United States Patent [19]

Akkerman

[11] **3,929,274**

[45] **Dec. 30, 1975**

[54] **FRUIT BASKET**

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[73] Assignee: **Domtar Limited,** Montreal, Canada

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[52] **U.S. Cl.** ..... **229/52 B;** 229/DIG. 6; 229/31 FS; 206/139

[51] **Int. Cl.²** **B65D 25/22**

[58] **Field of Search** ..... 229/52 B, 68 C, DIG. 6, 229/31 FS; 206/139

[56] **References Cited**

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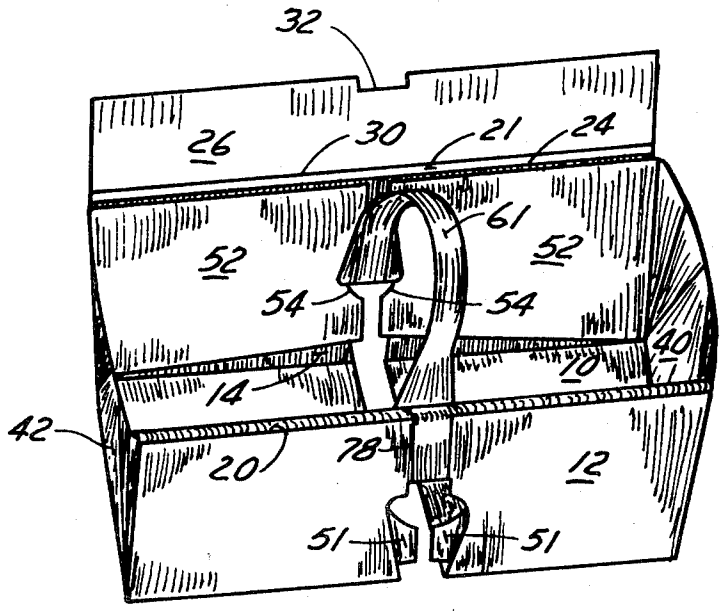
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Primary Examiner—William Price
Assistant Examiner—Douglas B. Farrow
Attorney, Agent, or Firm—C. A. Rowley

[57] **ABSTRACT**

A basket having an integral handle formed from a single blank of paperboard is disclosed. The handle is cut from the bottom and side walls of the basket and is foldable into a position overlying the transverse centre line of the basket, portions of the handle interlock with reinforcing flaps at the sides of the basket to lock the basket in erected position.

8 Claims, 7 Drawing Figures



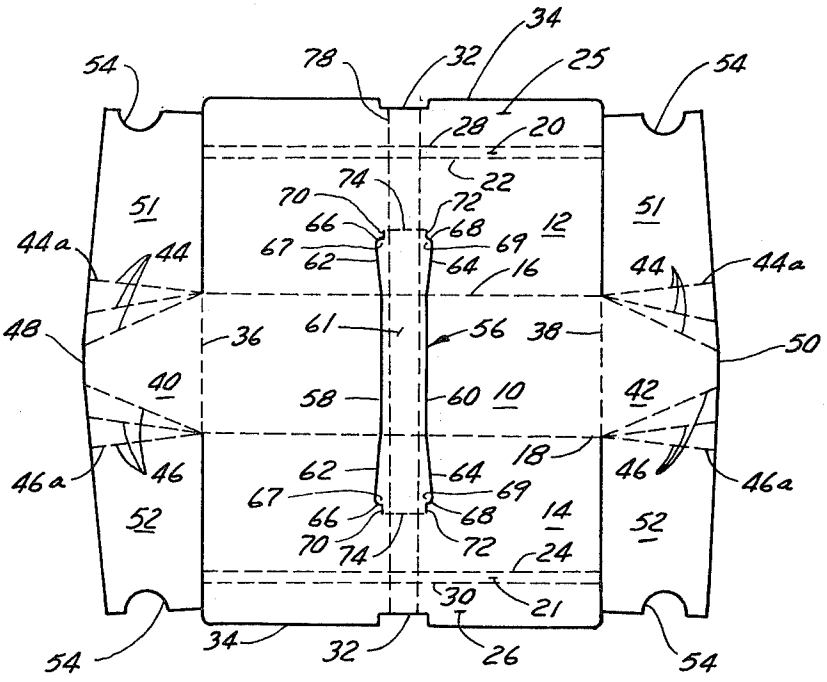


FIG. 1

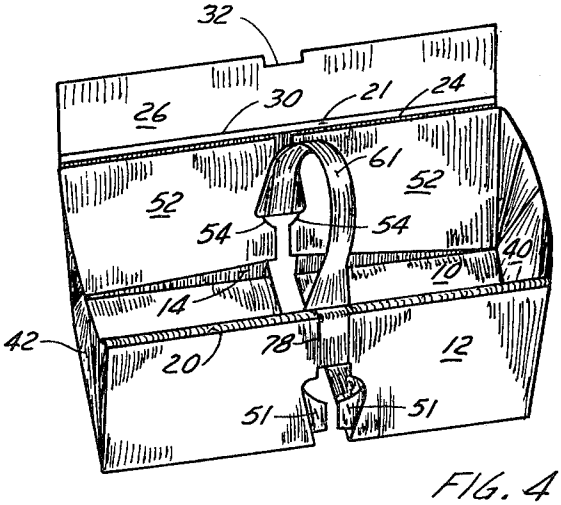


FIG. 4

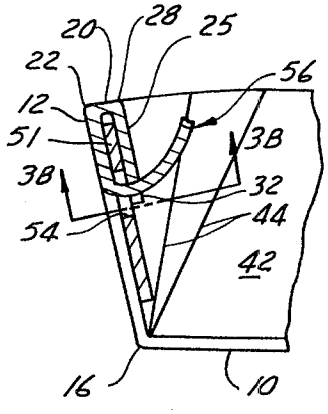


FIG. 3A

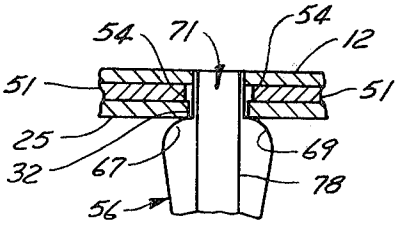


FIG. 3B

FIG. 2

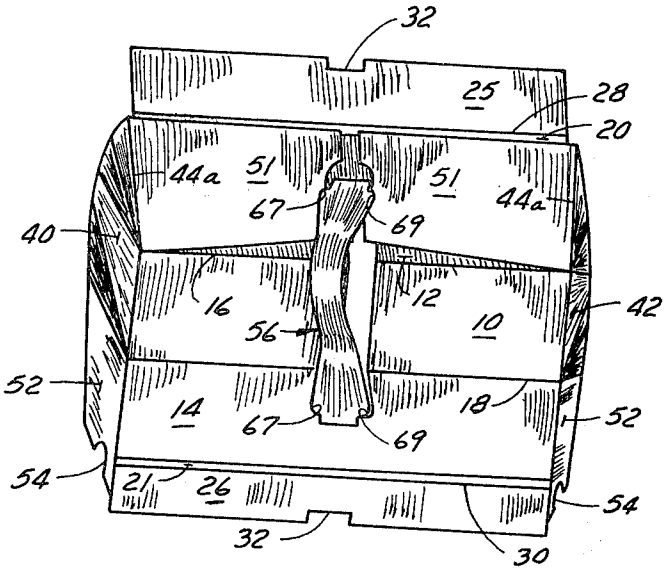
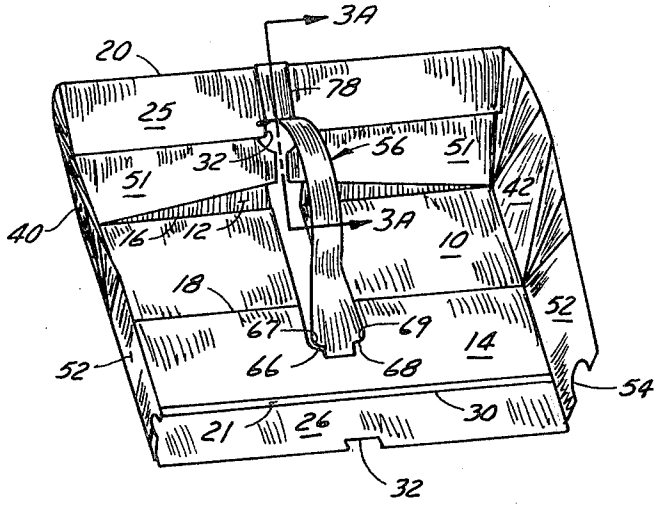


FIG. 3



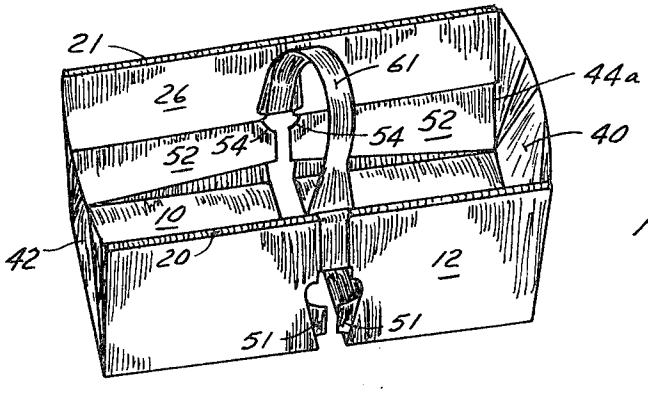


FIG. 5

FRUIT BASKET

FIELD OF THE INVENTION

The present invention relates to a basket, more particularly the present invention relates to a basket formed from a foldable blank and incorporating an integral handle.

Corrugated paperboard or the like is used to manufacture open-topped baskets with handles as exemplified in Canadian Pat. No. 772,504, issued Nov. 28, 1967 to Johnson or Canadian Pat. Nos. 757,928 or 665,387 issued to Vesak on May 2, 1967 and June 18, 1963 respectively. All of these patented structures require separate handle members that must be fitted to the formed basket.

Canadian Pat. No. 853,537 issued Oct. 13, 1970 to Kyle et al discloses an improvement on the earlier baskets in that it incorporates an integral handle member. This improvement resulted in a basket requiring considerably more board while providing an unsatisfactory handle structure having a width that inhibited access to the basket.

It is an object of the present invention to provide an improved basket structure incorporating an integral handle member.

SUMMARY OF THE INVENTION

Broadly, the present invention relates to a basket having a bottom wall and side walls, a handle formed by a pair of lines of severence extending across said bottom wall and part way up said side walls, with opposite ends of said handle integrally foldably connected to respective of said side walls. The invention also relates to the blank from which the basket may be formed.

More particularly, the present invention relates to a basket structure wherein the handle is formed by a band extending across the bottom wall and part way up each of the side walls, each of the side walls is provided with a flap foldable relative to the side wall into a position substantially parallel to its respective side wall, the end walls of the basket include lateral flaps that extend between the side walls and the side wall flaps and are trapped in this position, the handle member engages in slots in the end wall flaps and in the side wall flaps to lock the basket in erected form.

BRIEF DESCRIPTION OF THE DRAWINGS

Further features, objects and advantages will be evident from the following detailed description of a preferred embodiment of the present invention taken in conjunction with the accompanying drawings in which:

FIG. **1** is a plan view of a blank for forming the basket of the present invention;

FIG. **2** is a perspective view illustrating a first stage in setting up the basket;

FIGS. **3** and **4** illustrate subsequent stages;

FIG. **3***a* is a section on the line **3***a*-**3***a* of FIG. **3**;

FIG. **3***b* is a section on the line **3***b*-**3***b* of FIG. **3***a*, and

FIG. **5** is a perspective view of a set up basket incorporating the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The blank of FIG. **1** has a bottom wall **10** with a pair of opposite side wall panels **12** and **14** foldably connected thereto by fold lines **16** and **18** respectively. Top walls **20** and **21** are connected one to each of the walls

12 and **14** via fold lines **22** and **24** respectively and to side wall flaps **25** and **26** via fold lines **28** and **30** respectively. Each of the flaps **25** and **26** has a central notch **32** formed in its free edge **34.**

Also connected to the bottom wall **10,** one at each end thereof, via fold lines **36** and **38** respectively are end walls **40** and **42.** Each of the end walls **40** and **42** is divided into a plurality of segments by means of pairs of sets of fold lines **44** and **46** which extend from the free edge **48** and **50** of the end walls **40** and **42** to the junctions between the fold line **16** and line **36** or **38** and between the fold line **18** and line **36** or **38** respectively. These sets of fold lines **44** and **46** permit curving of the end walls **40** and **42** to simulate a conventional basket.

Connected to each of the end walls **40** and **42** via the outside fold lines **44***a* and **46***a* of the fold line sets **44** and **46** respectively are pairs of end flaps **51** and **52.** Each of these end flaps **51** and **52** is provided with a notch **54** which in the illustrated arrangement is substantially semi-circular.

A handle member **56** is defined in the bottom panel **10** and side wall panels **12** and **14** by a pair of spaced lines of severence **58** and **60** symmetrically arranged on opposite sides of the transverse centre line of the basket. It will be noted that the lines **58** and **60** extend substantially parallel to each other across the bottom wall panel **10** to define a hand gripping section **61,** flare slightly as they progress up the side walls **12** and **14** as indicated at **62** and **64** and then curve sharply in towards each other as indicated at **66** and **68** to form shoulders **67** and **69** and extend for a short distance substantially parallel to one another as indicated at **70** and **72.** The free ends of the short sections **70** and **72** as opposite sides of the basket are interconnected by fold lines **74** substantially parallel to the fold lines **16** and **18.** The sections **70** and **72** between the fold lines **74** and the adjacent shoulders **67** and **69** define neck sections **71,** one at each end of the handle **56.** These sections **71** are each approximately two thicknesses of the board in length.

Preferably, a reinforcing tape **78** will extend from the notches **32** each of which is in line with the handle member **56** (i.e., symmetrical with respect to the transverse centre line of the basket) and is sufficiently wide to receive snugly one of neck sections **71** when the basket is erected.

A reinforcing tape **78** in the illustrated arrangement extends across the flap **25,** top wall **20,** the side wall **12,** bottom wall **10,** side wall **14,** top wall **21** and side flap **26** in overlying relationship with the handle member **56.** Thus the tape **78** as illustrated extends the full length of and reinforces the handle member **56.**

To set up the basket, the handle member **56** is first lifted from the bottom wall **10** and side walls **12** and **14** and this in turn lifts at least one of the side walls **12** and **14** (say, wall **12**) from a position substantially in the plane with the bottom wall **10** to a plane at an angle thereto. With the wall **12** in this position, the flaps **51** are folded in on fold lines **44***a*, the end walls **40** and **42** are folded on fold lines **36** and **38** and the wall **12** is moved relative to the bottom wall **10** on fold line **16** to position the flaps **51** in face-to-face relationship with the wall **12,** with notches **54** encircling the neck section **71** substantially as shown in FIG. **2.**

When the flaps **51** have been folded into face-to-face relationship with the side wall **12** and the neck section **71** trapped in the notches **54,** the flap **25** may be folded over into overlying relationship with the flaps **51**

whereby the top wall **20** overlies the top edge of the flaps **51** and the flap **25** is in face-to-face relationship with the sides of the flaps **51** remote from the wall **12.** With the flap **25** folded into this position, the handle **56** is manipulated to move the neck section **71** into the notch **32** whereby the shoulders **67** and **69** engage the inner face of the flap **25** and lock the flap **25** in position thereby locking the wall **12** and flaps **51** together with the handle member **56** in position (see FIGS. **3, 3***a* and **3***b*).

Next, the flaps **52** and the wall **14** are moved into face-to-face relationship with notches **54** encircling the neck section **71** adjacent wall **14** in the same manner as the notches **54** on flaps **51** encircled the section **71** adjacent wall **12.** The end flap **26** is folded into face-to-face relationship with the flaps **52** with the top wall **21** overlying the flaps **52** and the handle **56** is manipulated so that the neck section **71** is received in the notch **32** in flap **26** and the shoulders **67** and **69** engage the face of flap **26** in the same manner the shoulders **67** and **69** on the opposite side of the basket engaged flap **25** thereby locking the basket in erected position.

All of the flaps, walls and handle member are locked in position by cooperation between the neck sections **71** and notches **32** and by engagement of shoulders **67** and **69** against the inner face of flaps **25** and **26** on opposite sides of the notches **32.** Thus when the handle is in its uppermost position as shown in the finished basket in FIG. **5,** the flaps **25** and **26,** end walls **40** and **42,** side walls **12** and **14** and handle member **56** are locked in position and collapse of the basket is substantially impossible. However, the basket may be knocked down simply by pushing the handle toward its original position thereby to release the flaps **25** and **26** which may be then unfolded thereby freeing the flaps **51** and **52.** The walls **40** and **42** may then be folded on fold lines **36** and **38** respectively to move the flaps **51** and **52** from about the neck sections **71** and the blank may be flattened to its original form.

The finished basket has side walls formed by two thicknesses (i.e. panel **12** and flaps **51** on one side and panel **14** and flaps **52** on the other side) reinforced by a top ridge is formed by the top walls **20** and **21** and side flaps **25** and **26** respectively. This provides a relatively strong basket structure.

The flaps **51** and **52** substantially abut when folded into their erected position and tend to close off the opening form by lifting of the handle member **56** from the side walls **12** and **14.** Thus substantially the only hole in the basket is that provided across the bottom **10** where the handle member **56** is lifted therefrom. This hole is relatively narrow and will not permit escape of such fruit as apples or the like for which the basket is primarily intended.

The reinforcing tape **78** provides a longitudinally extending reinforcing for the handle member **56** and extends across the walls **12** and **14** and flaps **26** to ensure adequate strength to the handle. Obviously, this reinforcing tape may be omitted depending on the weight of the material to be carried in the basket and the strength of the board from which the basket is fabricated.

Modifications may be made without departing from the spirit of the invention as defined in the appended claims. For example, if staples or adhesive is used to secure the basket in erected position, the notch **32** may be omitted and the flaps **25** and **26** shortened accordingly. Also where the ends of flaps **51** or **52** are not intended to at least partially cover the holes left in the side walls **12** and **14** when the handle **56** is removed therefrom the flaps **51** and **52** may be shortened and the notches **54** eliminated.

I claim:

1. A basket comprising a bottom wall, a pair of side walls integrally connected one to each side of said bottom wall, a handle integrally foldably connected at each of its opposite ends to respective of said side walls, said handle being formed in said bottom and said side walls by a pair of lines of severence extending across said bottom wall and part way up each of said side walls, end walls foldably integrally connected to opposite ends of said bottom walls, and flaps integrally foldably connected one at each side edge of said end walls and foldable into face to face relationship with said side walls on respective sides of said basket, a pair of side flaps, means connecting one of said side flaps to each of said side walls along the edges thereof remote from their respective foldable connections to said bottom wall, each of said side flaps folded inwardly and overlying a pair of said end flaps positioned in face to face relationship with the side wall to which said side flap is connected thereby trapping a pair of said end flaps between each of said side flaps and its respective side wall, said side flaps having free edges at least a portion of which is positioned immediately above the said foldable connection between the end of said handle and the side wall to which said side flap is connected.

2. A basket as defined in claim **1** further comprising a notch in each of said side flaps, a neck section at each end of said handle and a pair of shoulders at one end of each of said neck sections, said neck sections positioned in said notches in the adjacent of said side flaps and said shoulders engaging a face of said adjacent of said side flaps to lock said basket in erected position.

3. A basket as defined in claim **2** further comprising a second set of notches each notch of said second set of notches being formed on an end of each of said end flaps remote from its connection to its respective end wall, said notches of said second set of notches in a pair of said end flaps on one side of said basket embracing said neck section on said one side of said basket.

4. A basket as defined in claim **3** wherein said pair of lines of severence are located on opposite sides of the transverse centre line of said basket.

5. A basket as defined in claim **4** further comprising a reinforcing tape extending along said handle from one side of said basket to the other.

6. A basket as defined in claim **1** wherein said means connecting said side flaps to said side walls includes a top wall.

7. A basket as defined in claim **4** wherein said means connecting said side flaps to said side walls includes a top wall.

8. A basket forming blank comprising a bottom wall panel, a pair of side wall panels integrally foldably connected one to each side of said bottom wall panel, a pair of lines of severage extending across said bottom wall panel and partway across each of said side wall panels, said lines of severage defining opposite side edges of a handle, each of said opposite ends of said handle being integrally foldably connected one to each of said side wall panels, said lines of severance being symetrically positioned on opposite sides of the transverse center line of said bottom and side wall panels, a pair of side flaps each connecting one of said side flaps to each of said side wall panels along the edge thereof

remote from their respective foldably connections with said bottom wall panel, said side flaps being dimensions so that a portion of the free edge thereof remote from said foldable connection between each said flap and its respective side wall panel may be positioned immediately over said foldable connection between the end of said handle and its respective side wall panel when said blank is erected.

* * * * *