

[54] **COUNTER DISPLAY CONTAINER**

[75] Inventors: **Bob Beaver; Edward T. Turner, Jr.,**  
both of Terre Haute, Ind.

[73] Assignee: **The Weston Paper and Manufacturing Co., Terre Haute, Ind.**

[22] Filed: **Feb. 7, 1972**

[21] Appl. No.: **224,128**

[52] U.S. Cl. .... **229/34 R, 206/44 R, 229/34 R**

[51] Int. Cl. .... **B65d 5/22**

[58] Field of Search .... **229/27, 34 R, 34 HW;**  
**206/44 R; 211/132**

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*Primary Examiner*—Samuel B. Rothberg

*Assistant Examiner*—Stephen P. Garbe

*Attorney*—Lawrence B. Biebel

[57]

**ABSTRACT**

A container and a blank therefor have integral lateral and longitudinal dividing walls and means for firmly interlocking the various portions thereof and forming an attractive display device.

**18 Claims, 5 Drawing Figures**

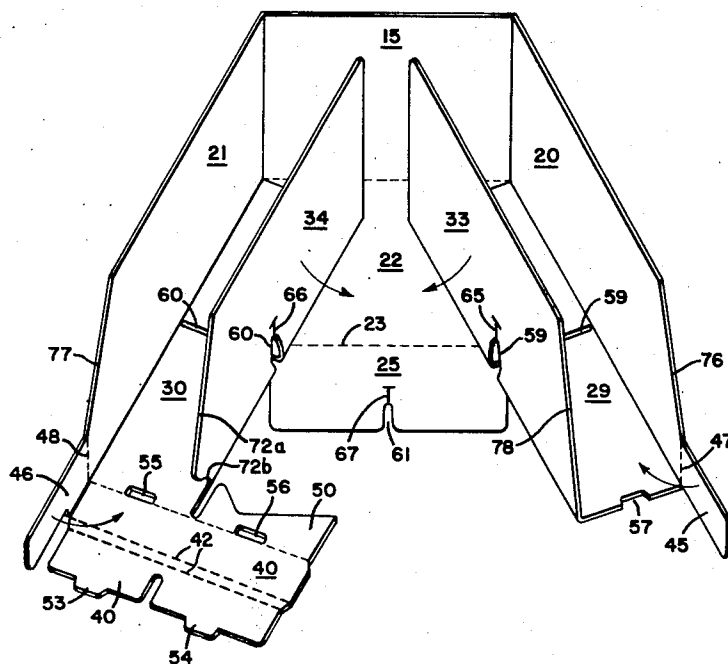


FIG-1

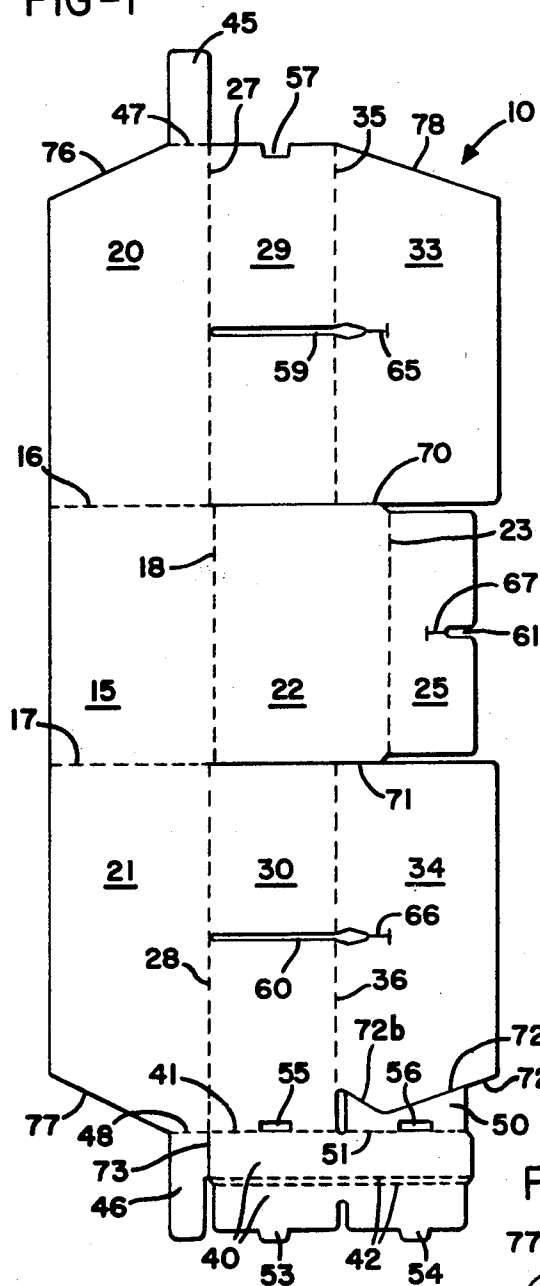


FIG-3

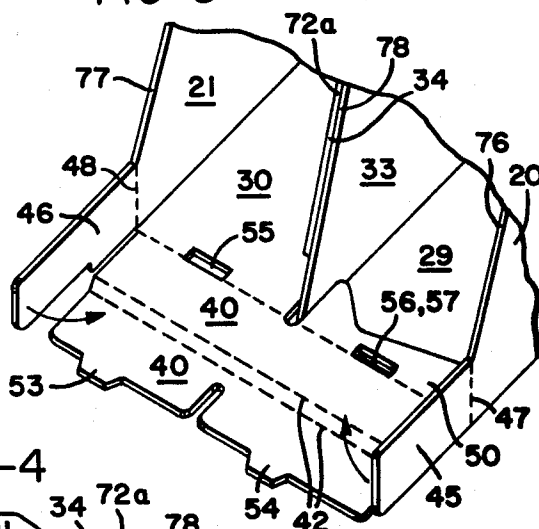


FIG-4

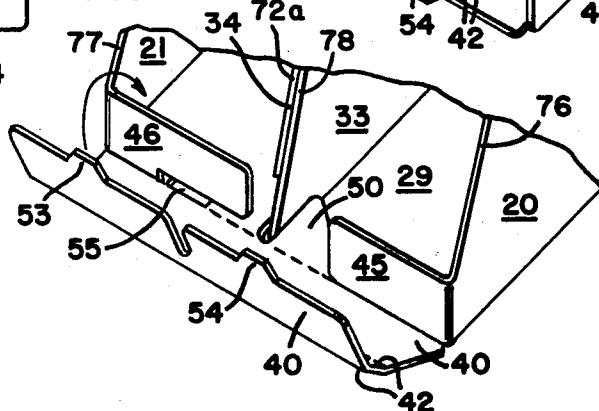


FIG-2

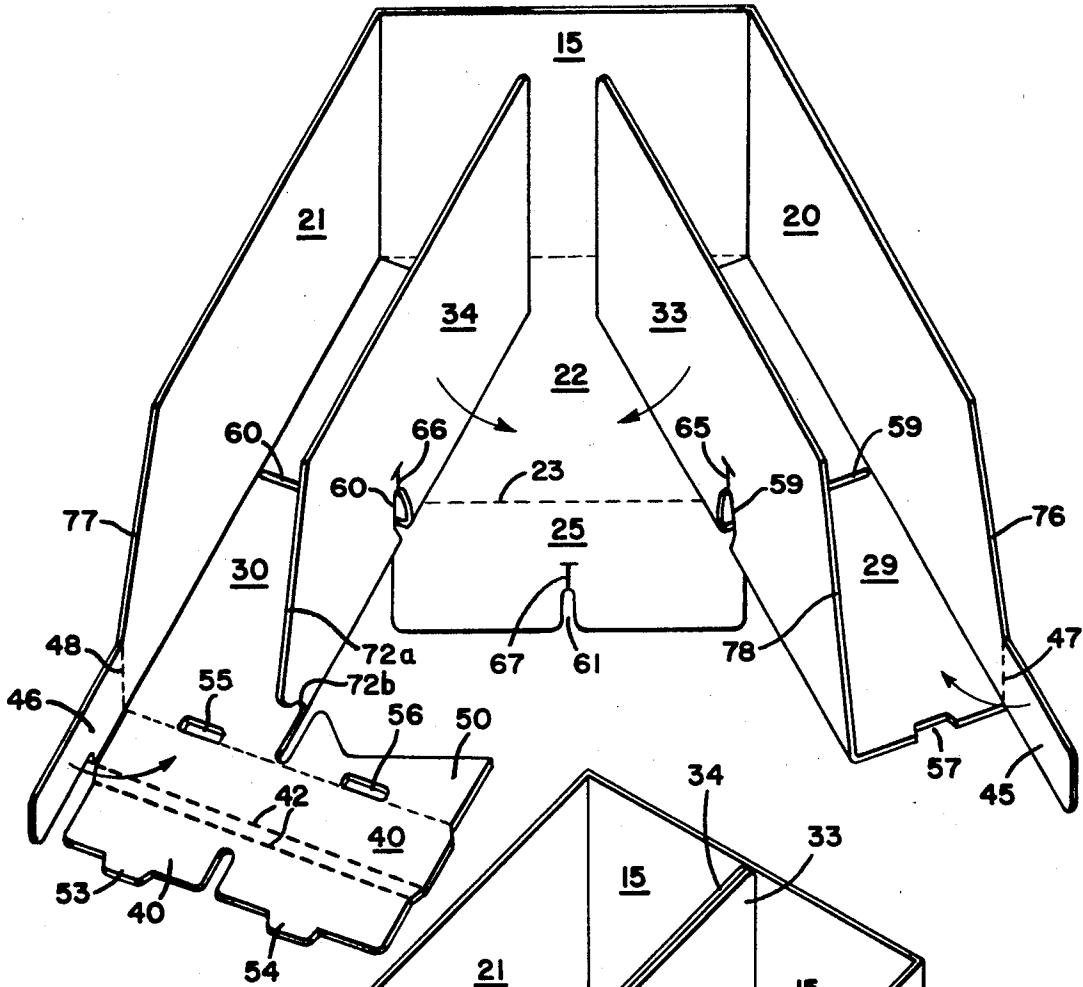
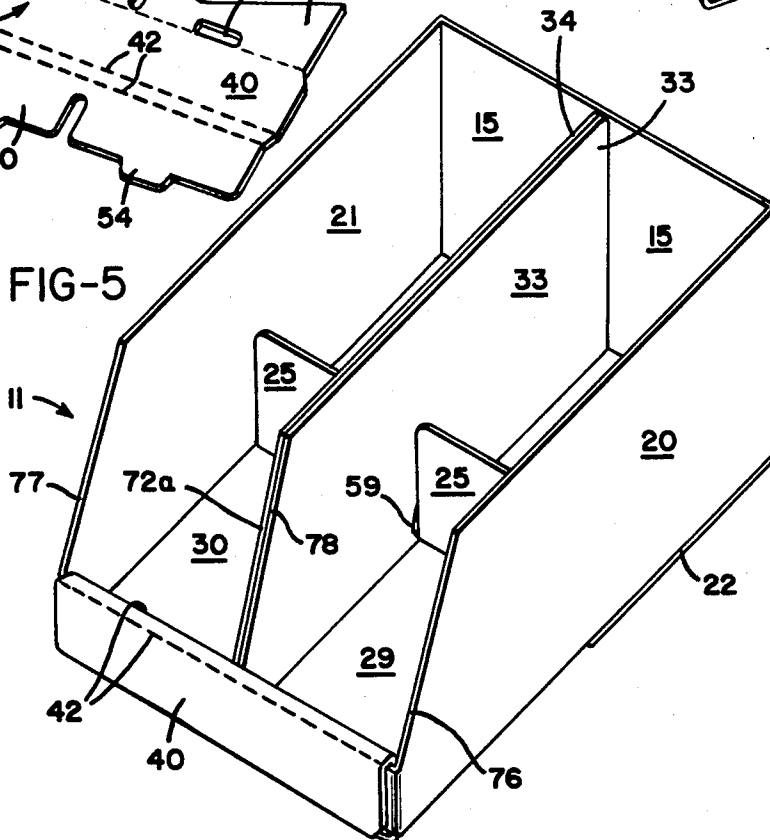
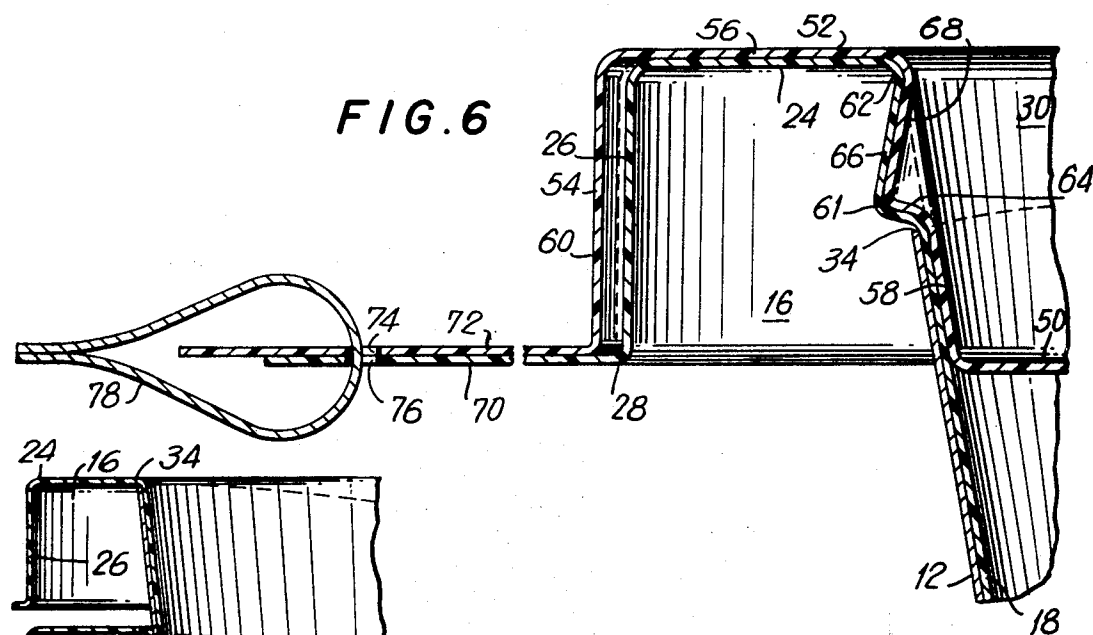
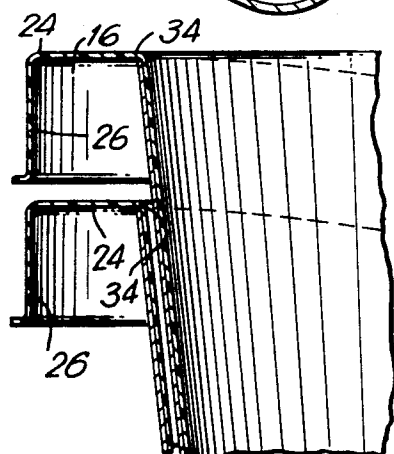
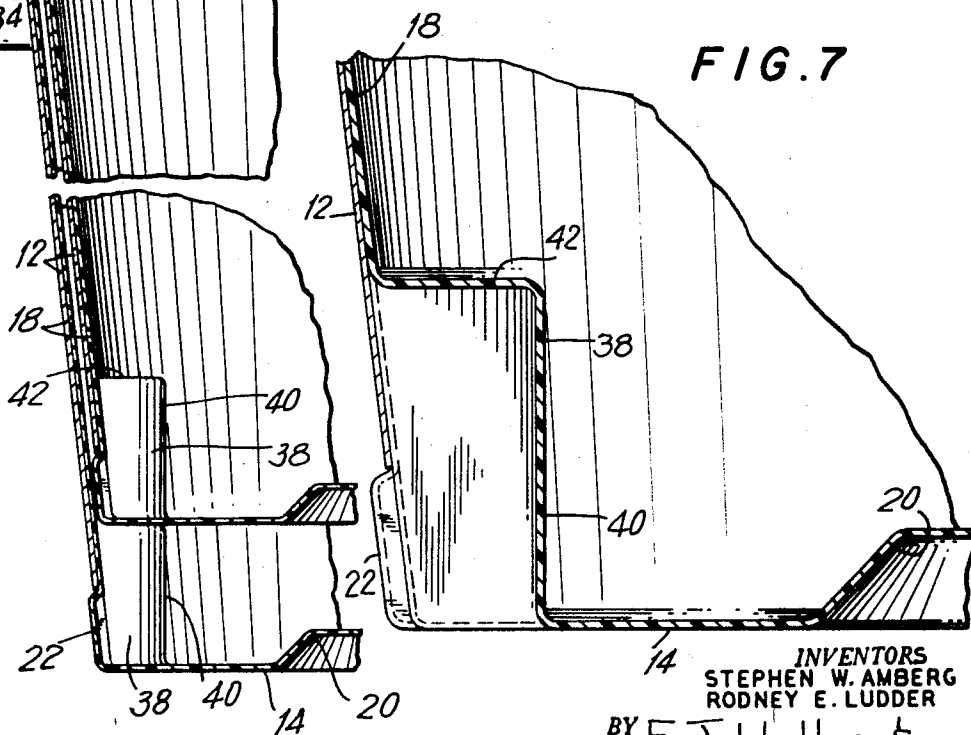


FIG-5





INVENTORS  
STEPHEN W. AMBERG  
RODNEY E. LUDDER

BY E.J. Holler &  
Thomas A. Neelhan  
ATTORNEY

## COUNTER DISPLAY CONTAINER

## BACKGROUND OF THE INVENTION

This invention relates to containers or trays, and more particularly to a container or tray adapted for display of articles contained therein when on sale.

Display and dispensing trays generally formed of cardboard material are well known in the art. Examples thereof may be found in such U.S. Pats. as Nos. 1,799,656 (Apr. 7, 1931), 2,178,091 (Oct. 31, 1939), 2,495,676 (Jan. 24, 1950), 2,937,742 (May 24, 1960) and 3,348,666 (Oct. 24, 1967). However, none of these prior art patents discloses a display container formable from a blank of but one integral piece of material, having integral internal divider walls, and being firmly self locking in the assembled condition.

The provision of internal divider walls is important where small objects such as food packets are to be displayed. The divider compartments maintain the articles in a generally upright condition, improving the appearance and eye-appeal of the product and aiding the easy removal thereof.

An integral, one-piece construction is preferable because it allows greater efficiency and economy in production. Only one part needs to be fabricated. Less material is used; less is wasted. Parts are not lost, and less labor is needed.

## SUMMARY OF THE INVENTION

Briefly, a preferred embodiment of this invention includes a substantially rectangular blank from which a container for displaying articles may be formed. The container includes two side walls extending from a rear wall, and two bottom portions extending toward one another from the side walls. Divider walls extend upwardly from the bottom portions adjacent each other within the container. A bottom reinforcing panel extends from the rear wall partway under the two bottom portions, and a lateral divider portion extends upwardly from the bottom panel through the bottom portions into interlocking relationship with the divider walls to maintain each other in position and to hold the two halves of the container together. Front tabs, extending from the side walls, interlock with a doubly scored and doubly folded front wall extending from one of the bottom portions. Tab means maintain the front wall doubly folded. A locking piece extends from the front wall adjacent the other of the bottom portions to lock together the two major portions of the box, represented by the two bottom portions, and to provide rigidity to the front of the box. The front of the box itself is sloped rearwardly to give it a pleasing appearance and to enhance its attractiveness for display purposes.

It is therefore an object of this invention to provide a counter display container which may be made from one single piece of material; to provide a one-piece blank for forming such a container which will require a minimum amount of material; to provide such a blank having a configuration whereby several blanks may conveniently be cut from one sheet of material with minimum waste thereof; to provide such a container having an integral, one-piece front; to provide a container which will have integral internal divider walls; to provide a container which will provide strength for the stacking of other such containers thereupon; to provide a container which will be selflocking in the assembled configuration; and to accomplish all of the above ob-

jects in an efficient, uncomplicated, useful and serviceable manner.

Other objects and advantages of the invention will be apparent from the following description, the accompanying drawings, and the appended claims.

## BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a plan view of the blank from which the container is formed.

FIG. 2 is an isometric illustration showing the container in a partially folded and assembled condition.

FIG. 3 is an isometric view of the lower front portion of the container prior to the folding of the front wall thereof.

FIG. 4 is an isometric view of the front wall of the container in partially folded condition.

FIG. 5 is an isometric illustration of the completed container.

## DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference to the drawings, a preferred embodiment of this invention includes a unitary or one-piece blank 10, shown in FIG. 1, which may be folded into a completed container 11, as shown in FIG. 5. The components of the box include a rear wall 15 which is connected along creases or fold lines 16, 17, and 18 respectively to first side wall 20, second side wall 21, and bottom reinforcing panel 22. Bottom reinforcing panel 22 is in turn connected by fold line 23 to a lateral divider portion 25.

Attached to each of the side walls respectively along fold lines 27 and 28 are bottom portions 29 and 30. The bottom portions are in turn connected to divider wall portions 33 and 34 respectively along divider wall fold lines 35 and 36.

A front wall 40 is attached to the bottom portion 30 along fold line 41. The front wall 40 is scored twice by score lines 42 to provide for easy folding of the front wall into a double thickness (FIGS. 4 and 5).

Various locking and retension means in this invention include front tabs 45 and 46 extending respectively from side walls 20 and 21 on fold lines 47 and 48. In the assembled container, as may be seen in FIG. 4, the front wall is folded over these front tabs to provide front vertical rigidity both for the side walls 20 and 21 and for the front wall 40.

A locking piece 50 is attached along fold line 51 to the front wall 40 adjacent front wall fold line 41. In the assembled container locking piece 50 is inserted over bottom portion 29 between side wall 20 and divider wall 33 to lock together the portions of the container represented by bottom portions 29 and 30. Locking piece 40 thus helps to hold divider wall portions 33 and 34 together. Locking piece 50 also cooperates with front tab 45 and doubly folded front wall 40 to provide front rigidity to the container. Front wall 40, in turn, is maintained doubly folded by tabs 53 and 54 which are inserted in slots 55 and 56, and notch 57, respectively.

The bottom portions 29 and 30 are provided respectively with slots 59 and 60 for reception therethrough of lateral divider 25. Slots 59 and 60 are continued into divider walls 33 and 34 in order to cooperate with a mating notch 61 provided in lateral divider portion 25. These slots interlock to provide rigidity among portions 25, 33, and 34 and to maintain them vertically disposed.

The apexes of slots 59 and 60 and of notch 61 in walls 33, 34 and 25 are provided respectively with "T" friction locks 65, 66, and 67. The "T" friction locks are cut into the wall portions in the shape of the letter T and allow the reception of a mating interlocking part in a friction tight fit. These "T" friction locks therefore firmly maintain the lateral divider portion 25 in folded condition, as may be seen in FIG. 5.

Cut lines 70-73 serve to separate various portions of the container blank. Cut line 70 separates bottom reinforcing panel 22 and lateral divider portion 25 from bottom portion 29 and divider wall 33. Similarly, cut line 71 separates bottom reinforcing panel 22 and lateral divider portion 25 from bottom portion 30 and divider wall 34.

Cut line 72 separates divider wall 34 and bottom portion 30 from locking piece 50, while score line 73 separates front tab 46 from front wall 40.

The top portion 72a of score line 72 is sloped rearwardly to give the front of the box a pleasant sloping configuration when assembled. The bottom portion 72b of score line 72 slopes in the opposite direction in order to provide material for locking piece 50. Side walls 20 and 21 and divider wall 33 are cut at 76, 77, and 78, respectively, similarly as 72a in order to give the front of the container a pleasantly sloped appearance. The enhanced attractiveness of the container increases its utility and desirability for display purposes.

The container of this invention thus provides numerous advantages. The double divider walls 33 and 34 provide considerable strength for stacking of the boxes one upon another. The lateral divider portion 25 separates the side compartments into front and rear halves, thus maintaining small packages therein in an upstanding condition for easy recovery thereof and better sales appeal. Lateral divider portion 25 also holds divider walls 33 and 34 together, thus also keeping the respective halves of the container itself together.

The bottom reinforcing panel 22 supports bottom portions 29 and 30 of the container near rear wall 15 thereof and thereby provides rear rigidity and strength for the bottom of the container.

Rather than providing front wall portions on each half of the box, a full-width, single piece front wall 40 has been provided. No interlocking tabs for the divider walls 33 and 34 are therefore required as would be the case for example if the front wall were not a single piece. The single piece front wall 40 is therefore much easier to assemble, especially by hand. Fewer pieces are involved; fewer steps are necessary to form the box; and the box itself is stronger, by virtue of the solid front wall.

The entire container is made from a single blank. This unitary design provides for considerable ease and economy both in the preparation of the blank and in the folding and assembly thereof. FIG. 1 shows that the unitary blank occupies a substantially rectangular area, providing for ease and economy in mass production. Several blanks may conveniently be cut from a single large sheet of material.

Double layers of material have been substantially eliminated except where desirable for purposes of support and strength. Thus bottom reinforcing panel 22 extends from rear wall 15 only midway along the box and then lateral divider portion 25 extends upwardly into its functional position. Locking piece 50 is formed

from a portion of the material resulting from the rearward slope of divider wall 34.

Lateral divider portion 25 and divider walls 33 and 34 are held together by "T" friction locks 65, 66 and 67 and interlock to maintain each other rigidly vertical.

The locking piece and the interlocking of the front tabs with the doubly folded front wall provide for ease, convenience, and speed in assembly as well as rigidity and strength for the front of the container. The double scoring on the front wall reduces the tendency of the tabs 53 and 54 to spring out of their slots.

While the form of container herein described constitutes a preferred embodiment of the invention, it is to be understood that the invention is not limited to this precise form of container, and that changes may be made therein without departing from the scope of the invention.

What is claimed is:

1. A display container for articles comprising a rear wall, two side walls each extending from said rear wall, bottom portions extending from said side walls toward one another, divider walls extending within said container from said bottom portions, a bottom reinforcing panel extending from said rear wall under said bottom portions, a lateral divider portion extending from said bottom reinforcing panel up through said bottom portions, front tabs extending from said side walls, and a front wall extending from one of said bottom portions and folded over said front tabs to form an interlocked double thickness front wall.

2. The container of claim 1 wherein said divider walls extend side by side substantially vertically upward.

3. The container of claim 1 further comprising a locking piece extending from said front wall adjacent the other of said bottom portions and extending into the space between said side wall and said divider wall of said other bottom portion to hold said other bottom portion and said side and divider walls thereof in interlocking relationship with said front wall.

4. The container of claim 1 further comprising tab means, including tabs and corresponding slots, for retaining said front wall doubly folded.

5. The container of claim 1 further comprising a double score on said front wall for easy folding thereof over said front tabs.

6. The container of claim 1 further comprising a "T" friction lock in at least one of said divider walls and said lateral divider portion for frictionally locking said lateral divider portion in position within said dispensing tray.

7. The container of claim 1 wherein said divider walls and said lateral divider portion are interlocked to maintain each in a generally upright position.

8. The container of claim 1 wherein said side walls and said divider walls slope rearwardly to give the container an attractive appearance.

9. A display container particularly adapted for the holding and display of a plurality of closely spaced standing packages comprising a rear wall, two side walls each extending from said rear wall, bottom portions extending from said side walls toward one another, divider walls extending upwardly within said container from said bottom portions, a bottom reinforcing panel extending from said rear wall under said bottom portions, a lateral divider portion extending from said bottom reinforcing panel up through said bottom portions into interlocking relationship with said

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divider walls to hold them together and to maintain said divider walls and said lateral divider portion in generally upright positions, front tabs extending from said side walls, a front wall extending from one of said bottom portions and doubly scored for easy folding over said front tabs to form a double thickness front wall interlocked therewith, a locking piece extending from said front wall adjacent the other of said bottom portions and extending into the space between said side wall and said divider wall thereof, and tab means, including tabs and corresponding slots, for retaining said front wall doubly folded.

10. The display container of claim 9 further comprising "T" friction locks in each of said divider walls and said lateral divider portion frictionally to lock said lateral divider portion in position within said container.

11. The container of claim 9 wherein said side walls and said divider walls slope rearwardly to give the container an attractive appearance.

12. A one-piece blank for forming a display container comprising a rear wall portion, side wall portions foldably extending from opposite sides of said rear wall portion, bottom portions each foldably extending in the same direction with respect to the other from said side wall portions, front tab portions foldably extending from said side wall portions opposite said rear wall portion, divider wall portions foldably extending from said bottom portions opposite said side wall portions, a bottom reinforcing panel foldably extending from said rear wall portion between said bottom and said divider wall portions, a lateral divider portion foldably extending

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from said bottom reinforcing panel opposite said rear wall portion, slots in said bottom portions for receiving said lateral divider portion, a front wall portion foldable into double thickness and foldably attached to one of said bottom portions near the respective front tab, said front wall portion being also near the respective said divider wall portion.

13. The blank of claim 12 wherein said front wall portion is doubly scored for easy folding thereof into double thickness.

14. The blank of claim 12 further comprising tab means, including tabs and corresponding slots, on said front wall portion to maintain it doubly folded.

15. The blank of claim 12 further comprising a locking piece foldably attached to said front wall portion between said front wall portion and said respective said divider wall portion.

16. The blank of claim 12 further comprising "T" friction locks in at least one of said divider wall portions and said lateral divider portion for frictionally locking said lateral divider portion when said blank is formed into a container.

17. The blank of claim 12 further comprising a slot in at least one of said divider wall portions and said lateral divider portion for cooperative reception thereof into interlocking relationship.

18. The blank of claim 12 wherein said side walls and said divider walls are cut on a slope at their front ends to give an attractive appearance to the front of the container assembled from the blank.

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