United States Patent [19]

Meyers

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[45] **July 23, 1974**

[54] **PAPERBOARD CONTAINER AND BLANK THEREFOR**

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[73] Assignee: **American Can Company,** Greenwich, Conn.

[22] Filed: **July 21, 1972**

[21] Appl. No.: **273,838**

[52] **U.S. Cl.** ..... **229/34 A,** 229/35, 229/34 R

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

[58] **Field of Search** ..... 229/34 R, 34 A, 35 MF, 229/31 R, 31 FS, 35, 32

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Primary Examiner—William I. Price
Assistant Examiner—Douglas B. Farrow
Attorney, Agent, or Firm—Robert P. Auber; F. Stanley Charlton; Joseph J. Orlando

[57] **ABSTRACT**

A paperboard container and blank therefor wherein the container is formed having tapered double thickness side walls and corner configurations wherein superimposed tabs extend from one of two adjacent side walls to adhesively bond to one side of a second adjacent side wall to thereby provide double thickness of material at the corner. One thickness of the second adjacent side wall is cut out co-extensively with the tab next adjacent thereto into which the tab is recessed thereby providing three thicknesses at the overlap of the corner connection.

20 Claims, 18 Drawing Figures

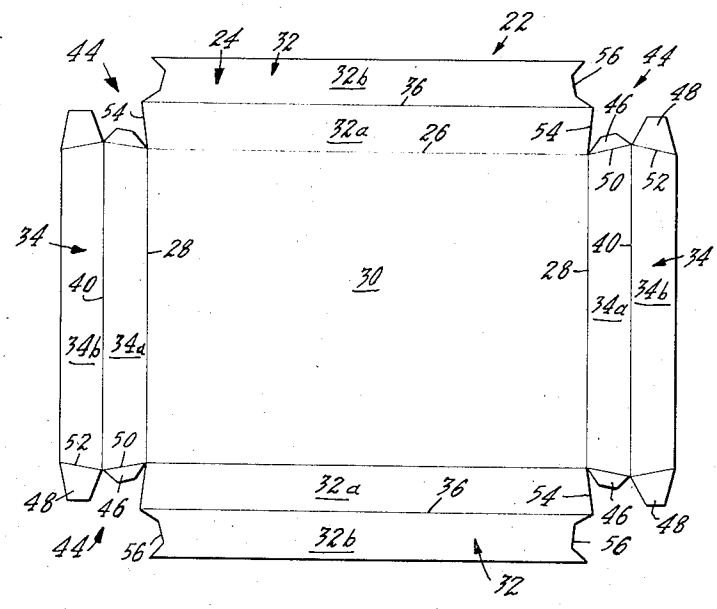


FIG. 1

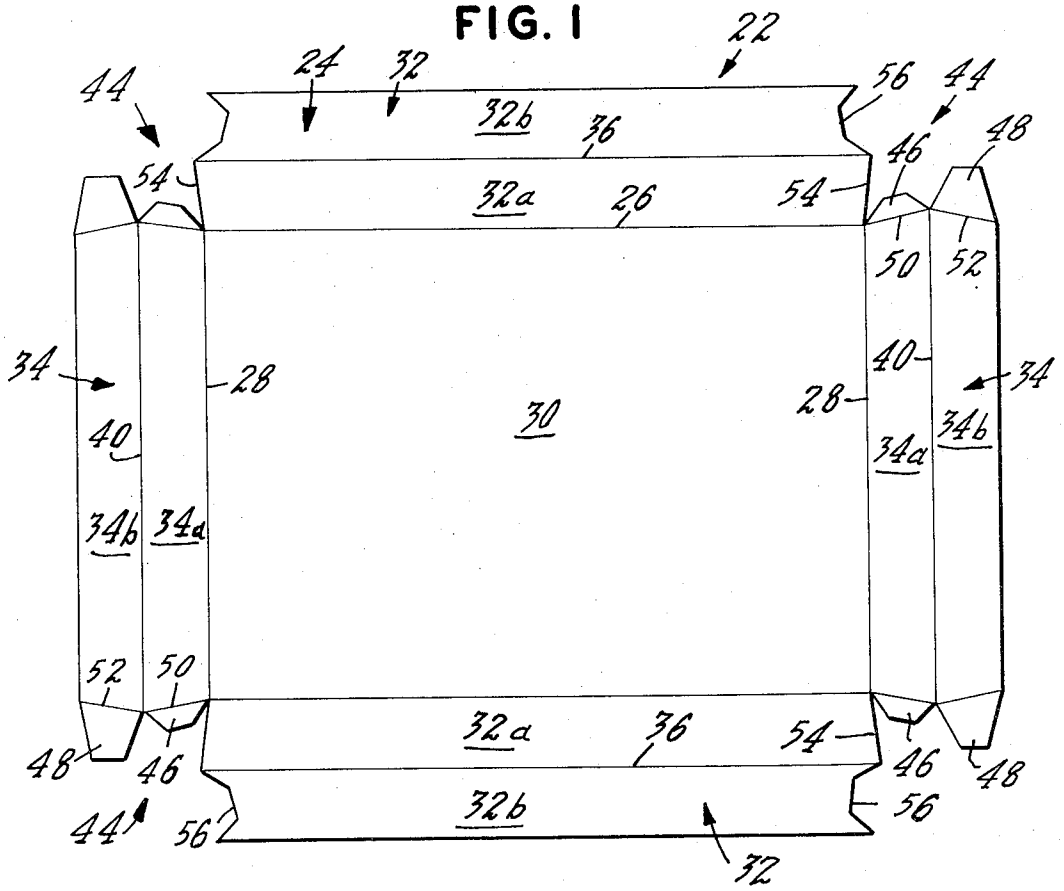

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34b
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32b
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32

FIG. 2

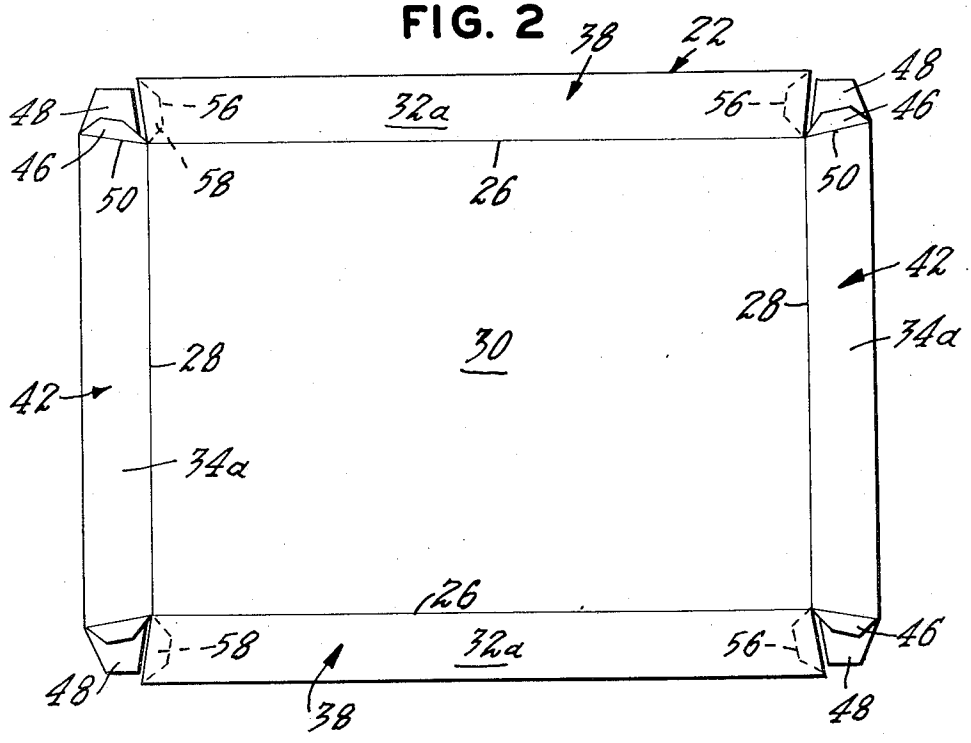

38
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FIG. 3

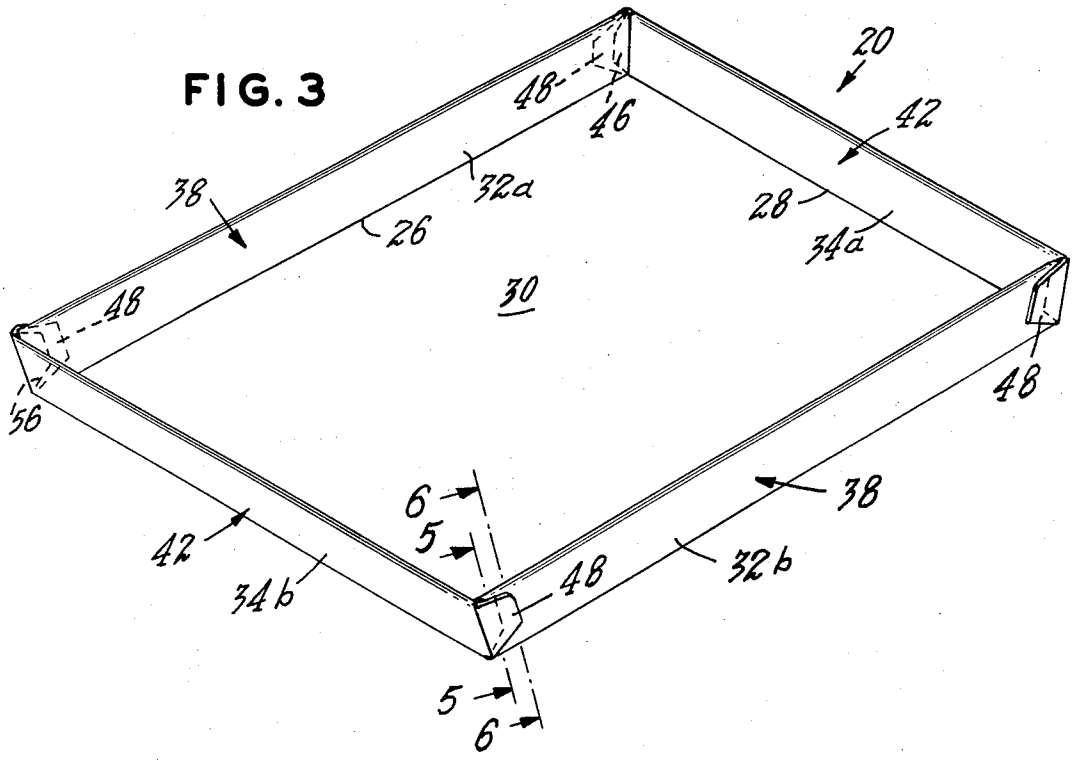


FIG. 4

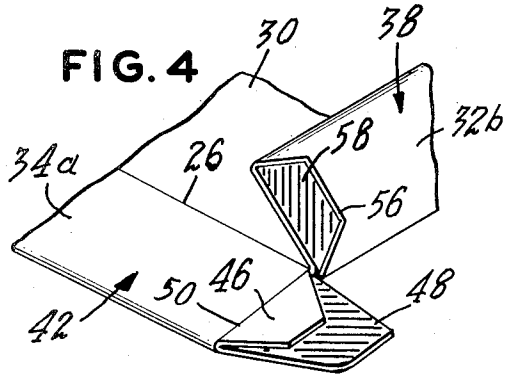


FIG. 5

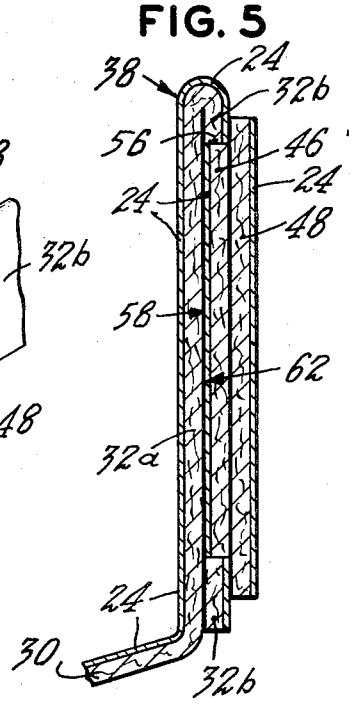


FIG. 6

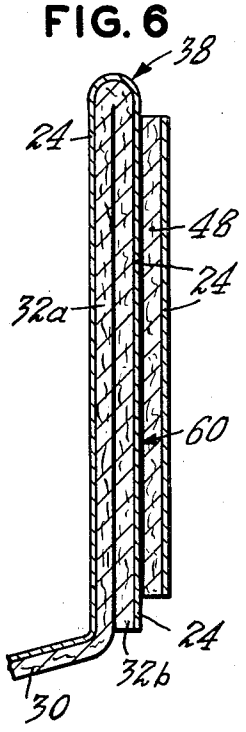


FIG. 7

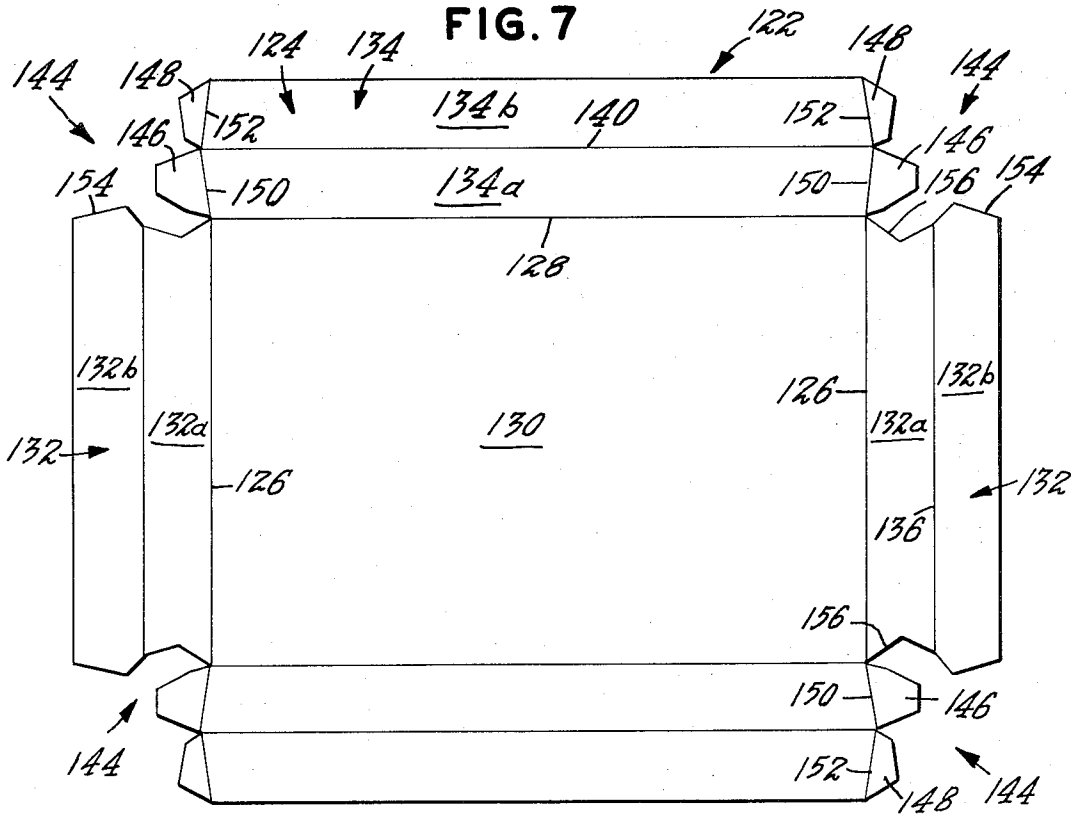

122
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144
148
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152
134b
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134a
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156
128
132b
132a
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138

FIG. 8

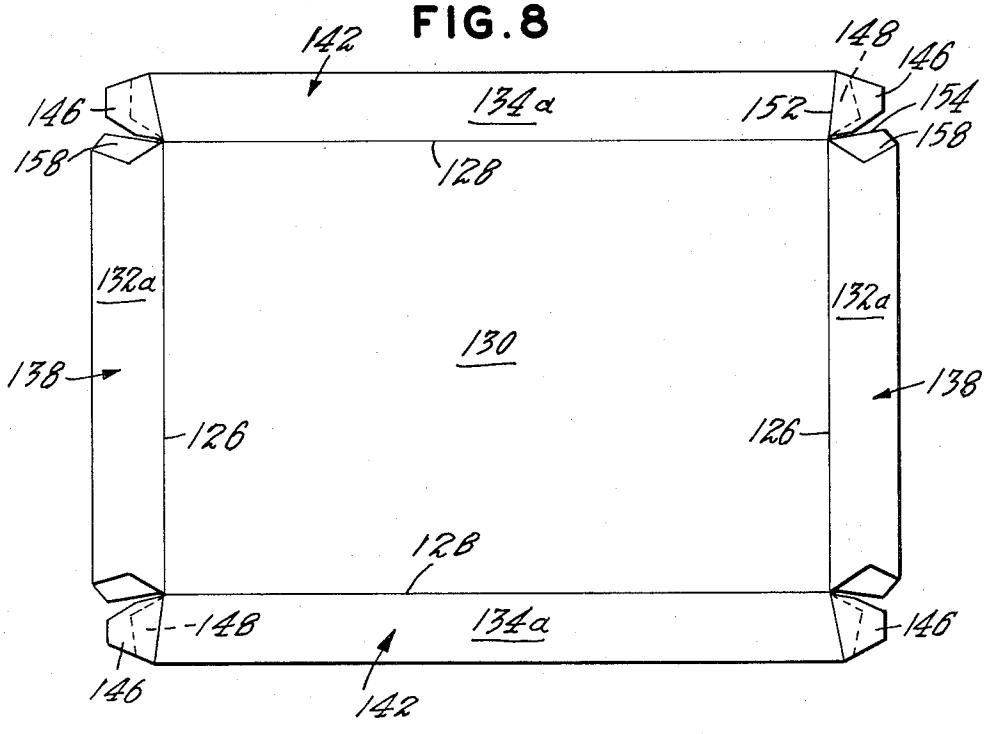

142
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146
134a
152
154
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128
132a
130
138
126
146

FIG. 9

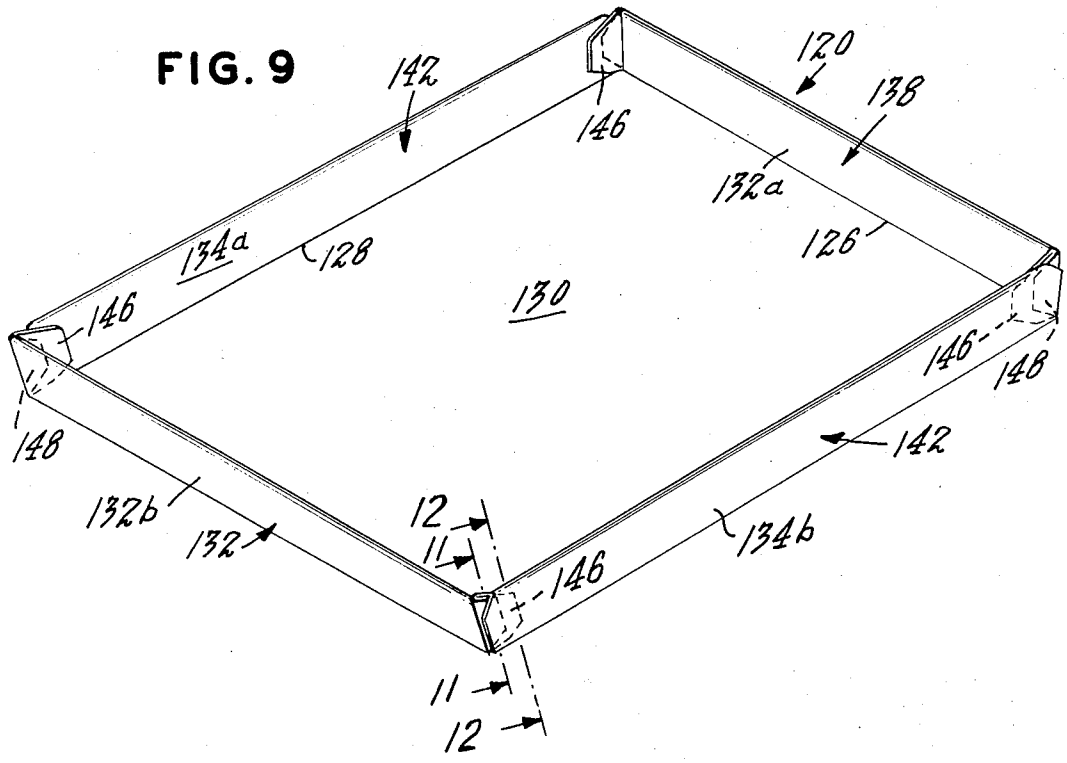


FIG. 10

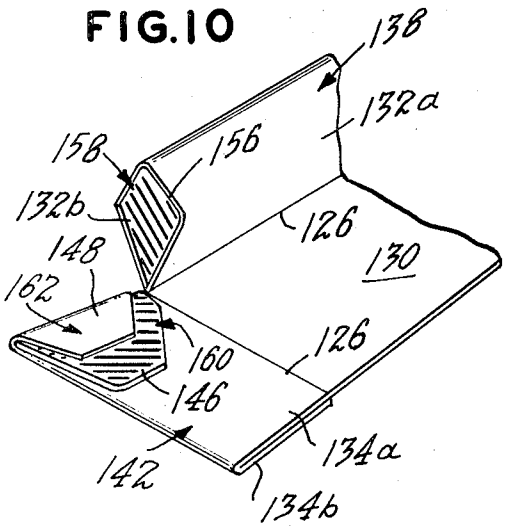


FIG. 11

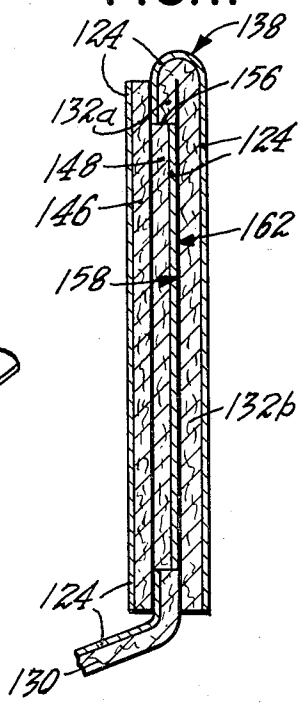


FIG. 12

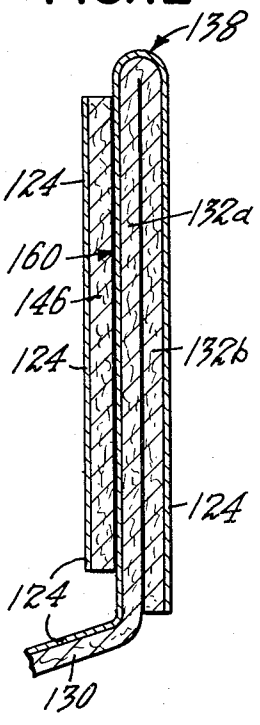


FIG. 13

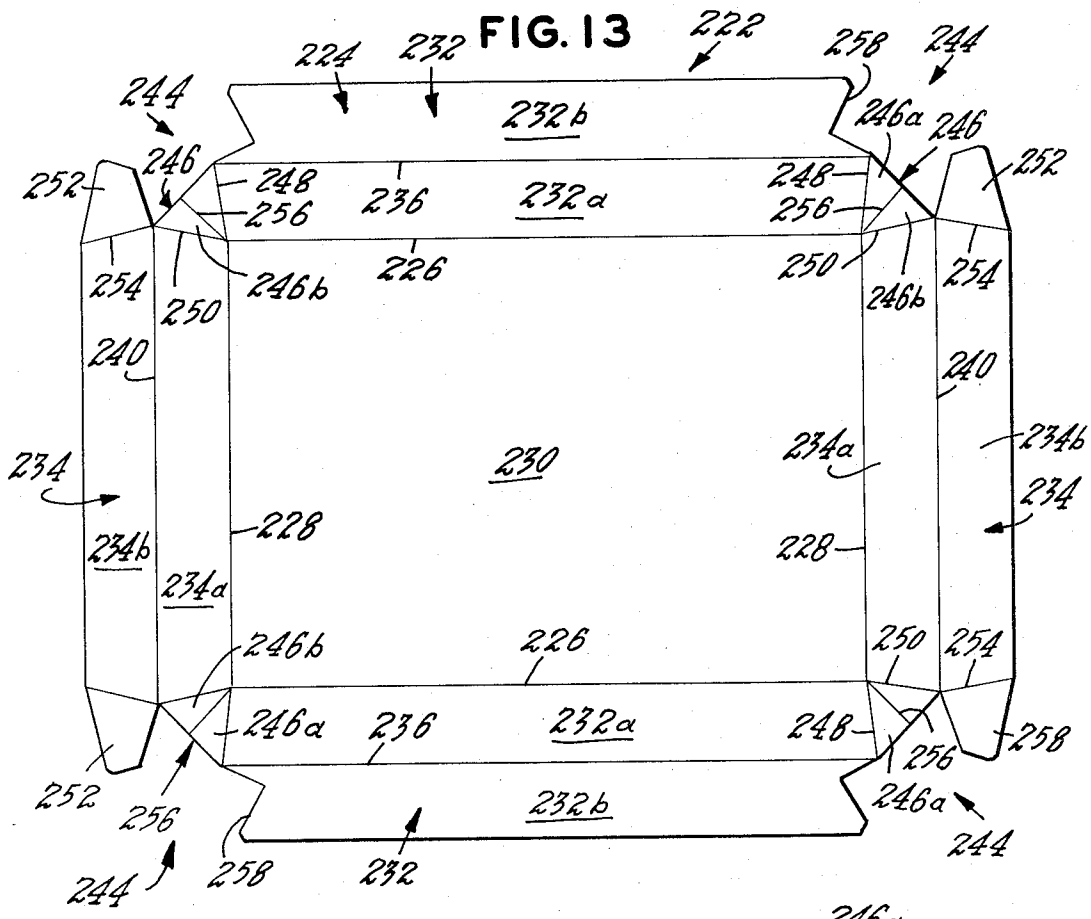

222
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232
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246a
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232b
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232a
226
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246b
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230
234a
234b
228
232

FIG. 14

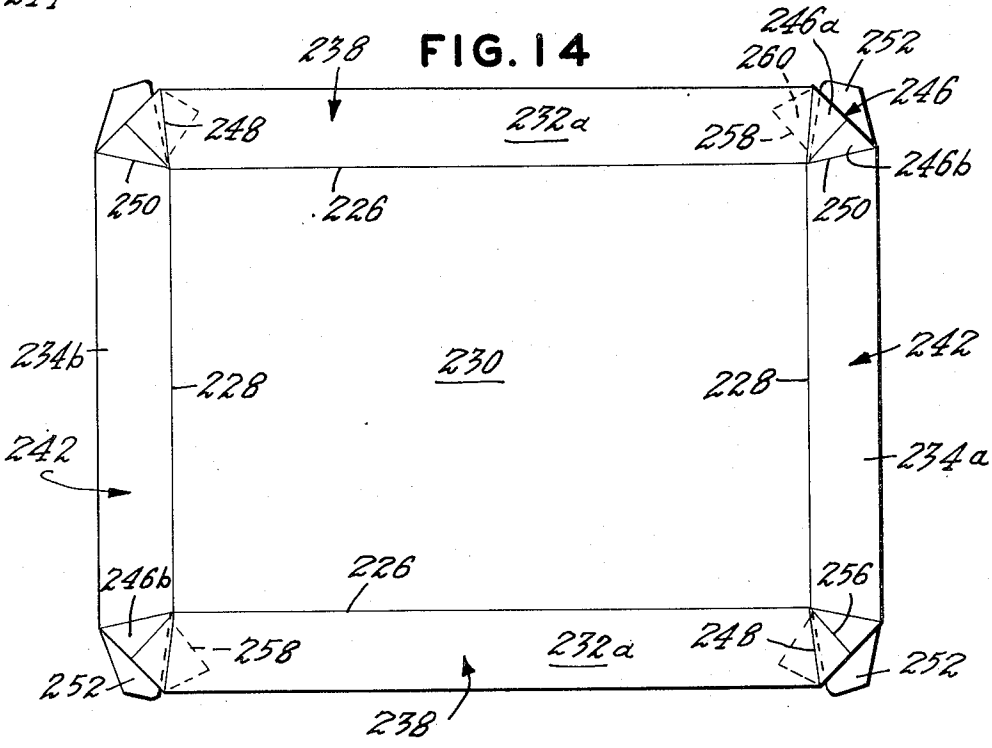

238
246a
260
252
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246b
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232a
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226
234b
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230
242
234a
256
232
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FIG. 15

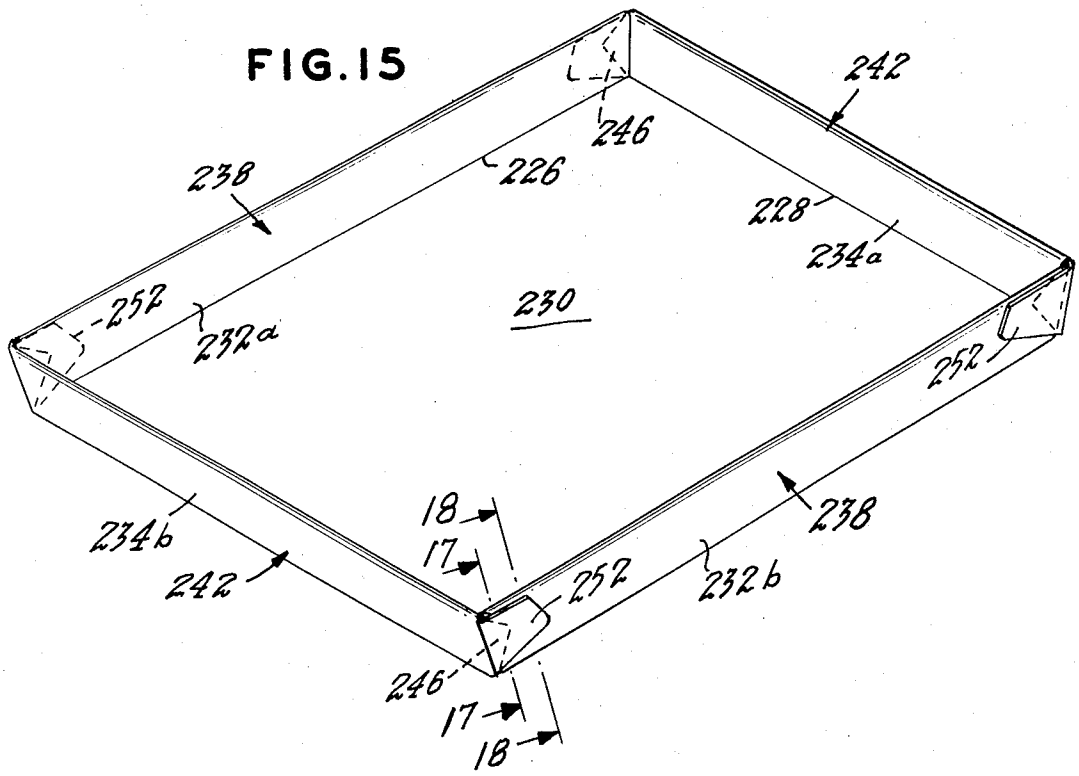


FIG. 16

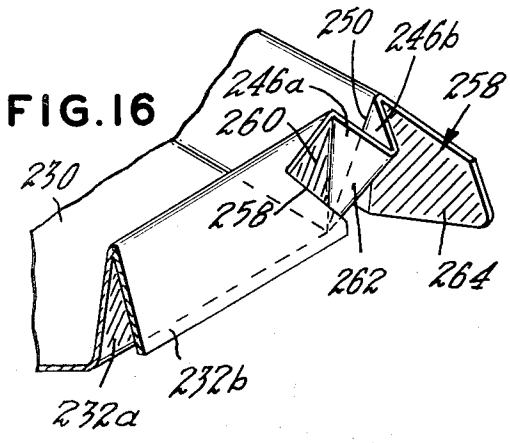


FIG. 17

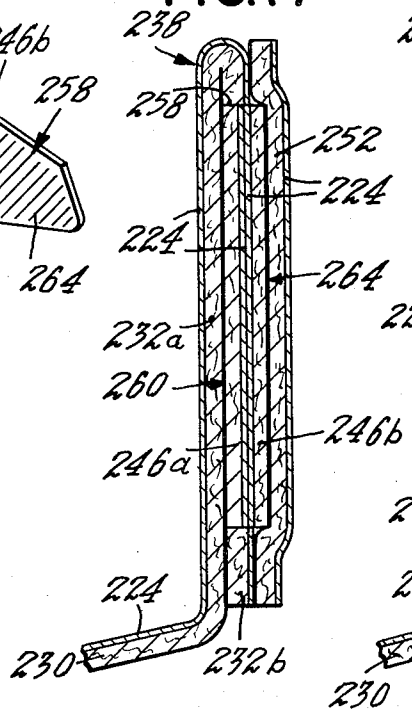
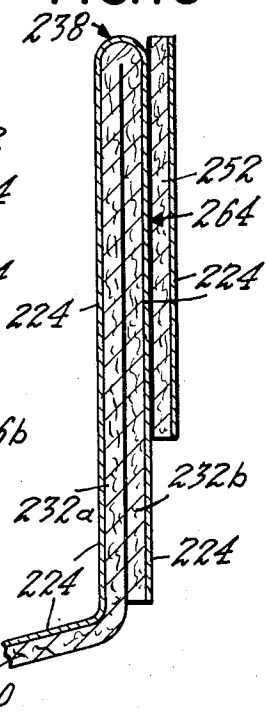


FIG. 18



PAPERBOARD CONTAINER AND BLANK THEREFOR

The present invention generally relates to improvements in the construction of paperboard containers and the blanks from which such containers are manufactured. More particularly, the present invention relates to an improved container construction, the container being produced from a novel paperboard blank configuration wherein provision is made for substantially increasing the strength of the container.

The packaging industry has long struggled with the problem of providing a strong, durable container that combines structural integrity with low unit cost and relative ease of rapid assembly. This is particularly true in the food packaging industry where the foods generally packaged and displayed are relatively inexpensive thus requiring an inexpensive container or tray for packaging or display purposes. Thus, paperboard as well as other fibrous materials have come into extensive use in the food packaging industry because of the inexpensive nature of the material and the ease with which such material can be folded and formed into the desired configurations by automated machines. In order to alleviate the problem of deterioration of the fibrous material resulting from the absorption of moisture and other food juices, the interiors of paperboard containers and trays are treated or laminated with an impervious material such as metallic foil.

Foil laminated paperboard trays are widely used in institutional baking such as in schools, hospitals, etc., where the goods are baked in the tray and afterwards displayed in the same tray. It is the usual practice for such containers to have the metallic foil covering both the inner and outer surfaces of the container side walls for the purpose of hiding scorched portions of the paperboard. It has been found that the best way of accomplishing this is to fold the laminated blank to produce a double thickness at the side walls wherein the metallic foil covers both the inside and outside surfaces of the side walls.

However, this type of tray construction presents problems in forming corner connections. In particular, the range of adhesives which will adequately bond foil to foil surfaces is substantially smaller than the range of adhesives which will adequately bond paperboard to foil surfaces. Also, adhesives which will bond foil to foil are substantially more expensive than adhesives for bonding paperboard to foil. Therefore, it is economically necessary that the corner connections provide a bonding arrangement of paperboard to foil. Thus, the usual corner connection is provided with a construction wherein a tab extends from either the inside or outside panel of one of two adjacent side walls and has the paperboard surface thereof bonded to the other adjacent side wall in proximity to the corner. The corners of such trays thus have a single thickness of material and are therefore the weakest points of the tray or container construction. This obvious point of weakness in the construction of such containers is amplified by constructions wherein the side walls are tapered. It has been found through experience that corner connections of such containers are apt to fail when sufficient pressure is applied to the tapered side walls and, in particular, failures have often occurred during shipment of stacks of containers where the side walls of the lowermost trays are subjected to the greatest pressure.

It is, therefore, a primary object of the present invention to provide a paperboard container construction and blank for making the same wherein the configuration of the corners of the container is such that the container has improved resistance to failure thereat.

The above object, as well as others which will hereinafter become apparent, is accomplished according to the present invention by providing a paperboard or other fibrous material blank which is foldable into a container having double thickness side walls, formed by folding the blank at the periphery thereof, and corners having a configuration wherein a pair of superimposed tabs extend from one of two adjacent side walls to adhesively bond to one side of the second adjacent side wall thereby providing a double thickness of material at the corner. One material thickness of the second adjacent side wall is cut coextensively with the tab next adjacent thereto and the tab is recessed into the cut-out and adhesively bonded thereto thereby providing three thicknesses of material at the overlap of the tabs and side wall. The tab overlying the tab recessed into the cutout portion of the side wall extends therebeyond and is adhesively bonded to the side wall. Where the paperboard blank is to be folded into a container laminated with a metallic foil on one side thereof, thus resulting in a container having metallic foil extending throughout the interior of the container and both the interior and exterior sides of the side walls, the provision of the superimposed extending tabs and cut-out portion of the side wall to which the tabs are adhesively bonded insures adhesive bonding wherein at least one of the bonding surfaces is paperboard.

The present invention will be described and understood more readily when considered together with the embodiments shown in the accompanying drawings, in which;

FIG. 1 is a plan view of a paperboard blank foldable into a container according to the present invention;

FIG. 2 is a plan view of the paperboard blank of FIG. 1 having portions thereof folded;

FIG. 3 is a perspective view of the container according to the present invention produced from the blank of FIG. 1;

FIG. 4 is an enlarged perspective view of a portion of the corner of the partially folded container formed from the blank of FIG. 1;

FIG. 5 is an enlarged partial cross-sectional view of the container of FIG. 3 taken along line 5—5 of FIG. 3;

FIG. 6 is an enlarged partial cross-sectional view of the container of FIG. 3 taken along line 6—6 of FIG. 3;

FIG. 7 is a plan view of a blank similar to the blank of FIG. 1 in a slightly modified form;

FIG. 8 is a plan view of the blank of FIG. 7 having portions thereof folded;

FIG. 9 is a perspective view of the container produced from the blank of FIG. 7;

FIG. 10 is an enlarged perspective view of a portion of the corner of the partially folded container formed from the blank of FIG. 7;

FIG. 11 is an enlarged partial cross-sectional view of the container of FIG. 9 taken along line 11—11 of FIG. 9;

FIG. 12 is an enlarged partial cross-sectional view of the container of FIG. 9 taken along line 12—12 of FIG. 9;

FIG. 13 is a plan view of a blank similar to the blank of FIG. 1 in a slightly modified form;

FIG. 14 is a plan view of the blank of FIG. 13 having portions thereof folded;

FIG. 15 is a perspective view of the container produced from the blank of FIG. 13;

FIG. 16 is an enlarged perspective view of a portion of the corner of the partially folded container formed from the blank of FIG. 13;

FIG. 17 is an enlarged partial cross-sectional view of the container of FIG. 15 taken along line 17—17 of FIG. 15; and

FIG. 18 is an enlarged partial cross-sectional view of the container of FIG. 15 taken along line 18—18 of FIG. 15

Referring now to the drawings wherein several embodiments of the present invention are illustrated, FIGS. 1 through 6 depict a first embodiment wherein an "open tray" type of container, generally designated 20 in FIG. 3, is shown. Container 20 is formed from a generally rectangular blank, designated 22 and shown in FIG. 1, which may be made from a suitable fibrous material such as paperboard and which may have a thin layer of impervious material, such as metallic foil 24, bonded to a surface corresponding to the interior of container 20. Two pair of parallel fold lines, generally designated 26 and 28, define the bottom wall panel 30 of container 20 and together with the outside edge of blank 22 define two pair of parallel side wall panels, respectively designated 32 and 34. Each of the parallel side wall panels 32 is provided with a centrally disposed fold line 36, parallel to fold line 26, which subdivide each of the panels 32 into inner and outer panels 32*a* and 32*b*. Fold lines 36 permit panels 32 to be folded into side walls 38 wherein panels 32*a* and 32*b* form the inner and outer sides respectively of the side walls, as clearly seen in FIGS. 2 and 3. Similarly, side wall panels 34 are provided with centrally disposed fold lines 40, parallel to fold lines 28, which subdivide panels 34 into inner and outer panels 34*a* and 34*b*. Fold lines 40 permit side wall panels 34 to be folded into side walls 42 of container 20 wherein panels 34*a* 34*b* form the inner and outer sides respectively of the side walls, as clearly seen in FIGS. 2 and 3. Thus, it is clearly seen that the side walls 38 and 42 of container 20 are provided with a double thickness of material and the layer of metallic foil 24 covers both the inside and outside surfaces of the side walls.

The corners, generally designated 44, of blank 22 are provided with cut-outs and fold lines in a unique manner and comprise an important part of the present invention. EAch corner 44 of blank 22 includes a pair of tabs, generally designated 46 and 48, which extend from panels 34*a* and 34*b* of side wall panel 34 respectively. Tabs 46 and 48 are connected to panels 34*a* and 34*b* along fold lines 50 and 52 respectively. As clearly seen in FIG. 1, fold lines 50 and 52 may be angularly positioned with respect to each other and with respect to fold line 28 to thereby allow side wall 38 to be erected having a tapered configuration as clearly seen in FIG. 3. In order to allow for a similar tapered configuration for side wall 42, edge 54 of panel 32*a* may be angularly positioned with respect to intersectng fold line 26. The edge of panel 32*b* adjacent corner 44 is cutout as at 56 to match and be mateable with tab 46 which extends from panel 34*a*. As clearly seen in FIG. 1, tab 48 is larger than tab 46 so that when side wall panel 34 is folded at fold line 40, as in FIG. 2, tab 48 overlaps and extends beyond tab 46. Further, as clearly seen in FIG. 2, when side wall panel 32 is folded at fold line 36, cut-out 56 in panel 32*b* exposes a portion of the under-side of panel 32*a*, generally designated 58, which matches the configuration of tab 46.

When forming blank 22 into container 20, side wall panels 32 and 34 are respectively folded along fold lines 36 and 40 and the under-sides of the panels bonded together by a suitable adhesive to form the unerected side walls 38 and 42 of container 20, as clearly seen in FIG. 2. In the next step, side wall 38 is raised by bending at fold line 26 so that exposed portion 58, defined by cut-out 56 in panel 32*b*, faces outwardly, as clearly seen in FIG. 4. At this point it is to be noted that where blank 22 has bonded thereto metallic foil 24, the exposed portion 58 of the under-side of panel 32*a* as well as surface 60 of tab 48, as seen in FIG. 4, are not covered by foil 24, while surface 62 of tab 46 is covered with metallic foil 24. An adhesive, suitable for bonding metallic foil to paperboard, may be applied to surfaces 62 and 60 of tabs 46 and 48, respectively, in preparation for the final step of forming the corner connections of container 20. Alternatively, the adhesive may be applied to exposed portion 58 and a portion of panel 32*b* coextensive with tab 48. In this final step of erecting container 20, side wall 42 is raised by bending at fold line 28 and tabs 46 and 48, having adhesive on surfaces 62 and 60, are folded over side wall 38 by bending at fold lines 50 and 52 respectively. Tabs 46 and 48 are bonded to side wall 38, as clearly seen in FIGS. 5 and 6, to form the corner connection of container 20. As clearly seen in FIG. 5, tab 46 fits into cut-out 56 of panel 32*b*, which forms the outer surface of side wall 38, and the surface 62 of tab 46, having a layer of metallic foil 24 thereon, is bonded to exposed portion 58 of the under-side of panel 32*a*. As clearly seen in FIGS. 5 and 6, tab 48 overlaps and extends beyond tab 46 and is bonded to the outer surface of side wall 38.

Thus, as clearly seen in FIGS. 3 to 6, the corner connections of container 20 are provided with a double thickness of material in the form of tabs 46 and 48 and also, as clearly seen in FIGS. 5 and 6, only three thicknesses of material are provided at the overlap of the corner connections.

Referring now to FIGS. 7 through 12 of the drawings, wherein a slightly modified form of the embodiment of the present invention shown and described in FIGS. 1 through 6 is depicted, there is shown a container, generally designated 120 in FIG. 9, formed from a generally rectangular blank, designated 122 and shown in FIG. 7. Blank 122 may be made from a suitable fibrous material such as paperboard which may have a thin layer of impervious material such as metallic foil 124, bonded to a surface corresponding to the interior of container 120. Two pair of parallel fold lines, generally designated 126 and 128, define the bottom wall panel 130 of container 120 and together with the outside edge of blank 122 define two pair of parallel side wall panels, respectively designated 132 and 134. Each of parallel side wall panels 132 is provided with a centrally disposed fold line 136, parallel to fold line 126, which subdivides each of the panels 132 into inner and outer panel 132 and 132*b*. Fold lines 136 permit panel 132 to be folded into side walls 138 wherein panels 132*a* and 132*b* form the inner and outer sides respectively of the side walls, as clearly seen in FIGS. 8 and 9. Simi-

larly, side wall panels **134** are provided with centrally disposed fold lines **140**, parallel to fold lines **128**, which subdivide panels **134** into inner and outer panels **134***a* and **134***b*. Fold lines **140** permit side wall panels **134** to be folded into side walls **142** of container **120** wherein panels **134***a* and **134***b* form the inner and outer sides respectively of the side walls, as clearly seen in FIGS. **8** and **9**. Thus, it is clearly seen that the side walls **138** and **142** of container **120** are provided with a double thickness of material and the layer of metallic foil **124** covers both the inside and outside surfaces of the side walls.

The corners, generally designated **144**, of blank **122** include a pair of tabs, generally designated **146** and **148**, which extend from panels **134***a* and **134***b* of side wall panel **134** respectively. Tabs **146** and **148** are connected to panels **134***a* and **134***b* along fold lines **150** and **152** respectively. As clearly seen in FIG. **7**, fold lines **150** and **152** may be angularly positioned with respect to each other and with respect to fold line **128** to thereby allow side wall **138** to be erected having a tapered configuration. In order to allow for a similar tapered configuration for side wall **142**, edge **154** of panel **134***b* is cut so that when panel **132***b* is folded in back of panel **132***a*, as in FIG. **8**, edge **154** of panel **132***b* is angularly positioned with respect to fold line **126**. The edge of panel **132***a*, adjacent corner **144**, is cut-out as at **156** to match and be mateable with tab **148** which extends from panel **134***b*. As clearly seen in FIG. **7**, tab **146** is larger than tab **148** so that when side wall panel **134** is folded at fold line **140**, as in FIG. **2**, tab **146** overlaps and extends beyond **148**. Further, as clearly seen in FIG. **8**, when side wall panel **132** is folded at fold line **136**, cutout **156** in panel **132***a* exposes a portion of the under-side of panel **132***b*, generally designated **158** which matches the configuration of tab **148**.

When forming blank **122** into container **120**, side wall panels **132** and **134** are respectively folded along fold lines **136** and **140** and the under-sides of the panels bonded together by a suitable adhesive to form the unerected side walls **138** and **142** of container **120**, as clearly seen in FIG. **8**. In the next step, side wall **138** is raised by bending at fold line **126** so that exposed portion **158**, defined by cutout **156** in panel **132***a* faces inwardly, as clearly seen in FIG. **10**. At this point it is to be noted that where blank **122** has bonded thereto metallic foil **124**, the exposed portion **158** of the under-side of panel **132***b* as well as surface **160** of tab **146**, as seen in FIG. **4**, are not covered by foil **124**, while surface **162** of tab **148** is covered with metallic foil **124**. In the final step of erecting container **120**, side wall **142** is raised by bending at fold line **128** and tabs **146** and **148** are folded on the inside of side wall **138** by bending at fold lines **150** and **152** respectively, Tabs **146** and **148** are bonded to side wall **138**, as clearly seen in FIGS. **11** and **12**, to form the corner connection of container **120**. As clearly seen in FIG. **11**, tab **148** fits into cut-out **156** of panel **132***a* which forms the inner surface of side wall **138** and the surface **162** of tab **148**, having a layer of metallic foil **124** thereon, is bonded to exposed portion **158** of the under-side of panel **132***b* by means of an adhesive suitable for bonding metallic foil to paperboard. As clearly seen in FIGS. **11** and **12**, tab **146** overlaps and extends beyond tab **148** and is bonded by an adhesive suitable for bonding metallic foil to paperboard to panel **132***a* which forms the inner surface of side wall **138**.

Thus, as in the case of the embodiment of FIGS. **1** through **6**, the corner connections of container **120** are provided with a double thickness of material in the form of tabs **146** and **148** and also, as clearly seen in FIGS. **11** and **12**, only three thicknesses of material are provided at the overlap of the corner connections.

Yet another embodiment of the present invention is depicted in FIGS. **13** through **18** wherein a slightly modified form of the paperboard tray of FIGS. **1** through **6** is shown. The major difference between the two embodiments is that in the paperboard container of FIGS. **13** through **18** provision is made for maintaining the corners of the container leakproof. Thus, a container, generally designated **220** in FIG. **15**, of the open-tray type is formed from a generally rectangular blank, designated **222** and shown in FIG. **13**, which may be made from a suitable fibrous material such as paperboard and which may have a thin layer of impervious material, such as metallic foil **224**, bonded to a surface corresponding to the interior of container **220**. Two pair of parallel fold lines, generally designated **226** and **228**, define the bottom wall panel **230** of container **220** and together with the outside edge of blank **222** define two pair of parallel side wall panels, respectively designated **232** and **234**. Each of the parallel side wall panels **232** is provided with a centrally disposed fold line **236**, parallel to fold line **226**, which subdivides each of the panels **232** into inner and outer panels **232***a* and **232***b*. Fold lines **236** permit panels **232** to be folded into side alls **238** wherein panels **232***a* and **232***b* form the inner and outer sides respectively of the side walls, as clearly seen in FIGS. **14** and **15**. Similarly, side wall panels **234** are provided with centrally disposed fold lines **240**, parallel to fold lines **228**, which subdivide panels **234** into inner and outer panels **234***a* and **234***b*. Fold lines **240** permit side wall panels **234** to be folded into side walls **242** of container **220**, wherein panels **234***a* and **234***b* form the inner and outer sides respectively of the side walls, as clearly seen in FIGS. **14** and **15**. Thus, it is clearly seen that the side walls **238** and **242** of container **220** are provided with a double thickness of material and the layer of metallic foil **224** covers both the inside and outside surfaces of the side walls.

Each corner, generally designated **244**, of blank **222** includes a web-corner portion **246** which interconnects panels **232***a* and **234***a* at fold lines **248** and **250** respectively. A tab, generally designated **252**, extends from panel **234***b* and is connected thereto along fold line **254**. Web-corner **246** includes a fold line, generally designated **256**, which extends from the corner of bottom wall panel **230** and bisects the angle formed between fold lines **248** and **250** to form generally triangularly shaped sections **246***a* and **246***b*. As clearly seen in FIG. **13**, fold lines **250** and **254** may be angularly position with respect to each other and with respect to fold line **228** tothereby allow side wall **238** to be erected having a tapered configuration, as clearly seen in FIG. **15**. In order to allow for a similar tapered configuration for side wall **242**, fold line **248**, which interconnects panel **232***a* and web-corner **246**, may be angularly positioned with respect to intersecting fold line **226**. The edge of panel **232***b* adjacent corner **244** is cutout as at **258** to match and be mateable with the triangularly shaped section **246***a* of web-corner **246**. As can be seen

from a comparison of FIGS. 1 and 13, the major difference between the blanks 22 and 222 is the addition of section 246*a* interconnecting tab 46 and panel 32*a* blank 22 in FIG. 1. Thus, when web-corner 246 is folded along fold line 256 a tab-like configuration similar to tab 46 of FIG. 1 is formed. As clearly seen in FIG. 13, tab 252 is larger than either of triangularly shaped sections 246*a* and 246*b* so that when the corner of container 220 is formed, as clearly seen in FIG. 15, tab 252 overlaps and extends beyond folded web-corner 246. Further, as clearly seen in FIG. 14, when side wall panel 232 is folded at fold line 236, cut-out 258 in panel 232*b* exposes a portion of the under-side of panel 232*a*, generally designated 260, which matches the configuration of triangularly shaped section 246*a*.

When forming blank 222 to container 220, side wall panels 232 and 234 are respectively folded along fold lines 236 and 240 and the under-sides of the panels bonded together by a suitable adhesive to form the unerected side walls 238 and 242 of container 220, as clearly seen in FIG. 14. In the next step, side walls 238 and 242 are raised by bending at fold lines 226 and 228 respectively and simultaneously therewith web-corner 246 is folded outwardly by bending at fold lines 248, 250 and 256. At this point it is to be noted that where blank 222 has bonded thereto metallic foil 224 the *a* as well as surface 262 of triangular section 246*a* and the surface 264 of tab 252, as seen in FIG. 16, are not covered by foil 224. Thus, for forming the corners of container 220 a suitable adhesive may be applied to surface 262 of triangular section 246*a* and a surface 264 of tab 252 and tab 252 folded at fold line 254 over web-corner 246 and bonded to the outside surface of the side wall 238. Alternatively, adhesive may be applied to exposed portion 260 and a portion of panel 232*b* coextensive with tab 252 to thereby provide the bonding means for bonding tab 252 and web-corner 246 to side wall 238. As clearly seen in FIGS. 17 and 18, folded web-corner 246 fits into cut-out 258 of panel 232*b* which forms the outer surface of side wall 238, and the surface 262 of web corner 246 is bonded to the exposed portion 260 of the under-side of panel 232*a*. Tab 252 overlaps and extends beyond folded web-corner 246 and is bonded to panel 232*b* of side wall 238.

Thus, as clearly seen in FIGS. 15 through 18, the corner connections of container 220 are provided with a double thickness of material in the form of tab 252 and triangular section 246*b* and also only four thicknesses of material are required at the corner, as seen in FIG. 17, for the purpose of providing a leakproof corner.

It is to be understood that the foregoing general and detailed descriptions are explanatory of the present invention and are not to be interpreted as restrictive of the scope of the following claims.

What is claimed is:

1. A container formed from a paperboard blank wherein fold lines define a rectangularly shaped bottom wall panel and side wall panels, each of said side wall panels being provided with a centrally disposed fold line parallel to the fold line defining the side wall panel and dividing said side wall panel into inner and outer panels which form double thickness side walls when erected, and having corner connections for connecting adjacent side walls of said container, said corner connections comprising a first tab extending from and integrally connected along a fold line to the inner panel of a side wall forming one of the connected adjacent side walls and folded at said fold line to overlie the other connected adjacent side wall, and a second tab extending from and integrally connected along a fold line to the outer panel adjacent the inner panel from which extends said first tab and folded at said fold line to overlie the other connected adjacent side wall in superimposed relation to said first tab, a side wall panel of the side wall on which the tabs are superimposed being cut out coextensively with the tab next adjacent said side wall to match and be mateable with said next adjacent tab, said next adjacent tab being fitted into said cut-out, and said first and second tabs being bonded to said connected adjacent side wall which they overlie.

2. The container as defined in claim 1 wherein the tab in superimposed relation to said tab fitted into said cut-out is larger to extend beyond said tab fitted into said cut-out and is bonded to the connected adjacent side wall.

3. The container as defined in claim 1 wherein the double thickness side walls formed by the side wall panels are tapered.

4. The container as defined in claim 1 wherein the paperboard blank is provided with a thin layer of impervious material bonded to the surface thereof which forms the interior of the container.

5. The container as defined in claim 4 wherein the impervious material bonded to the surface of said paperboard blank is metallic foil.

6. The container as defined in claim 2 wherein said cut-out is formed in the inner panel of said side wall panel forming the side wall to which the tabs are bonded.

7. The container as defined in claim 2 wherein said cut-out is formed in the outer panel of said side wall panel forming the side wall to which the tabs are bonded.

8. The container as defined in claim 7 which further comprises a third tab extending from and integrally connected along a fold line with the inner panel of the side wall panel forming the side wall to which said first and second tabs are bonded, said third tab being integrally connected to said first tab along a fold line extending from the corner of said rectangularly shaped bottom wall panel to thereby form a web-corner between the inner panels of said connected adjacent side walls.

9. A container having tapered side walls formed from a foil laminated paperboard blank wherein fold lines define a rectangularly shaped bottom wall panel and side wall panels, each of said side wall panels being provided with a centrally disposed fold line parallel to the fold line defining the side wall panel and dividing said side wall panel into inner and outer panels which form double thickness side walls when erected, and having corner connections for connecting adjacent side walls of said container, said corner connections comprising a first tab extending from and integrally connected along a fold line to the inner panel of a side wall panel forming one of the connected adjacent side walls and folded at said fold line to overlie the other connected adjacent side wall, a second tab larger than said first tab and extending from and integrally connected along a fold line to the outer panel adjacent the inner panel from which extends said first tab and folded at said fold line to overlie the other connected adjacent side wall in superimposed relation to said first tab, and a cut-out

in the outer panel of the side wall panel forming the side wall from which extend said first and second tabs, said cut-out being coextensive with said first tab to match and be mateable therewith so that said first tab fits therein, said first and second tabs being bonded to the connected adjacent side wall which they overlie.

10. A container having tapered side walls formed from a foil laminated paperboard blank wherein fold lines define a rectangularly shaped bottom wall panel and side wall panels, each of said side wall panels being provided with a centrally disposed fold line parallel to the fold line defining the side wall panel and dividing said side wall panel into inner and outer panels which form double thickness side walls when erected, and having corner connections for connecting adjacent side walls of said container, said corner connections comprising a first tab extending from and integrally connected along a fold line to the inner panel of a side wall panel forming one of the connected adjacent side walls and folded at said fold line to overlie the other connected adjacent side wall, a second tab smaller than said first tab and extending from and integrally connected along a fold line to the outer panel adjacent the inner panel from which extends said first tab and folded at said fold line to overlie the other connected adjacent side wall in superimposed relation to said first tab, and a cut-out in the inner panel of the side wall panel forming the side wall from which extend said first and second tabs, said cut-out being coextensive with said second tab to match and be mateable therewith so that said second tab fits therein, and first and second tabs being bonded to the connected adjacent side wall which they overlie.

11. A paperboard blank adapted to be formed into a container and having fold lines defining a rectangularly shaped bottom wall panel to be formed into the bottom of said container, rectangularly shaped side wall panels integrally connected to said bottom wall panel at said fold lines, a fold line centrally disposed in each side wall panel parallel to the fold line connecting said side wall panel to said bottom wall panel and dividing said side wall panel into inner and outer panels to thereby permit said side wall panel to be formed into a side wall having double thickness, a first tab extending from and integrally connected along a fold line to the inner panel of one of two adjacent side wall panels, and a second tab extending from and integrally connected along a fold line to the outer panel of said one of two adjacent side wall panels, said first and second tabs being adapted to be superimposed one upon the other when said inner and outer side wall panels are folded to form the side wall of said container, aid tabs being further adapted to overlie an adjacent side wall when folded along the fold lines connecting said tabs to said inner and outer panels, and a cut-out in a side wall panel adjacent the side wall panels from which said first and second tabs extend, said cut-out being formed to be coextensive with and to match and be mateable with the tab next adjacent the erected side wall and extending from the other adjacent side wall.

12. The paperboard blank as defined in claim **11** wherein the tab superimposed upon the tab next adjacent the side wall having said cut-out is larger than said tab next adjacent the side wall having said cut-out to extend therebeyond and overlie a larger portion of the adjacent side wall.

13. The paperboard blank as defined in claim **11** wherein the fold lines interconnecting the first and second tabs with said side wall panel are angularly positioned with respect to each other and with respect to the fold line interconnecting said side wall panel with said bottom wall panel, and the edges of the inner and outer panels of an adjacent side wall panel are angularly positioned with respect to each other and with respect to the fold line interconnecting said side wall panel with said bottom wall panel thereby imparting a tapered configuration to the side walls of the erected container.

14. The paperboard blank as defined in claim **11** which further comprises a thin layer of impervious material bonded to the surface of said paperboard blank corresponding to the interior surface of the container formed from said paperboard blank.

15. The paperboard blank as defined in claim **14** wherein said impervious material bonded to a surface of said paperboard blank is metallic foil.

16. The paperboard blank as defined in claim **12** wherein said cut-out is formed in the outer panel of said side wall panel adjacent the side wall panel from which extend said first and second tabs.

17. The paperboard blank as defined in claim **16** which further comprises a third tab extending from and integrally connected along a fold line to the inner panel of the side wall panel in which said cut-out is formed, said third tab being connected along a fold line to the first tab extending from the inner panel of the adjacent side wall panel to thereby form a web between the inner panels of said adjacent side wall panels.

18. The paperboard blank as defined in claim **12** wherein said cut-out is formed in the inner panel of said side wall panel adjacent the side wall from which extend said first and second tabs.

19. A foil laminated paperboard blank adapted to be formed into a container and having fold lines defining a rectangularly shaped bottom wall to be formed into the bottom of said container, rectangularly shaped side wall panels integrally connected to said bottom wall panel at said fold lines, a fold line centrally disposed in each side wall panel parallel to the fold line connecting said side wall panel to said bottom wall panel and dividing said side wall panel into inner and outer panels to thereby permit said side wall panel to be formed into a side wall having double thickness, a first tab extending from and integrally connected along a fold line to the inner panel of one of two adjacent side wall panels, a second tab larger than said first tab and extending from and integrally connected along a fold line to the outer panel of said one of two adjacent side wall panels, said first and second tabs being adapted to be superimposed one upon the other when said side wall panel is folded to form the side wall of said container and to overlie an adjacent side wall when folded along the fold lines connecting said tabs to said inner and outer panels, said fold lines connecting said tabs to said inner and outer panels are angularly positioned with respect to each other and with respect to the fold line interconnecting said side wall panel with said bottom wall panel and the edges of the inner and outer panels of the adjacent side wall panel are angularly positioned with respect to each other and with respect to the fold line interconnecting said side wall panel with said bottom wall panel thereby imparting a tapered configuration to the sidewalls of the erected container, and a cut-out

formed in the outer panel of the side wall panel adjacent the side wall panel from which extend said first and second tabs, said cut-out being coextensive with said first tab to match and be mateable therewith.

20. A foil laminated paperboard blank adapted to be formed into a container and having fold lines defining a rectangularly shaped bottom wall to be formed into the bottom of said container, rectangularly shaped side wall panels integrally connected to said bottom wall panel at said fold lines, a fold line centrally disposed in each side wall panel parallel to the fold line connecting said side wall panel to said bottom wall panel and dividing said side wall panel into inner and outer panels to thereby permit said side wall panel to be formed into a side wall having double thickness, a first tab extending from and integrally connected along a fold line to the inner panel of one of the two adjacent side wall panels, a second tab smaller than said first tab and extending from and integrally connected along a fold line to the outer panel of said one of two adjacent side wall panels, said first and second tabs being adapted to be superimposed one upon the other when said side wall panel is folded to form the side wall of said container and to overlie an adjacent side wall when folded along the fold lines connecting said tabs to said inner and outer panels, said fold lines connecting said tabs to said inner and outer panels are angularly positioned with respect to each other and with respect to the fold line interconnecting said side wall panel with said bottom wall panel and the edges of the inner and outer panels of the adjacent side wall panel are angularly positioned with respect to each other and with respect to the fold line interconnecting said side wall panel with said bottom wall panel thereby imparting a tapered configuration to the side walls of the erected container, and a cut-out formed in the inner panel of the side wall panel adjacent the side wall panel from which extend said first and second tabs, said cut-out being coextensive with said second tab to match and be mateable therewith.

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