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MULTIPLE SECTION CONTAINER

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2 Sheets-Sheet 2

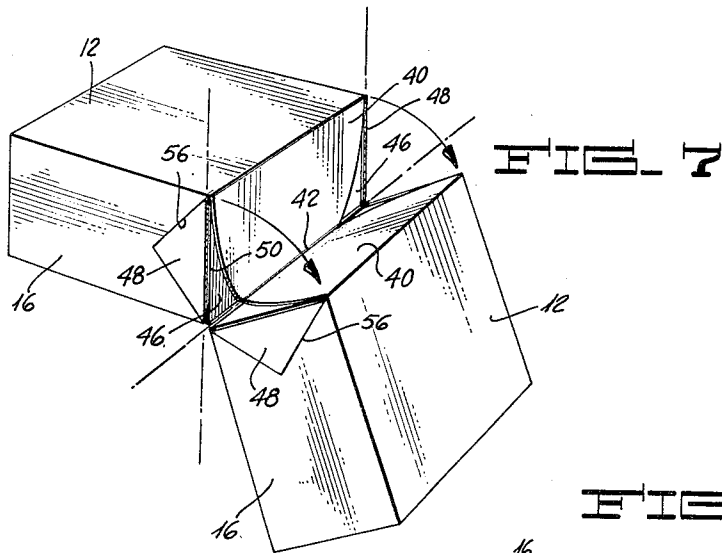


FIG. 7

FIG. 8

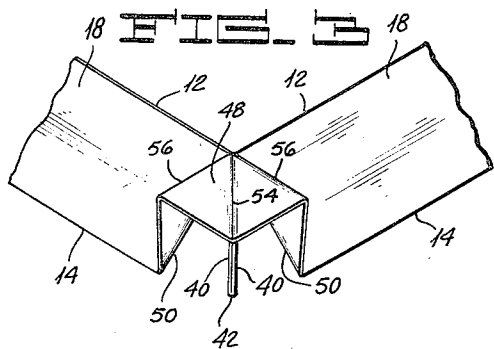
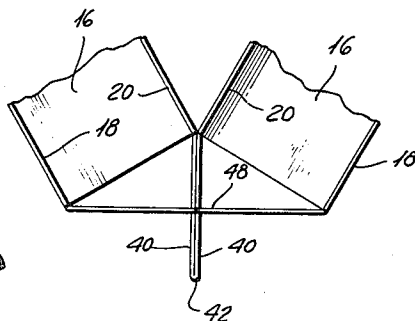


FIG. 9

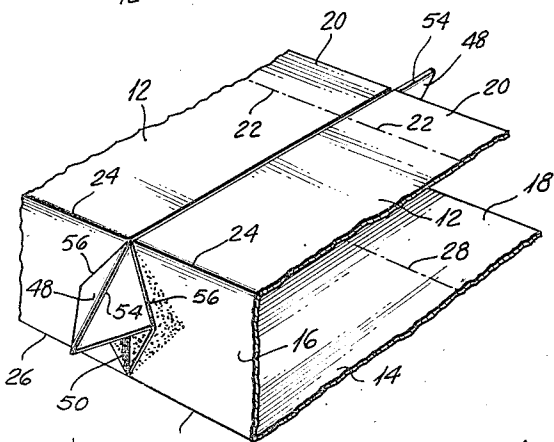


FIG. 10

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## MULTIPLE SECTION CONTAINER

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4 Claims. (Cl. 229—37)

1

This invention relates to packaging, and more particularly to a multiple package structure adapted to be formed from a unitary cutout or blank to thus provide in effect a multiple section package which may be sold or dispensed in that form with its appropriate contents and later separated or pulled in twain by the purchaser to thereupon produce two or more separated packages, each of which is provided throughout with fully sealed edges.

In summary, the invention involves the provision of a cardboard cutout or blank of such configuration that it may be suitably folded to provide two or more box-like containers or packages joined together in such fashion by inter-leafed webbing, the adjacent surfaces of which are suitably bonded upon themselves, as by the conventional gluing, to provide a rigidified structural entity comprising a plurality of open ended containers, the inner ends of which are demarcated by the said inter-leafed webbing, which containers may then be appropriately filled and sealed to provide a multiple package which may be efficiently utilized in dispensing or selling packaged food to purchasers. The multiple package may then be severed at the time for use by the purchaser to resolve the container into its component parts and thus provide separated and completely sealed packages which may then be individually opened for use.

These and other objects of the invention will be apparent from the following description taken in conjunction with the drawings forming part of this specification, and in which:

Figure 1 is a plan view of a blank embodying the invention forming the subject matter hereof;

Figure 2 is a partial view in side elevation of the structure of the invention, showing the same as it appears in an early stage of folding;

Figure 3 is a view of the nature of that of Figure 2 showing a later stage of folding;

Figure 4 is a partial view in perspective of the semi-folded blank;

Figure 5 is a view in perspective showing the container structure in fully folded, or assembled, condition;

Figure 6 is a view in section taken along lines 6—6 of Figure 5; and

Figure 7 is a perspective of the container structure showing the sections thereof in semi-separated condition.

Referring to the drawings for more specific details of the invention, and to Figure 1 in particular, and using the abbreviated vertical edges 10, shown in solid outline, as reference lines in

2

describing the structure of the multiple container blank and the way it is folded to form the resultant multiple package, it will be seen that the configuration of the blank, as it appears to the right of the righthand edge of the two edges 10 is precisely similar to the configuration of that portion of the blank located to the left of the lefthand edge of the two edges 10. Using similar reference numbers for both of these outer and major blank portions, it will be seen that each portion comprises equi-sized panels 12 and 14 joined together by a smaller panel 16, which latter panel is equal in area to a panel 18 located in Figure 1 beneath panel 14. A smaller panel 20 is carried above each of the panels 12. The panels 12—18 are demarcated by score lines designated from top to bottom as: 22 to 28, respectively. The larger panels 12 and 14 of the two symmetrical half portions of the blank are provided with laterally extending flaps 30 and 32, while the smaller panels 16 and 18 are provided, respectively, with flaps 34 and 36. The flaps 30—36 are demarcated with respect to their adjacent panels by score line 38. Additionally, the panels 12 are joined together by flaps 40 which are integral, being characterized by a central score line 42. The flaps 40 are provided with arcuate edges 44 for a purpose hereinafter disclosed. Panels 14 are provided with flaps 46 having integral therewith isosceles triangular members 48 having a base equal to the combined length of the flaps 46 and demarcated by score line 50. The flaps 46 are separated across their main rectangular body portion by slot 52. The triangular tabs 48 are provided with main score lines 54 and each of the triangular tabs is further provided with a pair of auxiliary score lines 56.

In describing the folding operation whereby the multiple section container is formed, the description will be initially directed, for purposes of clarity, to a description of the folding of the major portions of the blank; that is, the portions to the right and left, respectively, of the righthand and lefthand edges 10. It will be clear that when these portions are folded upon score lines 22—28, a pair of semi-boxes will be formed in which the panels 12 and 14 are the larger sidewalls, the panels 16 and 18 the smaller and oppositely disposed sidewalls, and that the small flap 20 may be glued to panel 18 after the manner of the conventional glue flap arrangement. After this operation has been completed, it will be clear that the flaps 40 are oppositely disposed with respect to their counterpart portions of flaps 40, and that the flaps 40 may be considered as re-

siding within the plane of the panels 12, with the flaps 46 and triangular tabs 48 being considered as residing within the plane of the panels 14.

As the semi-boxes are then moved angularly toward each other about the axis in which the score lines 42 and slot 52 reside, the flaps 40 will become doubled upon themselves to form a knife edge, so to speak, constituted by the score line 42, which knife edge may be inserted through the slot 52 for interlocking engagement, as shown in Figure 2, until the score line bases of the flaps 40 reach the actual slot edges of the slot 52. Then, by grasping the doubled flaps 40 and pivoting the semi-boxes toward their original relation of alignment, as shown in Figure 3, it will be clear that, when the upper surfaces of flaps 40 are provided with glue, and when the under sides of flaps 40, as viewed in Figure 1, are likewise provided with glue, that these surfaces, when finally juxtaposed, may be pressed together to constitute a four thickness wall serving as the wall dividing the previously communicable spaces of the two semi-boxes into what actually consists of a double ended container, or, rather, a multiple container joined together as an integral whole.

In this process of forming the common wall for the two portions of the container the triangular tabs will be so collapsed and bent upon each other with respect to their portions as defined by the respective score lines thereof 54 and 56, as by collapsing the sub-triangles of each half of the triangular tabs 48 upon each other, as to form lateral reinforcing wings of the configuration shown in Figures 4 and 5 which are glued to the panels 18 and extend across the junction zone of the juxtaposed walls of the boxes. The triangular tabs, when in their final, or glued, position of Figure 5, serve as truss members to secure the two sections of the package together and maintain them in alignment as a single unit.

When it is desired to separate one of the sections from the multiple section container, the container is subjected to a joint-breaking action along the transverse plane of least resistance constituted by the score lines 42 and 54, as illustrated in Figure 7. The respective sections then constitute separate and complete packages or containers.

The physical effort required in the joint-breaking action, which may be done by hand or with the aid of a knife, or the like, is minimized by the fact that score line 42 is of relatively short length due to the provision of the arcuate edges 44 for the flaps 40. The arcuate edges 44 also make it easier to insert the flaps 40 through the slot 52, as will be readily understood. While it is preferred that the flaps 40 be interconnected in order that the flaps may be manipulated as a unit and that the flaps 40 be provided with the arcuate edges 44, it will be appreciated that the flaps 40 may be rectangular, as are flaps 46, and that they may be unconnected, without at all departing from the spirit of the invention.

When the multi-section package has been divided into two sections, each of which is then a complete box or package, all four edges of each package at the previous plane of joinder of the sections are fully sealed, with the result that the separated packages are each as airtight as they previously were when they were joined together. The upper edge of the joinder end of each package is constituted by the line of connection between panel 14 and flap 46, reference being had to the package orientation of Figure 6, and this line of connection is not disturbed by the joint-

breaking operation. The lower edge of the joinder end of each package is constituted by the line of connection between panel 12 and flap 40, and this line of connection is not disturbed by the joint-breaking operation. The interfaces of flaps 40 and 46 are secured together, as by glue. This leaves the side edges of the joinder end of the package to be considered. Prior to joint-breaking, both side edges were constituted by the lines of connection 50 between the triangular tabs 48 and the flap 46 (see Figure 1) and half of each tab was folded and wrapped around edge 10 of panel 18, or the corresponding edge of panel 16, and secured, as by gluing, to panel 18 or panel 16. These lines of connection and the wrap-around edge seal provided by the half portions of triangular tabs 48 are not disturbed by the joint-breaking operation.

The invention claimed is:

1. A blank of cardboard or the like for the formation of multiple package containers, comprising a single sheet of material cut out to form identical, laterally disposed, parallel oblong sections, each section being similarly scored on spaced transverse fold lines defining a plurality of pairs of oppositely disposed panels, the adjacently disposed ends of one of the pairs of panels being provided with foldable flap-like extensions connected together to constitute a web foldable medially along a line disposed in parallel relation to said adjacently disposed ends of said pair of panels, said flap-like extensions being symmetrically tapered inwardly to make their line of joinder of shorter length than the length of said adjacently disposed ends of said pair of panels, the adjacently disposed ends of a second pair of panels alternately arranged with respect to first-mentioned pair of panels being provided with inter-connected foldable flap-like extensions, said latter flap-like extensions being provided along their line of joinder with a slot disposed in parallel and in alignment with the line of joinder between said first-mentioned flap-like extensions, with said slot being of greater length than said first-mentioned flap-like extensions.

2. A blank of cardboard or the like, as set forth in claim 1, with said latter flap-like extensions forming a slotted web, said slotted web having integral with its side edges oppositely disposed, triangularly shaped extensions co-extensive with the side edges of said web at their lines of joinder therewith.

3. A blank of cardboard or the like, as set forth in claim 2, wherein said oppositely disposed extensions are substantially isosceles triangular in form with their apices being directed away from said slotted web, said triangular extensions having medial score lines in alignment with the slot of said web and score lines extending from the inner ends of said medial score lines and in bisecting relation to the two triangular sections defined on said extensions by said medial score lines.

4. A multiple section container comprising a pair of integral box-shaped units in end to end relation and a common closure embodying a rupturable connection for the adjacently disposed ends of said unit, said common closure embodying a web inter-connecting the top walls of said units, and folded medially to form a double thickness partition extending across the space defined within said units, a slot in the medial fold line of said web, flap-like extensions carried at the inner ends of the bottom walls of said units, said extensions extending through said

5

slot within the fold of said web, means adhesively securing the interjacent surfaces of said web and said flap-like extensions together, said web being provided with oppositely disposed extensions integral and co-extensive with the side edges of said web, said extensions being folded medially on fold lines aligned with the slot of the web and being symmetrically folded on fold lines biased with respect to the medial fold lines, the members so formed by said multi-folded extensions being adjacently disposed to the side walls of said units, with each member being in bridging relation to corresponding side walls of said units, and means securing each member to said corresponding side walls of said unit.

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15

6

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