

[54] **CONTAINER WITH MEANS FOR LOCKING THE LID**

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[51] Int. Cl.B65d 5/32

[58] Field of Search229/44 R, 45, 5.5, DIG. 11

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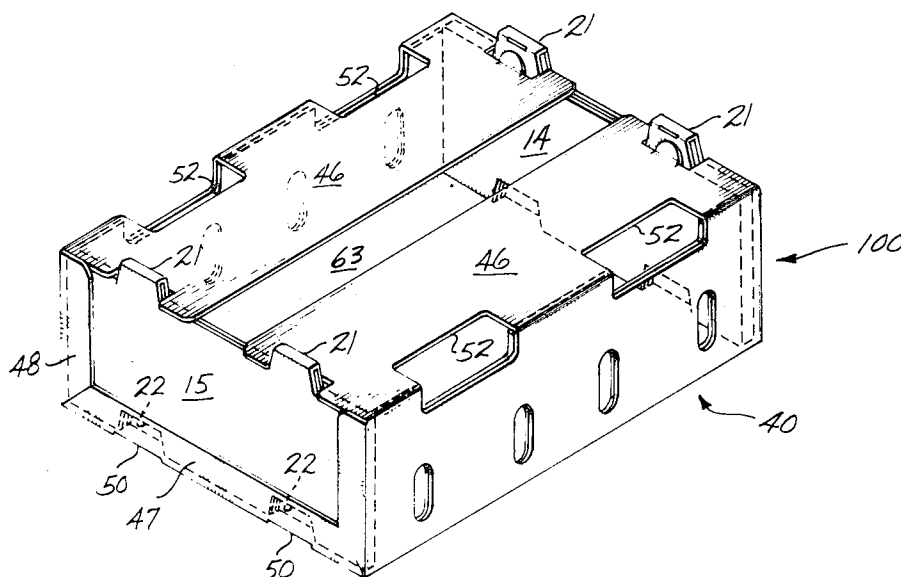
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[57] **ABSTRACT**

A container having means for easily locking and unlocking the lid of the container. The lid sits on a ledge of the container body. A side wall of the container body extends above the lid and has a relief which extends above the lid also. A locking tab on the lid extends upwardly into the aperture and frictionally engages the upper edge and back of the relief to lock the lid in place. The tab may be pulled from the relief to unlock the lid.

3 Claims, 7 Drawing Figures



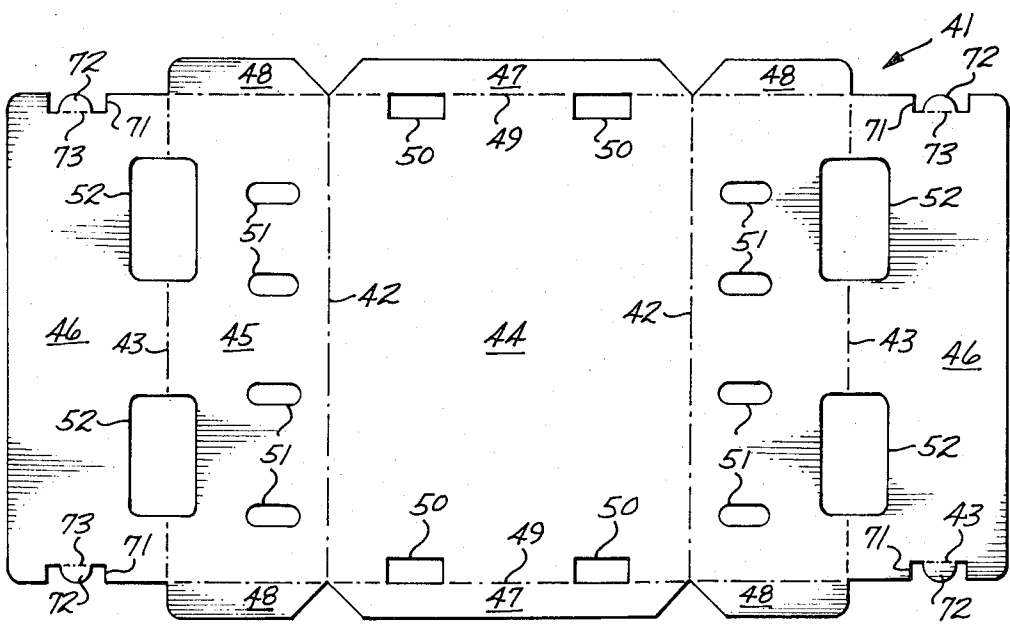


Fig. 1

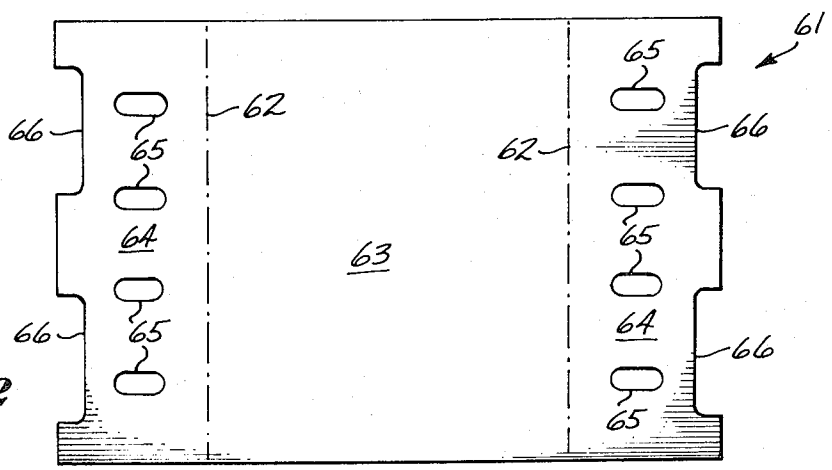


Fig. 2

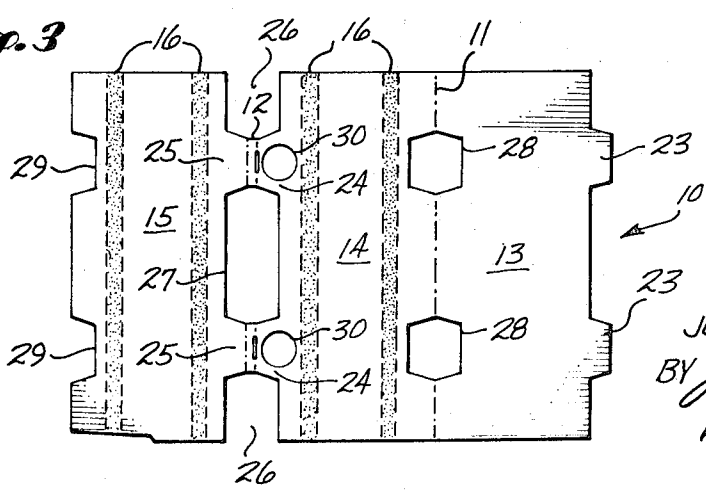
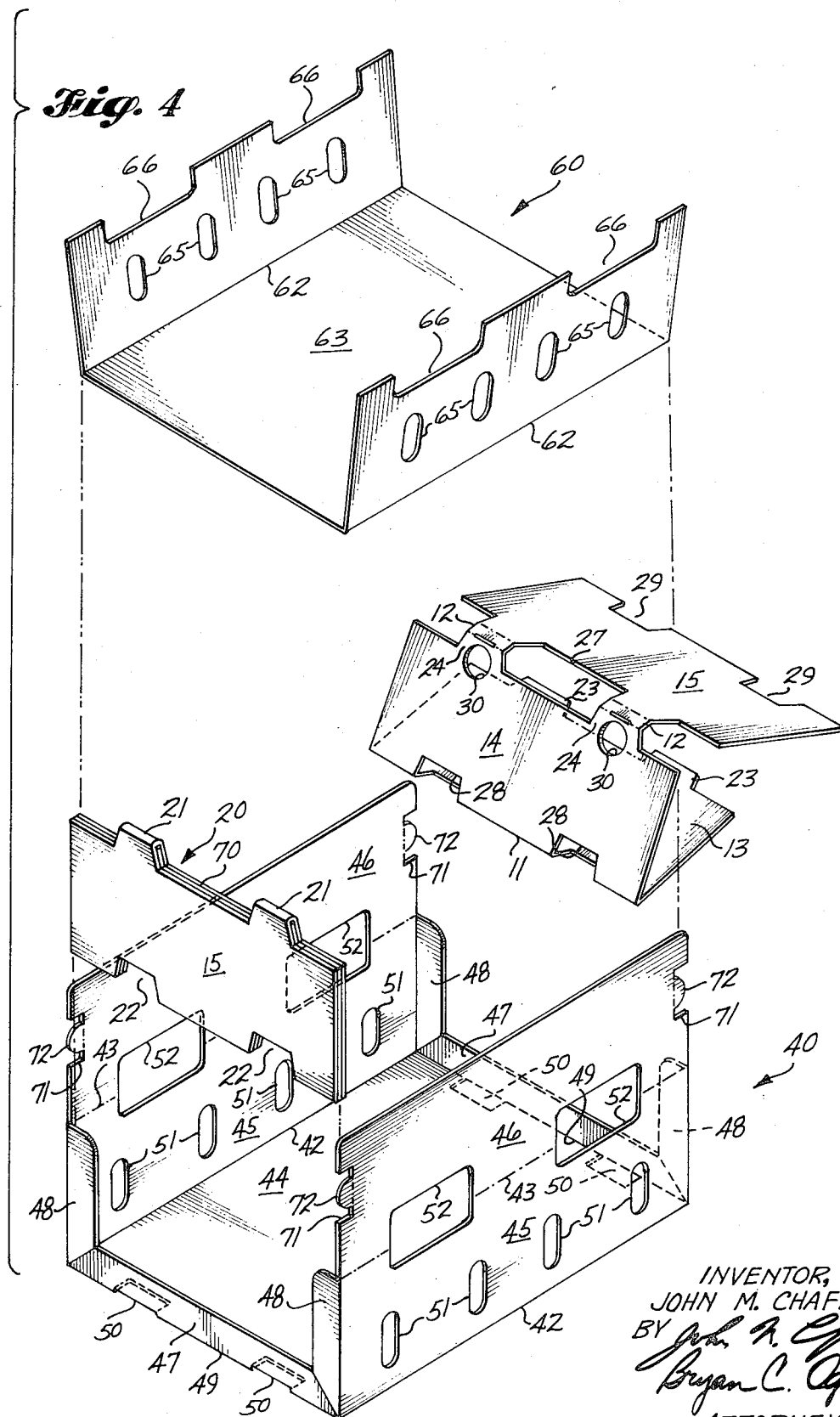


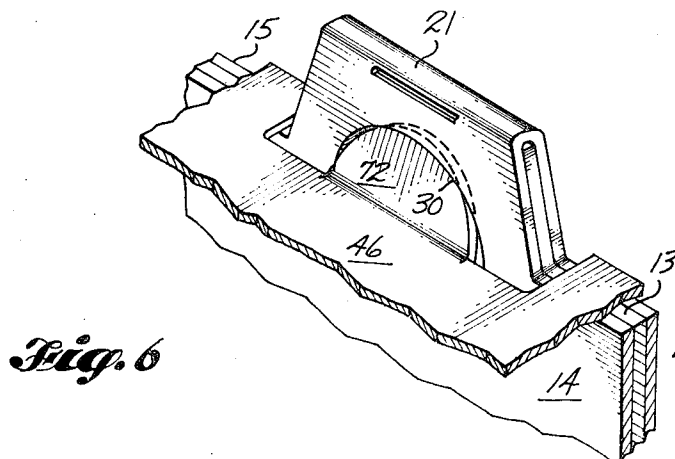
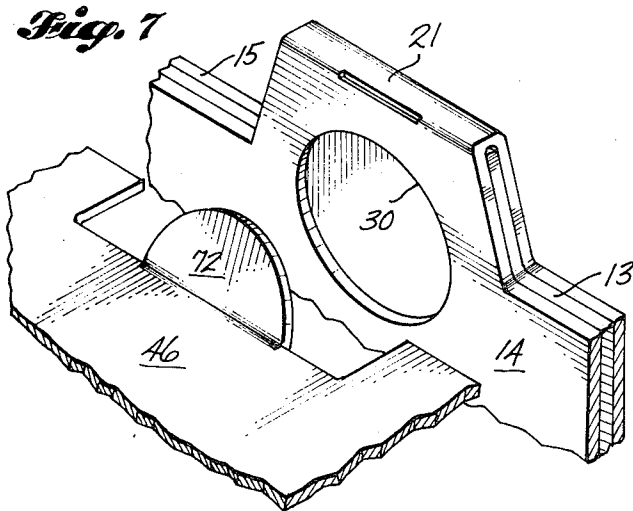
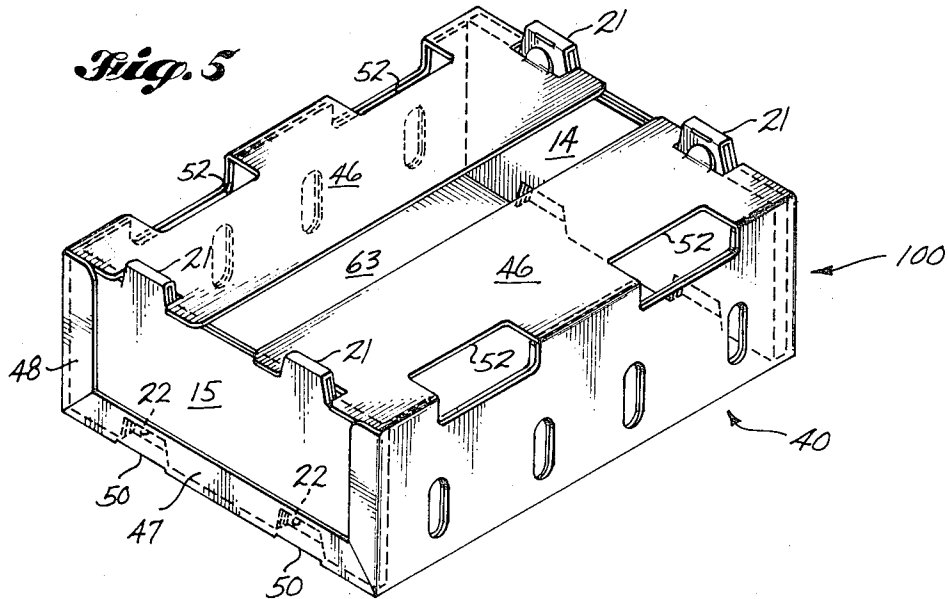
Fig. 3

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Fig. 4



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CONTAINER WITH MEANS FOR LOCKING THE LID

BACKGROUND OF THE INVENTION

1. Field of the Invention

Means for locking a lid on a container.

2. Description of the Prior Art

Kieckhefer U.S. Pat. No. 2,622,785 which issued Dec. 23, 1952, George U.S. Pat. No. 2,736,487 which issued Feb. 28, 1956, and Reynolds U.S. Pat. No. 3,095,137 which issued June 25, 1963 disclose various locking combinations for lids.

In Kieckhefer a spring wire on an outside flap of the lid is biased into an aperture on the outer side wall. Reynolds discloses a downwardly extending flange on the lid which extends into the container. It has locking tabs 32 which fit into apertures on the inner face of the container. George discloses dovetailing segments on the top of the end walls and the ends of the lid. Two different styles are disclosed.

BRIEF SUMMARY OF THE INVENTION

Means for easily locking and unlocking the lid of a container. The lid sits on a ledge of the container and has locking tabs which fit into a relief on a side wall of the container body. The relief and the side wall extend above the lid. The locking tab extends upwardly into the aperture and frictionally engages the top and back of the relief to lock the lid in place. The tab may be pulled from the aperture to unlock the lid.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a top plan view of the blank of the container body.

FIG. 2 is a top plan view of the blank of a liner.

FIG. 3 is a top plan view of the blank of the end wall.

FIG. 4 is an isometric exploded view of the container. One of the end panels is partially formed to show its construction.

FIG. 5 is an isometric view of the closed container.

FIG. 6 is an isometric view of the container lock.

FIG. 7 is an isometric exploded view of the container lock of FIG. 6.

DETAILED DESCRIPTION OF THE DRAWINGS

The container 100 is formed by folding the body 40 around the end panels 20.

The end panels are formed from end wall blank 10. The blank, FIG. 3, is divided by a single score line 11 and double score line 12 into a center panel 13, an inner panel 14 and an outer panel 15. Glue stripes 16 on the inner and outer panels 14 and 15 adhere these panels to the center panel 13 to form the end panel 20.

The end panel 20 has stacking cleats 21 on its upper edge, and reliefs 22 on its lower edge for reception of the stacking cleats of the container below. The cleats are formed by the tabs 23, 24, and 25 on panels 13, 14, and 15 respectively. Two of these tabs—24 and 25—are formed by reliefs 26 at the edges of the blank and aperture 27 in the center of the blank. The stacking cleat reliefs are formed by the aperture 28 in panels 13 and 14, and the relief 29 in the edge of panel 15. The

opposing edges of the apertures 28 and the edge of the relief 29 are aligned in the end panel 20 to form the relief 22.

The aperture 30 in both the tab 24 and its associated inner panel 14 forms a locking relief in the end wall. The tab 23 on the inner panel 13 is the back of the locking relief 30.

The container body 40 is formed from blank 41, divided by longitudinal score lines 42 and 43 into a bottom panel 44, side walls 45 and lid panels 46. The body 40 is attached to the end panels 20 by the bottom flanges 47 and side flanges 48 which are hinged to the bottom panel 44 and side walls 45 by score line 49. Apertures 50 in the bottom panel 44 are aligned with the cleat reliefs 22 in the end walls.

An inner liner 60 may be provided. It is formed from blank 61. The longitudinal score lines 62 divide it into a bottom panel 63 and side walls 64. The apertures 65 in the side walls 64 are aligned with the apertures 51 in the side walls 45 of the container body and the reliefs 66 of the liner are aligned with the apertures 52 of the body 40. These apertures are provided to produce containers to allow the passage of air through the container.

In the formed container the lids 46 are bent downwardly around score lines 43 until they rest on the ledges 70 formed by the upper edge of the end panels. The lids have reliefs 71 which accommodate the stacking cleats 21. A locking tab 72 is hinged to the inner edge of the relief 71 by score line 73. When the lid is closed the locking tab 72 is placed in the locking relief 30 and frictionally engages the relief top and back to hold the lid in place. The lid may be opened by pulling the tab 72 from the aperture.

Although the box has been described in terms of a lid hinged to the side walls it can also be used for a removable lid.

What is claimed is:

1. In a container having a body and a lid, the improvement comprising
 - a ledge on said container body, said lid resting on said ledge,
 - said lid being hinged to said body,
 - a container wall extending above said lid,
 - a relief in said upstanding wall, said relief extending above said lid,
 - a locking tab hinged to said lid and extendable upwardly into said relief to lock said lid to said body.
2. The container of claim 1 in which the side edges of said lid are hinged to said body and said lid is divided longitudinally.
3. In a container having a body and a lid, the improvement comprising
 - a ledge on said container body, said lid resting on said ledge,
 - stacking cleats on said container body extending above said lid,
 - a relief in the inner face of said stacking cleat, said relief extending above said lid,
 - said lid being relieved at said stacking cleat, and
 - a locking tab hinged to said lid from the inner edge of said lid relief and extendable upwardly into said stacking cleat relief to lock said lid to said body.

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