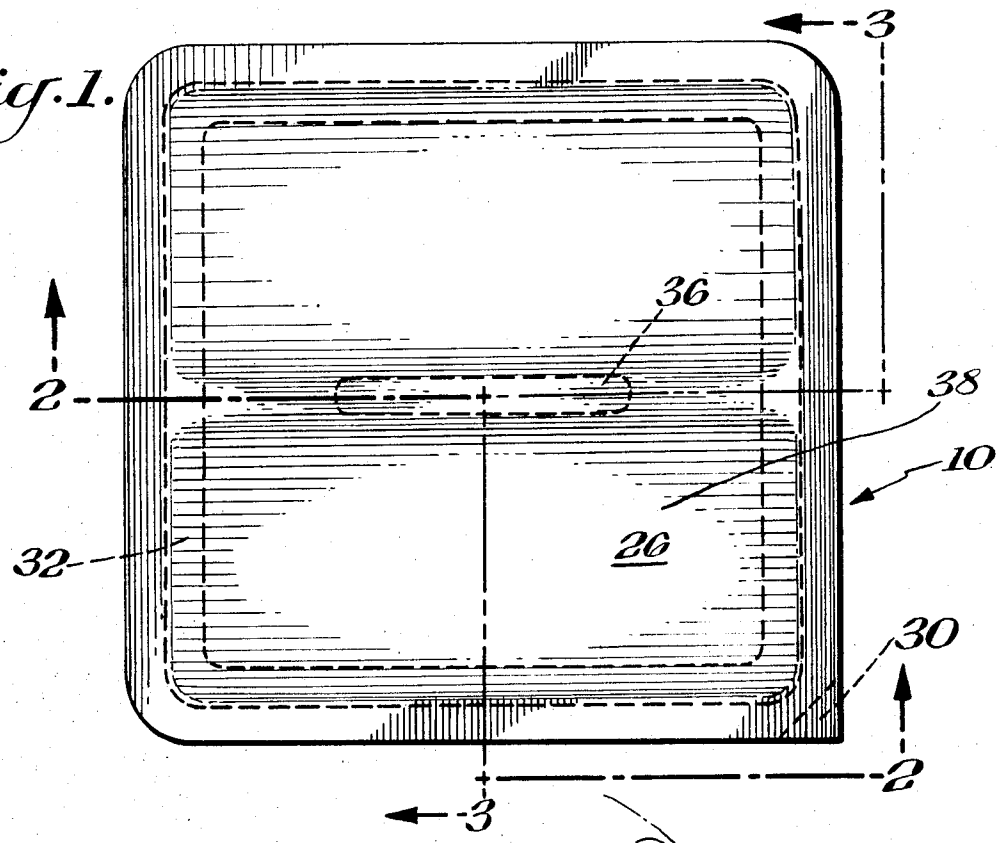


Fig. 2.

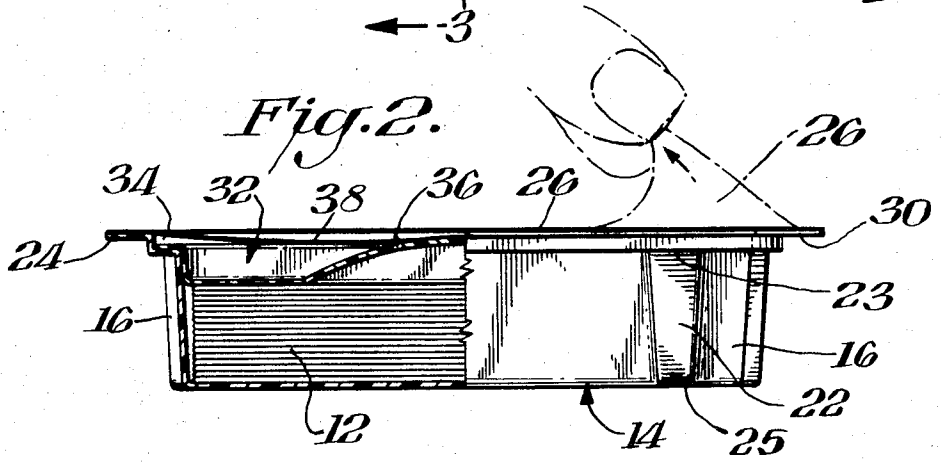


Fig. 3.

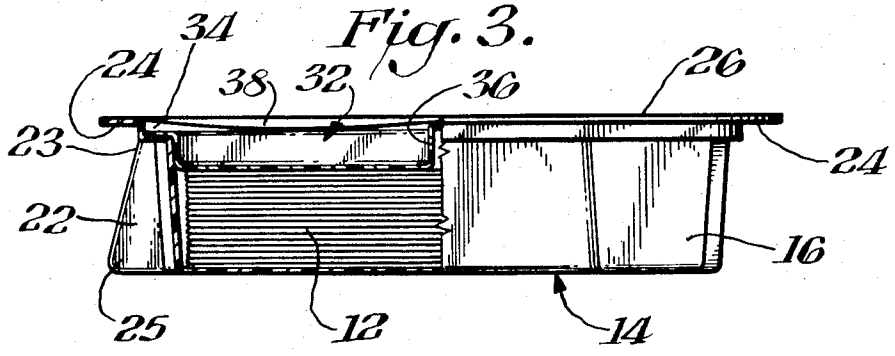


Fig. 4.

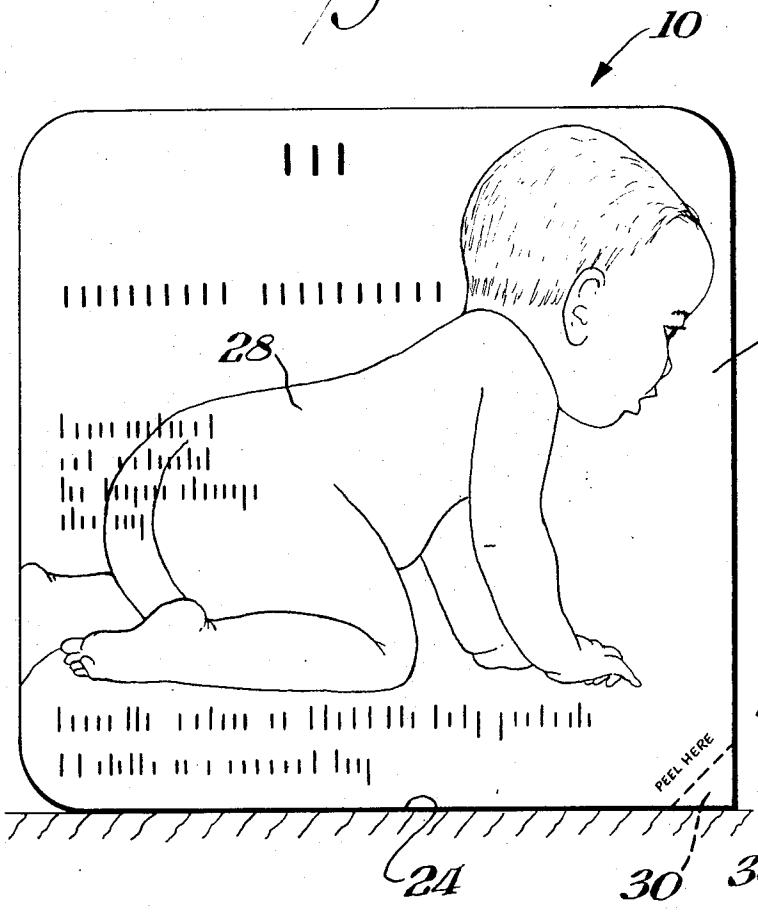


Fig. 5.

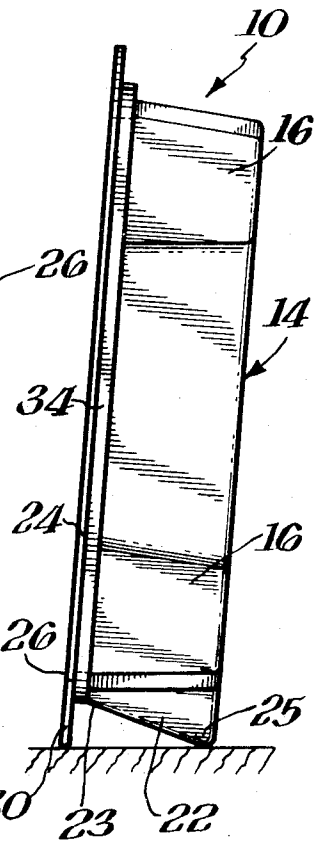


Fig. 8.

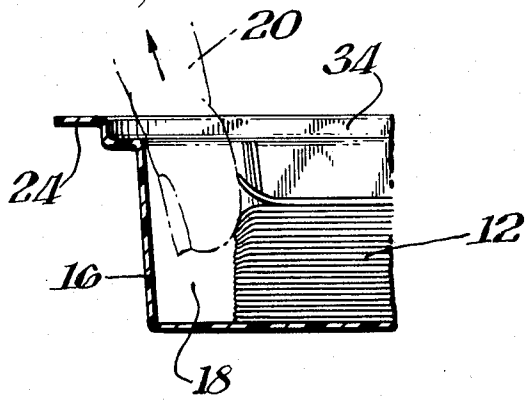


Fig. 6.

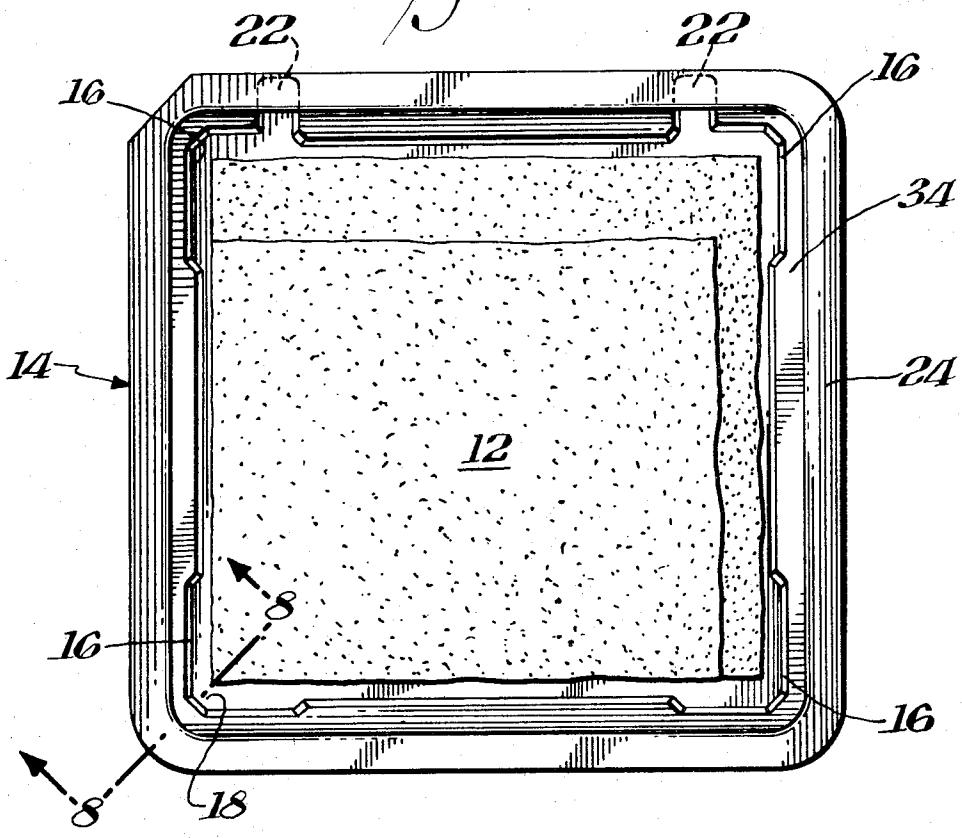
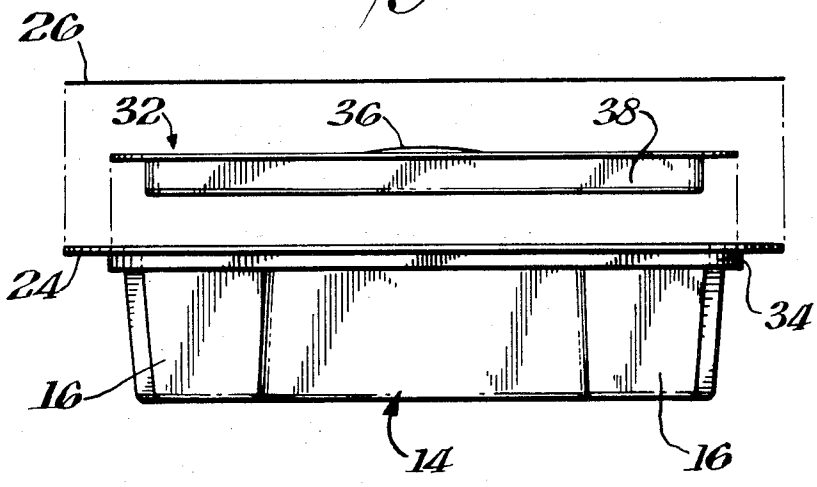


Fig. 7.



CONTAINER OF TREATED DISPOSABLE TOWELS

BACKGROUND OF THE INVENTION

This invention relates to a disposable sealed container of disposable treated towels. Various plastic containers are used for dispensing consumable products, such as food, as described in U. S. Pat. Nos. 1,758,916, 2,880,859, 2,887,244, 3,163,311 and 3,344,974. None of the aforementioned types of containers are, however, completely satisfactory for packaging and dispensing treated disposable towels. An object of this invention is therefore to provide a simple, economical, efficient and attractive container of treated disposable towels.

SUMMARY

The shallow tray for a stack of treated towels has outwardly projecting corners for stiffening it and facilitating internal access to the corners of the towels for grasping and obtaining and maintaining uniform saturation by the treating agent. Outwardly projecting legs extend from one side of the tray at the corners for standing the containers on end for display. A formed lid with handle is received within a peripheral well within the lip of the tray for covering the container after the seal is removed and trapped under a foil-backed cover sealed to the lip of the tray. The foil-backed sealing cover is easily stripped from the container with a peeling tab scored from one of the corners of the lip.

BRIEF DESCRIPTION OF THE DRAWING

Novel features and advantages of the present invention will become apparent to one skilled in the art from a reading of the following description in conjunction with the accompanying drawings wherein similar reference characters refer to similar parts and in which:

FIG. 1 is a top plan view of one embodiment of this invention containing a stack of towels;

FIG. 2 is a partial cross-sectional view taken through FIG. 1 along the line 2—2 with a user's finger shown in phantom peeling off a corner of the cover seal;

FIG. 3 is another partial cross-sectional view taken through FIG. 1 along the line 3—3;

FIG. 4 is a front view in elevation of the container shown in FIG. 5, standing on end to show the illustrated sealed cover;

FIG. 5 is a right end view in elevation of the end-standing container shown in FIG. 4;

FIG. 6 is a top plan view of the tray portion of the container shown in FIGS. 1–5;

FIG. 7 is an exploded front view in elevation of parts of the container shown in FIGS. 1–6; and

FIG. 8 is a fragmental cross-sectional view taken through FIG. 6 along the line 8—8 with an inserted finger of a user shown in phantom withdrawing one of the towels from the container.

DESCRIPTION OF THE PREFERRED EMBODIMENT

In FIGS. 1–3 is shown a sealed container 10 enclosing a stack of 24 towels 12 treated with a cleansing liquid later described. Container 10 includes a shallow tray 14 formed of a thin plastic such as a sheet of white polystyrene 0.030" thick. Tray 14 as shown in FIGS. 5–8 includes four outwardly projecting corners 16 which stiffen the tray and facilitate internal access through corresponding angular indentations 18 for grasping corners of towels 12 as shown in FIG. 8 by the inserted finger 20 of a user and for facilitating uniform saturation of the stack of towels by the treating liquid later described. Indentations 18 provide free space within tray 14 around the edges of towels 12 to permit the treating solution and vapors to maintain towels 12 uniformly saturated throughout storage and use.

A pair of projecting legs 22, extend from one of the sides of the tray at corners 16 for standing containers 10 on end as shown in FIGS. 4 and 5 in conjunction with the outwardly extending lip 24 of tray 14 and attached foil-backed sealing cover 26 as shown in FIGS. 4 and 5. Legs 22 taper outwardly from a narrow top end 23 to feet 25 near the bottom of tray 14. Feet 25 extend outwardly from the side of tray 14 slightly less than lip 24 to incline container 10 slightly backwardly when standing on end. This standing-on-end position of container 10 facilitates display of indicia printed on sealing cover 26 such as infant 28. Removable foil-backed sealing cover 26, for example made of 0.010 solid bleached sulfate paper lined with 0.00035" thick aluminum foil, is heat sealed to lip 24 of tray 14 and is easily peeled with tab 30 scored from a corner of lip 24.

Formed lid 32 is trapped inside of heat sealed cover 26 within well 34 of tray 14 by the sagging contact of central portions of cover 26 upon the curved top of handle 36 and it provides a convenient means of covering tray 14 after sealed cover 26 is removed. The substantial depth of well 34 facilitates location and retention of lid 32 during assembly and use. Lid 32 is easily removed by grasping thin curved handle 36 extending upwardly within the downwardly-dished central portions 38 of lid 32. Lid 32 is conveniently formed of a white polystyrene and may be even thinner than tray 14 such as 0.020" thick. The top ends 23 of legs 22 join with well 34 to facilitate fabrication.

Towels 12 are for example made from an absorbent paper towel material having a substantial wet strength, such as Dexter paper, Grade X 2067. They are for example originally in the form of 9 × 9 inch squares which are folded to about half their original size. Towels 12 are treated with a cleansing and medicated liquid which for example includes an aqueous solution of an antibacterial quaternary ammonium salt. A suitable salt is benzalkonium chloride. Other suitable odorizers or deodorants may be included and may be referred to as odorizing agents.

I claim:

1. A container of treated disposable towels comprising a substantially rectangular tray of a thin plastic material, a stack of substantially rectangular disposable towels disposed within said tray, said tray having outwardly projecting corners for stiffening it and facilitating internal access, said tray having internal angular indentations corresponding to said outwardly projecting corners and disposed within said outwardly projecting corners whereby space is provided about the corners of said towels, outwardly projecting legs extending from one side of said tray at said corners, an outwardly extending lip at the top of said tray, a shallow well disposed within said lip, a lid having an outer edge for engagement in said well, said lid being loosely engaged within said well, a sealing cover adhered to said lip for

sealing said towels within said container and trapping said lid within said container, and a handle extending upwardly from a central portion of said lid for grasping and removing it after stripping of said sealing cover.

2. A container as set forth in claim 1 wherein the major portion of said lid is downwardly dished for stiffening it and providing room for receiving said handle under said sealing cover.

3. A container as set forth in claim 1 wherein said sealing cover is comprised of foil-backed paper.

4. A container as set forth in claim 1 wherein said towels are treated with an aqueous solution comprising an anti-bacterial quaternary ammonium salt.

5. A container as set forth in claim 4 wherein said aqueous solution also comprises an odorizing agent.

6. A container as set forth in claim 1 wherein said sealing cover includes indicia, said outwardly projecting legs have feet disposed near the bottom of said tray, said feet extending laterally outwardly from the bottom of said tray slightly less than the lateral outward extension of said lip to permit said container to be stood on end with the bottom of said tray slightly backwardly inclined for displaying said indicia on said sealing cover.

7. A container as set forth in claim 6 wherein said legs taper outwardly from a narrow section near the top of said tray to a wider section of said feet near the bottom of said tray.

8. A container as set forth in claim 7 wherein the top sections of said legs join said well to facilitate fabrication.

9. A container as set forth in claim 2 wherein said sealing cover is foil-backed and it is disposed in sagging contact with the top of said handle to hold said lid in place in said well.

10. A container as set forth in claim 9 wherein the top of said handle is curved to prevent rupturing of said sealing cover.

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