Nov. 12, 1957 T. J. DEEREN ET AL 2,812,878

BOTTLE CARRIER

Filed Dec. 21, 1953 2 Sheets-Sheet 1

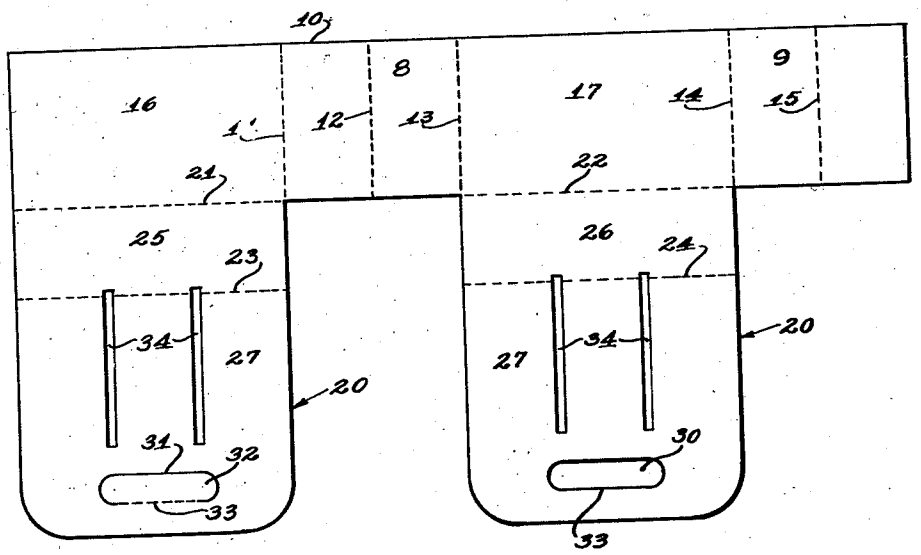


FIG. 1.

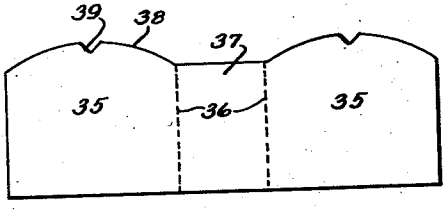


FIG. 2.

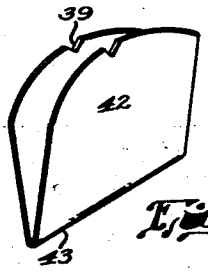


FIG. 4.

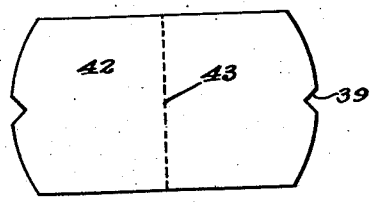


FIG. 3.

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BOTTLE CARRIER

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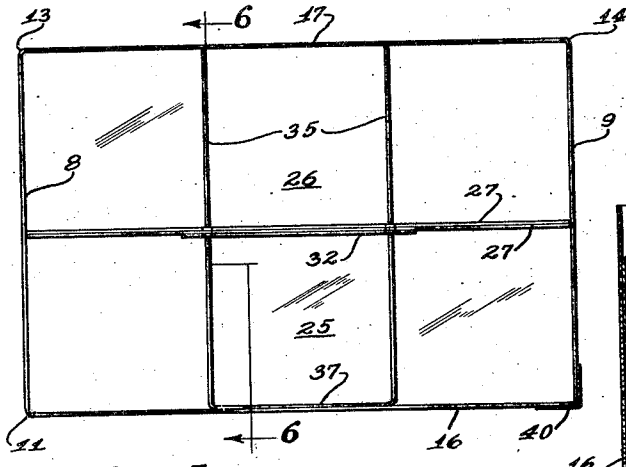


Fig. 5.

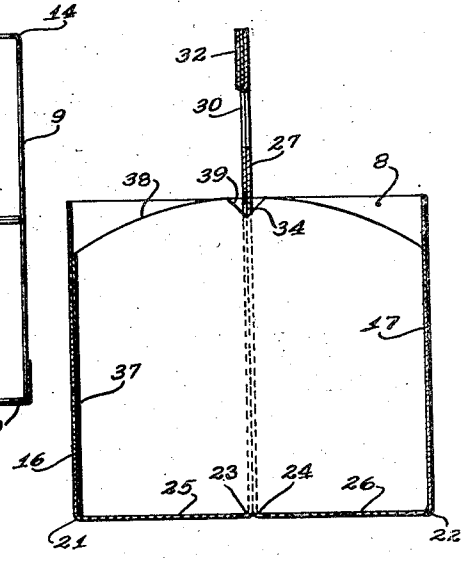


Fig. 6.

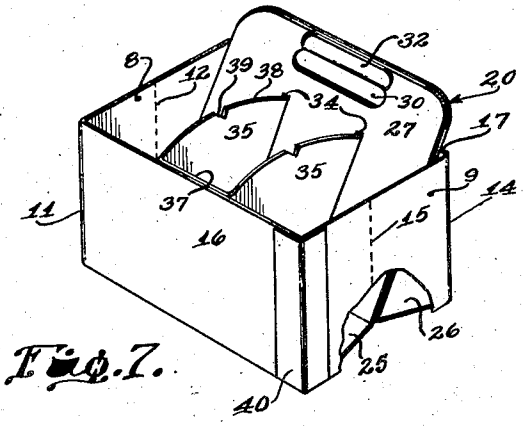


Fig. 7.

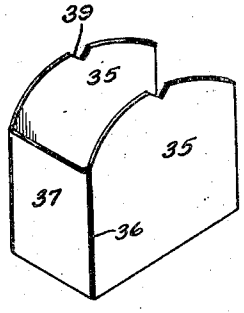


Fig. 8.

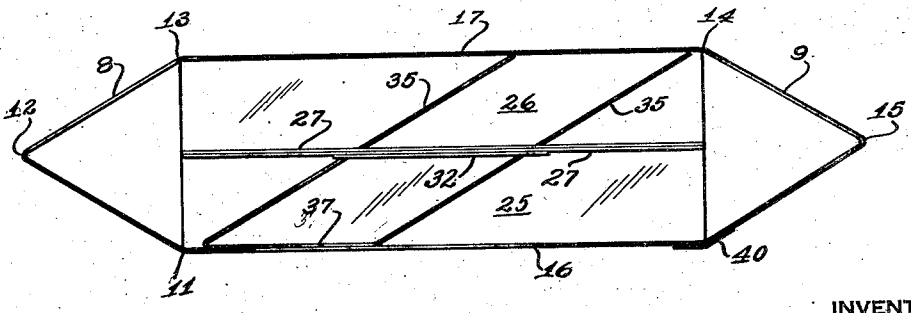


Fig. 9.

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BOTTLE CARRIER

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Application December 21, 1953, Serial No. 399,295

2 Claims. (Cl. 220—115)

Our invention relates to carriers for bottles or other articles and provides a foldable or collapsible type of carrier provided with partition strips by which the carrier is divided into a plurality of individual cells or compartments for the articles. The carrier is made of stiff sheet material such as paperboard, fiberboard, corrugated paper and the like. The body portion of the carrier is formed from a blank having flexible fold lines or score lines at which it is folded. A cross partition strip or strips divide the carrier into compartments or cells. The blank from which the body of the carrier is formed includes extension strips which form the bottom panels and partition panels which extend upwardly from the bottom of the carrier and form a central or medial partition extending the full length of the carrier and which also provides a handle for the carrier. The construction is such that as the body of the carrier is collapsed, the bottom panels fold upwardly carrying the partition upward. The construction permits the cross partition strips to be assembled with the medial partition through the open upper end of the carrier, as hereinafter more fully set forth.

Referring to the accompanying drawings:

Fig. 1 is a view of a blank foldable to form the carrier;

Fig. 2 is a view of a blank foldable to form cross partitions adapted to be assembled with set up carrier;

Fig. 3 is a view of a modified form of blank for forming a double walled cross partition strip;

Fig. 4 shows the blank of Fig. 3 partly folded;

Fig. 5 is a plan view of the carrier formed from the blanks shown in Figs. 1 and 2;

Fig. 6 is a sectional elevation at the line 6—6 on Fig. 5;

Fig. 7 is a perspective view of the assembled carrier and partition strips with the central partition panel in an inclined position;

Fig. 8 is a perspective view of the partition blank of Fig. 2 folded for assembly with the carrier; and

Fig. 9 is a plan view of the carrier shown in Fig. 5, with the carrier partially collapsed.

Referring to Fig. 1 the blank from which the carrier is formed, and which may consist of corrugated paperboard or other stiff sheet material, is provided with flexible fold lines or score lines illustrated by the dotted lines. The blank includes a rectangular portion, one edge **10** of which forms the upper edge of the carrier body. Fold lines **11**, **12**, **13**, **14** and **15** define the vertical edges or meeting lines of the body panels. These include panels **16** and **17** forming the front and rear panels, and end panels **8** and **9** foldable at the fold lines **12** and **15**, the end panel **8** extending from the line **11** to line **13** and the panel **9** extending from the line **14** to the end of the blank.

Extensions **20**, united or hinged to the front and rear body panels at the score lines **21** and **22**, form the bottom panels **25**, **26** and partition panels **27** which, in the set up carrier, rise from the bottom panels and form a

double walled partition extending the length of the carrier, preferably mid-way between the front and rear panels **16** and **17**. These extensions **20** are provided with fold lines **23** and **24** parallel with the fold lines **21**, **22** thereby dividing the extensions **20** into the bottom panels **25** and **26**, which in the set up carrier are horizontal, and the vertical panels **27** which are juxtaposed to form the double walled partition.

The partition panels are extended upwardly above the carrier to provide a carrying handle. One of the panels **27** is formed with a hand hole **30** and the other is cut at the line **31** to provide a flap **32** corresponding in size and shape to the hole **30** and connected to the panel by a fold line **33**. When the carrier is set up, the flap **32** is extended through the opening **30** and folded upwardly to lock the panels together and form a handle.

The partition panels **27** are formed with slits **34** to receive the cross partitions **35** which may be formed from the blank shown in Fig. 2, the blank being folded at the score lines **36** to bring the partition strips parallel as in Fig. 8. The partition strips are connected by an intermediate panel or strip **37** which is equal in width to the spacing between the slits **34**. The upper edges **38** of the cross panels **35** are curved in an arc having a radius preferably substantially equal to the length of the slits **34** or the height to which the slits extend above the floor of the carrier. The edges **38** are formed with central notches **39**.

When the blank (Fig. 1) is folded for setting up the carrier the ends of the blank are held together by a flexible strip **40** (Fig. 7) glued or adhered thereto. The extensions **20** are folded or turned upwardly between the front and rear panels **16**, **17**, brought into juxtaposition and secured together by the handle flap **32**. The central partition may be swung to one side as shown in Fig. 7. This permits the cross partition strips **35** to be assembled with the carrier by inserting said strips downwardly through the open top of the carrier and through the slits **34** as indicated in Fig. 7, with the connecting panel **37** bearing against the inner face of the front wall panel **16**. The partition **27** may now be swung upwardly to its central upright position at which it drops into position to interlock the slits **34** and notches **39**, the bottom panels **25**, **26** at the same time being moved downwardly to a horizontal position. The hinge connection of the bottom panels **25**, **26** to the partition panel and also to the front and rear body panels, permits the slight upward movement of the partition panel during the assembling therewith of the cross partition strips. The carrier as thus set up provides six separate rectangular cells or compartments adapted to receive a like number of bottles or other articles.

The carrier is collapsible to a folded position without disassembling or removing the partitions. Fig. 9 shows the carrier partially collapsed. The end walls fold outwardly as indicated and the cross partition strips **35** are moved to positions substantially parallel with the central partition when the carrier is completely collapsed.

Fig. 3 illustrates a blank **42** which is foldable at the fold line **43** to form a two-ply or double walled cross partition panel which may have the same outline as the panels **35**. With this form of cross partition the number of cells or compartments in the set up carrier may be varied as desired in multiples of two by increasing or decreasing the number of cross partitions and slits and the length of the carrier. The partitions **42** may have a snug fit within the slits **34** for holding them in their doubled position.

Modifications may be resorted to within the spirit and scope of our invention.

We claim:

1. A plural cell carrier formed of sheet material and

comprising a rectangular body including upright front, rear and end panels, a bottom wall comprising bottom panels hinged to the lower edges of the front and rear panels, partition panels hinged to the bottom panels and extending upwardly therefrom in juxtaposition and forming a medial partition dividing the carrier into front and rear compartments, said partition being extended upwardly above the body of the carrier and comprising means forming a handle for the carrier, an upright cross partition intermediate the ends of the carrier and extending substantially the full width of the carrier with the ends of the cross partition abutting the inner surfaces of the front and rear panels, and the bottom edge of the cross partition abutting the upper surfaces of said bottom panels, the medial partition being formed with a slot through which the cross partition extends, the slot in the medial partition extending from the bottom panels upwardly substantially the full height and depth of the cross partition, the upper edge of the cross partition being curved on an arc struck from the hinge of the medial partition at a radius substantially equal to the length of the slot in medial partition, and thereby permitting swinging movement of the medial partition relative to the cross partition to and from an upright

position, the cross partition having an interlocking connection with the said medial partition.

2. The article defined in claim 1, the cross partition being formed with a notch in its upper edge engaging the medial partition at the upper end of the slot when the medial partition is in its upright position and thereby forming said interlocking connection and locking the said medial partition in upright position.

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