April 3, 1962 J. E. BUMBY 3,028,066

MULTIPLE SECTION PAPERBOARD CONTAINER

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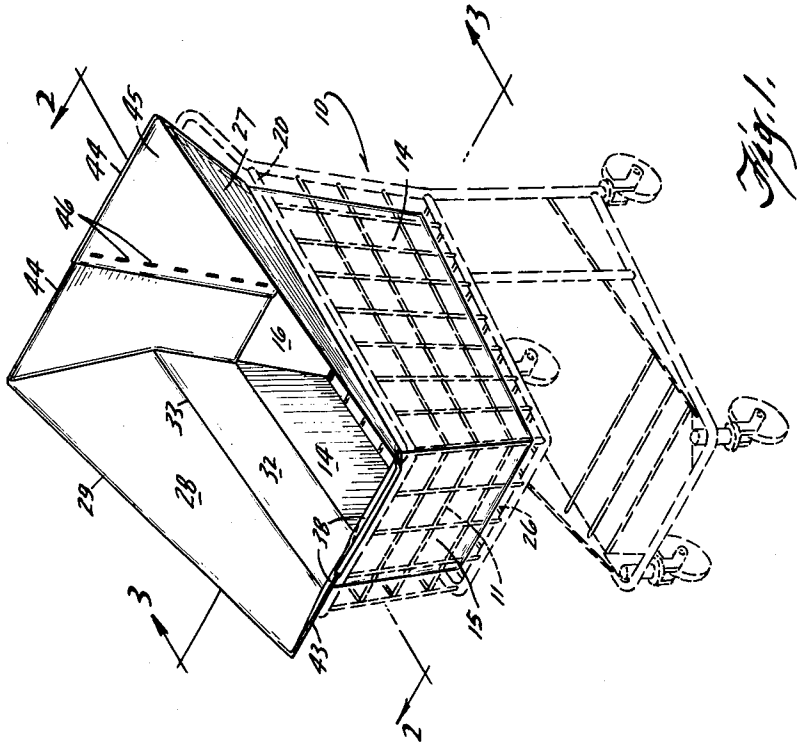


Fig. 1.

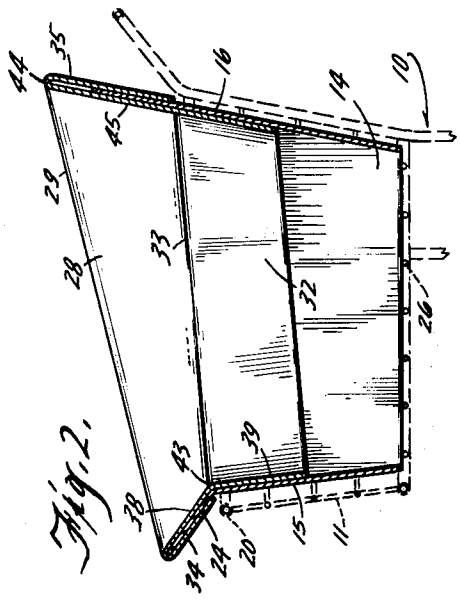


Fig. 2.

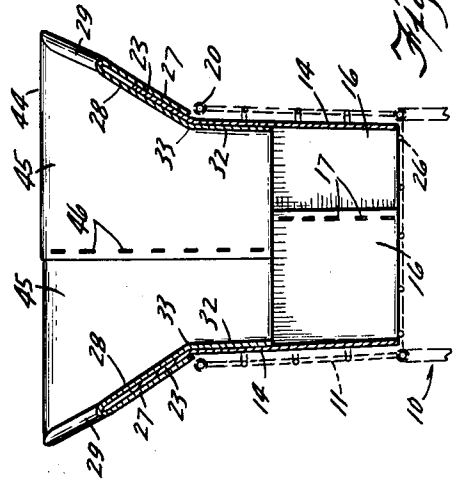


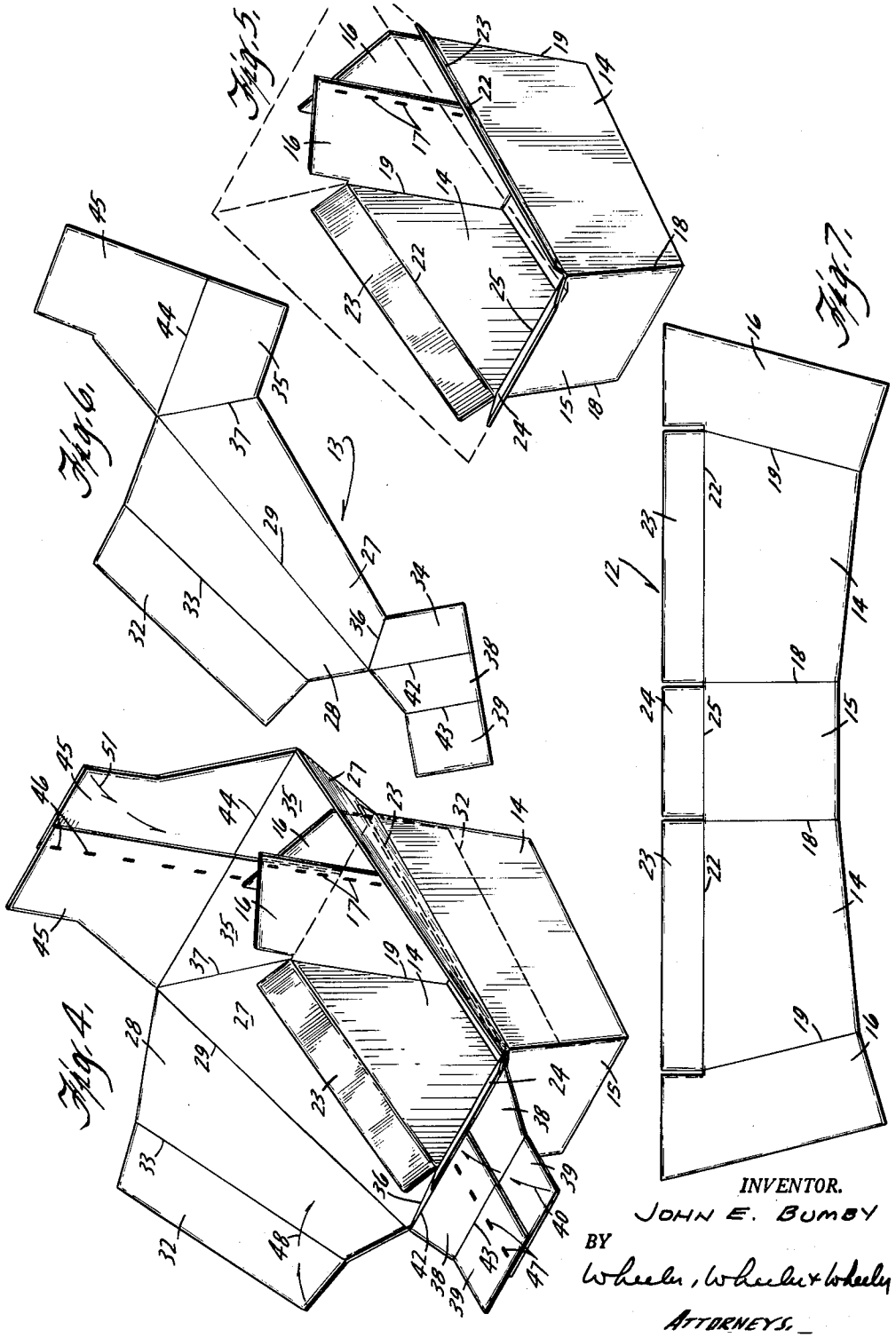
Fig. 3.

INVENTOR.
JOHN E. BUMBY
BY
Wheeler, Wheeler & Wheeler
ATTORNEYS.

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MULTIPLE SECTION PAPERBOARD CONTAINER

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INVENTOR.
JOHN E. BUMBY
BY
Wheeler, Wheeler & Wheeler
ATTORNEYS.

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MULTIPLE SECTION PAPERBOARD CONTAINER

John E. Bumby, Ripon, Wis., assignor to Ripon Foods, Inc., Ripon, Wis., a corporation of Wisconsin

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This invention relates to a multiple section paperboard container, particularly adapted to convert a cart, such as is used in supermarkets, for display purposes, to enlarge its capacity, improve its appearance and facilitate access thereto.

While containers embodying the invention are not limited for use with supermarket carts, such containers are particularly adapted for use in conjunction therewith. Supermarket operators have made increasing use of such carts for aisle display purposes. The conventional supermarket cart, however, usually has insufficient capacity to display adequate quantities of bulky items. Moreover, the wire baskets or frames of conventional carts are not sufficiently attractive to meet modern display standards.

Containers embodying the present invention will enlarge the capacity of the conventional supermarket cart, facilitate access to its contents, and improve the appearance of the display by providing a more substantial-looking container.

It is a particular object of the invention to provide a container consisting of multiple paperboard sections which will interlock when assembled together. One section fits into the wire basket of the cart to receive support therefrom and other sections flare upwardly and outwardly over the top rim of the cart. The resultant composite container has relatively great capacity with minimum requirements for paperboard stock.

But for the multiple piece construction of the present invention, it would be very difficult to economically produce a paperboard container having hopper-like upwardly flaring side walls. The present invention utilizes multiple blanks of paperboard material, each shaped to use the minimum of material. When assembled according to the present invention, however, a large capacity container achieving the objects of the invention results.

Moreover, the present invention provides for finished surfaces on all parts of the container which are normally visible. The inside surfaces of the base section and the inside surfaces of the hopper section are left unfinished. The outside surfaces only of the sections are finished. However, the hopper section is so folded with respect to the base section that the finished surfaces of the hopper section overlap and cover the raw surfaces of the base section, thus to produce an attractive hopper-like container at minimum cost.

Other objects, features and advantages of the invention will appear from the following disclosure in which:

FIG. 1 is a perspective view of a supermarket cart and container embodying the present invention.

FIG. 2 is a fragmentary cross section taken along the line 2—2 of FIG. 1.

FIG. 3 is a fragmentary cross section taken along the line 3—3 of FIG. 1.

FIG. 4 is a perspective view of the container only, the hopper section of the container being shown in the course of folding its flaps about the flaps and walls of the base section.

FIG. 5 is a perspective view of the base section only, the outline of the completely folded hopper section being shown in broken lines.

FIG. 6 is a developed plan of a blank from which one-half of the hopper section is fabricated.

FIG. 7 is a developed plan of a blank from which the base section is fabricated.

A conventional supermarket cart is shown at 10 in

FIG. 1 and comprises a wire basket or frame 11 which is sometimes used by the supermarket operator for aisle storage and display.

According to the present invention, the capacity of the frame 11 is increased and the attractiveness of the display is enhanced by a display insert for the frame consisting of a base section made from the blank 12 shown in FIG. 7 and a hopper section made from two of the blanks 13 shown in FIG. 6. Base section blank 12 has corresponding side panels 14, an end panel 15 between side panels 14 and two terminal panel 16 which are overlapped as shown in FIG. 5 to form an end panel opposite end panel 15. Overlapping margins of flaps 16 are interconnected by staples 17 or the like when the respective panels 14, 15, 16 are folded on the fold lines 18, 19.

Panels 14 are provided with upper flaps 23 along their top edges on the fold lines 22. End panel 15 is provided with an upper flap 24 along fold line 25. The terminal panels 16 extend upwardly to the level of the free edges of the flaps 23, 24 and do not have bendable flaps.

The panels 14, 15 normally have a width slightly in excess of the height of the basket or frame 11 of the supermarket cart 10. The flaps 23, 24 in the erected position of the base section 12 will flare outwardly over the top rim 20 of the frame 10, as shown in FIGS. 2 and 3.

The bottom of the container is left unpaneled, inasmuch as material within the cart 10 will be supported on the wire floor 26 thereof.

The hopper section, which is ultimately interlocked with the base section is made from allochiral blanks, typified by blank 13 shown in FIG. 6. Each blank comprises an outside panel 27, an inside panel 28 connected to panel 27 on fold line 29 and a terminal flap 32 connected to panel 28 on fold line 33. To the ends of outside panel 27 end panels 34 and 35 are connected on fold lines 36, 37. End panel 34 has an intermediate panel portion 38 foldably connected thereto on fold line 42 and a terminal flap 39 foldably connected to panel 38 on fold line 43. Panel 35 is foldably connected on fold line 44 with a terminal flap 45.

Two such blanks 13 are connected in allochiral relationship. Corresponding margins of the respective panels 35 and flaps 45 are connected by staples 46 (FIG. 4). Corresponding margins of the panels 34, 38 and flaps 39 are connected by staples 47. The respective panels 27, 34, 35 of each allochiral section 13 are trapezoidal in shape so as to fix the panels 27, 34, 35 in outwardly and upwardly flared position, when the hopper section is erected, as shown in the drawings.

The perimeter of the bottom edge of the erected hopper section is slightly larger than the perimeter of the upper edges of the panels 14, 15, 16 of the base section. Accordingly, when the base section is erected to its position shown in FIG. 5, the hopper section can be telescopically assembled over the base section as the first step of the assembly of the display insert container. The position of the parts at this stage of the assembly is shown at FIG. 4.

The next step in the assembly of the display insert container and interlock of the various flaps thereof is to fold over the flaps 28, 32 of the hopper section on fold line 29 in the direction of the arrow 48, as shown in FIG. 4, thus to fold intermediate panel 28 against terminal flap 23 of the base container which intervenes between panels 27, 28, as is shown in FIG. 3 of the drawing. Terminal flap 32 of the hopper section is further folded on its fold line 33 against the inner face of the upper margin of side panels 14 of the base section, as is also shown in FIG. 3.

With both sides of the hopper section folded in as aforesaid, the end panels 38 and flaps 39 of the hopper sections are now folded on fold line 43 in the direction of arrows 40 to their position shown in FIG. 2 so that

flaps 34 and 38 embrace intervening terminal flap 24 on base section end panel 15. Terminal flap 39 on the hopper section is further folded on its fold line 43 against the inner face of the upper margin of base section end panel 15.

The last step in the assembly process is to fold downwardly flaps 45 in the direction of arrow 51 in FIG. 4 and about fold line 44 to embrace and lie flat against the flaps 16 of the base section of the container. The parts are so dimensioned that the edges of all the inturned flaps will frictionally engage opposed portions within the base container to frictionally retain the flaps, panels, etc. in assembled relation.

Because of the complementary upward and outward flare of flaps 23, 24 of the base section with corresponding flared panels of the hopper section, the base and hopper sections of the assembled display insert will be interlocked against vertical separation. It is not possible to separate the assembled sections unless the paperboard material thereof is torn or distorted, or the various flaps and panels unfolded in the reverse order of the folding steps aforesaid.

The inside surfaces of both hopper and base sections may be left raw or unfinished. The outside surfaces thereof are desirably finished with an attractive surface. Accordingly, when the various panels and flaps of the hopper section are folded inwardly as aforesaid, they will cover most of the raw surfaces of the base section, leaving only finished surfaces of the insert exposed to view. The only uncovered raw surfaces of the display insert will be the lowermost inside marginal portions of the base section, which will normally be concealed from view by container contents. Accordingly, all the visible exposed surfaces of the paperboard display insert container will be finished to present an attractive appearance to the customer.

Because the sections 13 of the hopper section are allochiral, two such blanks which are finished on opposite sides are used to make up one composite hopper section.

The wire frame 11 of supermarket cart 10 will hold the base section erected while the panels and flaps of the hopper section of the container are being folded thereabout, and will help hold the interlocked sections in erected position, although the interlocked base and hopper sections will stand unsupported if desired.

The area bounded by the upper edges of the display insert is materially greater than the area bounded by the rim 20 of the wire basket of the cart. In practice, the area bounded by the display rim is about double the area bounded by the basket rim. Accordingly, access to the contents thereof is greatly facilitated.

I claim:

1. A multiple part paperboard container comprising a base section having upwardly and outwardly flared upper flaps and a separate hopper section having downwardly and inwardly flared panel portions embracing said upper flaps to interlock said hopper section against separation from the base section.

2. The container of claim 1 in which the hopper section comprises interconnected allochiral parts.

3. The container of claim 1 in which the said sections have raw surfaces facing the inside of said container and finished surfaces facing the outside of said container, finished surfaces of said hopper section being folded over said upper flaps of the base section and extending downwardly beyond said upper flaps into the base section to cover raw inside surfaces of the base section.

4. The device of claim 1 in combination with an external frame about the base section of the container.

5. The container of claim 1 in which the downwardly and inwardly flared portions of the hopper section are complementary with the upper flaps of the base section, said hopper section having terminal portions therebeyond which extend into said container and along the sides of the base section.

6. A multiple part paperboard container comprising the combination of a base section having upwardly exposed margins and an upper section comprising interconnected allochiral parts in telescopic relation with the margins of the base section and interlocked therewith, the upper margins of the base section flaring outwardly and upwardly, portions of the upper section interlocked therewith flaring downwardly and inwardly.

7. The container of claim 6 in which portions of the upper section are folded over portions of the base section to interlock therewith.

8. The container of claim 7 in which each allochiral part has a finished surface exposed to view when such portions of the upper section are folded over portions of the base section.

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