United States Patent [19]

Locke

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[54] **EASILY SET-UP CONTAINER**

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[73] Assignee: **Hoerner Waldorf Corporation,** Ramsey, Minn.

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[52] **U.S. Cl.** ..... **229/38,** 229/6 R, 229/16 R, 229/37 R

[51] **Int. Cl.** **B65d 5/08**

[58] **Field of Search** ..... 229/38, 37 R, 43, 6 R, 229/39, 16 R

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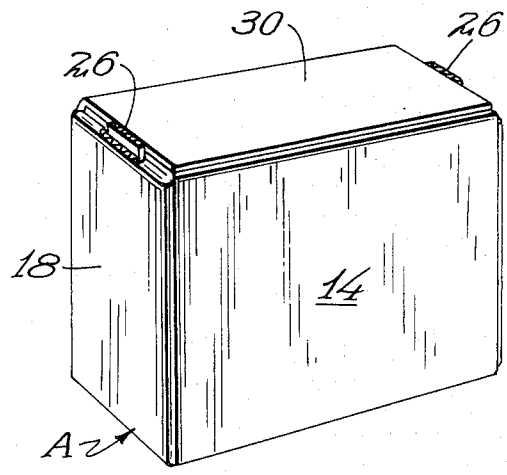
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[57] **ABSTRACT**

A container is provided which is easily filled, and which may be easily closed, even without the use of sealing means if desired. The container is made in two sections, each including a side wall and end panels hingedly secured thereto. The end walls of one section include bottom closure flaps which extend over the intermediate bottom panel, and top closure flaps connected along fold lines to the upper ends of said end walls of said one section. The fold lines are interrupted by slots. The end walls of the other of said sections include projecting tongues which are extendable through said slots. Closure flaps on said side walls fold down between said tongues and may be frictionally engaged therebetween.

3 Claims, 6 Drawing Figures



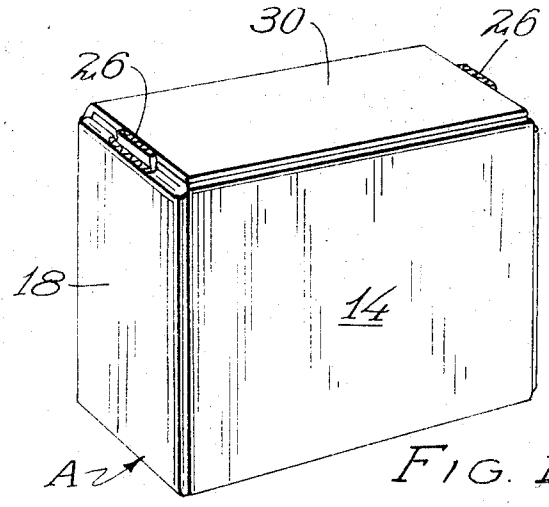


FIG. 1

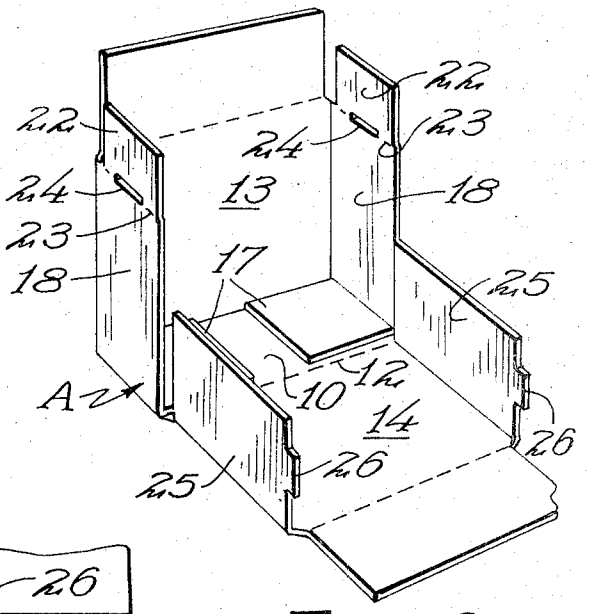


FIG. 2

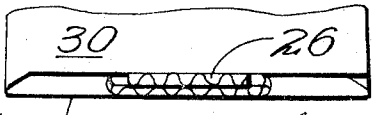


FIG. 4

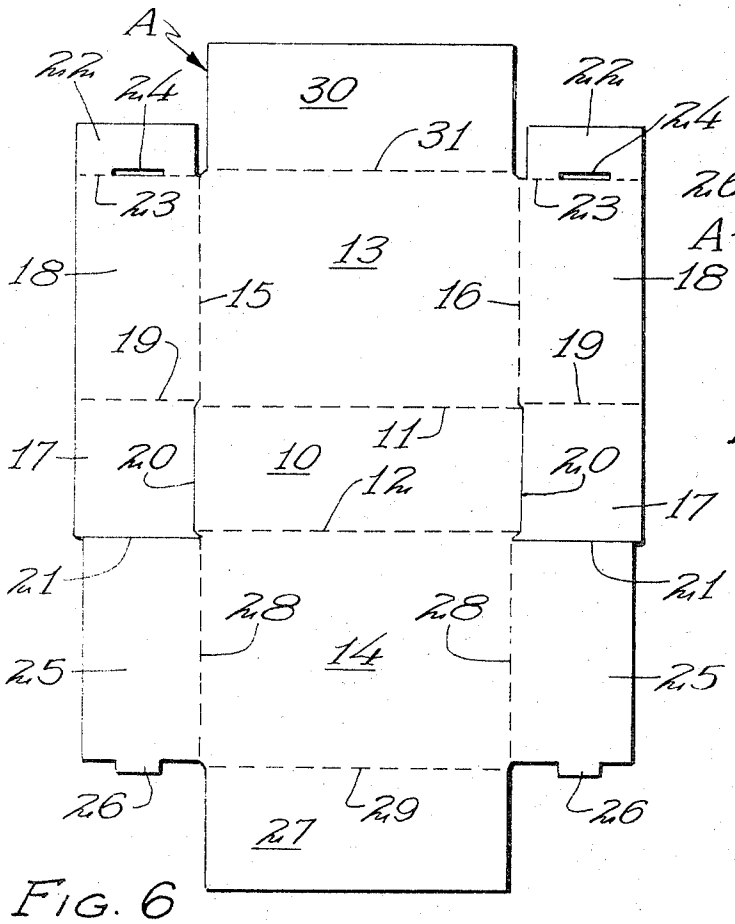


FIG. 6

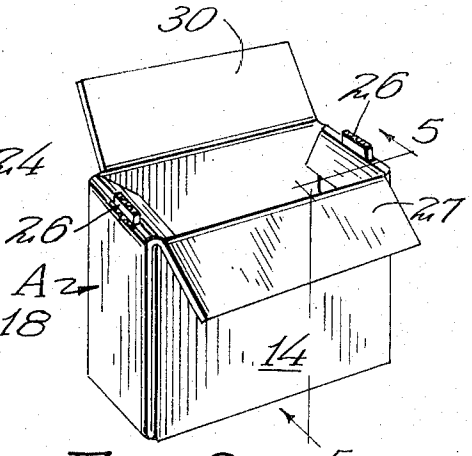


FIG. 3

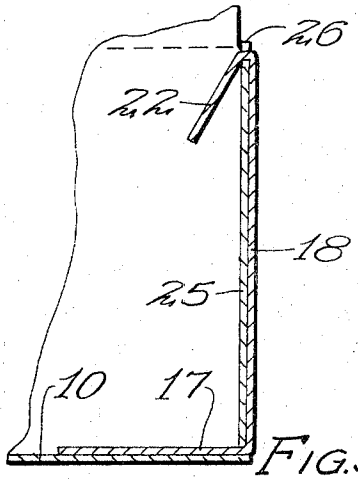


FIG. 5

EASILY SET-UP CONTAINER

An Easily Set-Up Carton deals particularly with a container which can be readily set up from a flat blank, it may be easily filled, and may be readily closed.

SUMMARY OF THE INVENTION

The container is indicated in general in the drawings. The container is formed of two sections which are hingedly connected in parallel relation by fold lines on opposite sides of a bottom panel. A first of these sections includes end walls which are hingedly connected to opposite side edges of one side wall. Bottom closure flaps are provided on the lower ends of the end walls and are folded into a position overlying the bottom wall. These end walls are also hingedly connected at their upper edges to closure flaps including slots which extend therethrough adjacent and parallel to the hinge lines connecting the top closure flaps to the end walls.

The other section includes a second side wall which is in parallel relation to the first in closed position of the container, and also includes end walls which are hingedly connected to opposite ends thereof, and which are designed to fold inwardly of the first named end walls. This second pair of end walls is provided with projections which extend upwardly, serving as tongues to extend through the slots in the top closure flaps. When thus connected, the top closure flaps lock the inner end walls in position in face contact with the outer end walls.

Top closure flaps are hingedly connected to the upper edges of the first and second side walls, and are designed to fold down into face contact between the projections or tongues on the inner end walls. The top closure flaps on the side walls may frictionally engage between the tongues, or may be secured in face contact either by adhesive or by tape.

These and other objects and novel features of the present invention will be more clearly and fully set forth in the following specification and claims.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of the closed container in condition for shipment or storage.

FIG. 2 is a perspective view of the carton with one section erected and the other section extending in the plane of the bottom panel.

FIG. 3 is a perspective view of the container after the second section has been erected, and the apertured closure flaps of the first section are folded over the upwardly projecting tongues on the inner end walls of the section.

FIG. 4 is a top plan view of one end of the container in closed position thereof.

FIG. 5 is a vertical sectional view through the container, the position of the section being indicated by the line 5—5 of FIG. 3.

FIG. 6 is a diagrammatic view of the blank from which the container is formed.

DESCRIPTION OF THE PREFERRED INVENTION

With reference to FIG. 6 of the drawings, the container blank is shown as including a bottom panel **10** which is foldably connected along parallel fold lines **11** and **12** to a rear side wall **13** and a front side wall **14**.

The terms "front" and "rear" are merely for the purpose of identification, as either side wall may comprise the front wall after the container has been closed.

The rear side wall **13** is connected along parallel fold lines **15** and **16** to opposite outer end walls **18.** Bottom closure flaps **17** are hingedly connected to the lower ends of the end walls **18** along alined fold lines **19.** These bottom closure flaps **17** are separated from the bottom panel **10** along cut lines **20,** and are separated from the inner end walls of the second section along cut lines **21.**

The end walls **18** which are hingedly connected to opposite sides of the side wall **13** along the fold lines **15** and **16** are also provided with top closure flaps **22** which are hingedly connected to the upper edges of the end walls **18** along alined fold lines **23.** Slots **24** which are of elongated form extend along the fold lines **23** and are located in the closure flaps **22.**

End walls **25** are hingedly connected to opposite ends of the side wall **14** along fold lines **28.** The end walls **25** are designed to fold inwardly of the end walls **18.** The edges of the side walls **25** are provided with projecting tongues **26** which are proportioned to extend through the slots **24** in the erected form of the container, as will be described.

A top closure flap **27** is hingedly connected to the upper edge of the side wall **14** along a fold line **29** which is parallel to the fold lines **11** and **12.** In a similar manner, a top closure flap **30** is hingedly connected to the upper edge of the rear side wall **13** along a fold line **31.**

In erecting the container, the end walls **18** are folded into right angular relation to the rear side wall **13,** and the bottom closure flaps **17** are folded to overlie the bottom panel **10.** The inner end walls **25** which are hingedly connected to the front side wall **14** are folded up into right angular relation to the side wall **14** which remains in coplaner relation with the bottom panel **10** as indicated in FIG. **2** of the drawings. When the contents of the container are in place, the side wall **14** is folded upwardly along the fold line **12,** the end walls **25** extending inwardly of the end walls **18** in surface contact therewith. The top closure flaps **22** are folded inwardly along fold lines **23,** the tongues or projections **26** flexing through the elongated slots or apertures **24.** The container is then in the position shown in FIG. **3** of the drawings. If it is more convenient, the container may be filled when in this position, depending upon the contents of the container.

When the container A is filled and in the position shown in FIG. **3,** the top of the container may be closed by folding inwardly the top closure flap **27** which is hinged to the upper edge of the front wall **14.** The closure flap **30** may then be folded down to overlie the flap **27.** The arrangement is such that the ends of the closure flaps **27** and **30** may frictionally fit between the upwardly projecting tongues **26.** Alternatively, the closure flaps **27** and **30** may be adhered together or the container may taped shut.

In accordance with the Patent Statues, I have described the principles of construction and operation of my improvement in An Easily Set-Up Container; and while I have endeavored to set forth the best embodiment thereof, I desire to have it understood that obvious changes may be made within the scope of the following claims without departing from the spirit of my invention.

I claim:

1. A container including: a generally rectangular bottom panel,

side walls hingedly secured thereto,

first end walls hingedly connected to one of said side walls,

bottom closure flaps hingedly connected to said first end walls and folded over said bottom panel,

top closure flaps secured to the upper edges of said first end walls along fold lines,

said top closure flaps including elongated slots extending therethrough parallel to, and adjacent, said fold lines,

second end walls hingedly connected to the other of said side walls and foldable inwardly of said first end walls,

said second walls including tongues projecting upwardly from the upper edges thereof and extending through said slots, and

closure flaps hinged to the upper edges of said side walls and foldable into face contact between said tongues.

2. The structure of claim **1** and in which said side wall closure flaps are frictionally engaged between said tongues.

3. The structure of claim **1** and in which said side wall closure flaps are secured together in overlapping relation.

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