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2,787,371

CONVERTIBLE DISPLAY CARTON

Filed Feb. 10, 1956

2 Sheets-Sheet 1

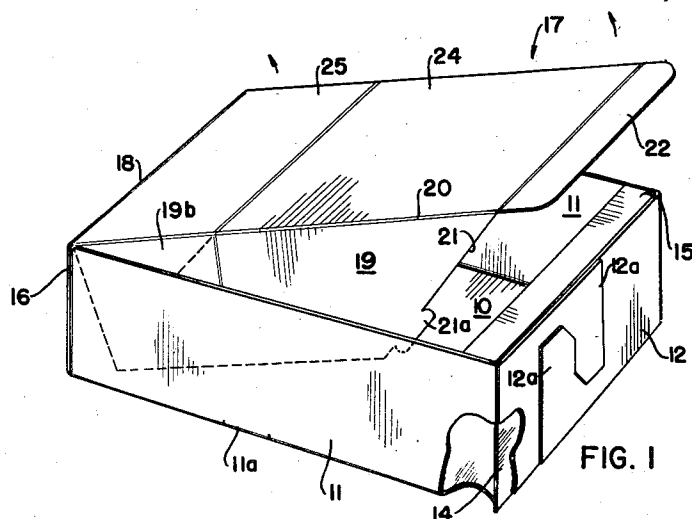


FIG. 1

FIG. 4

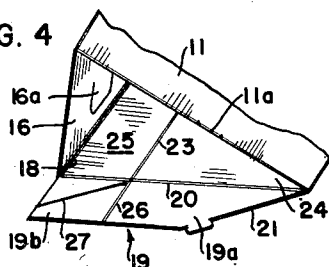
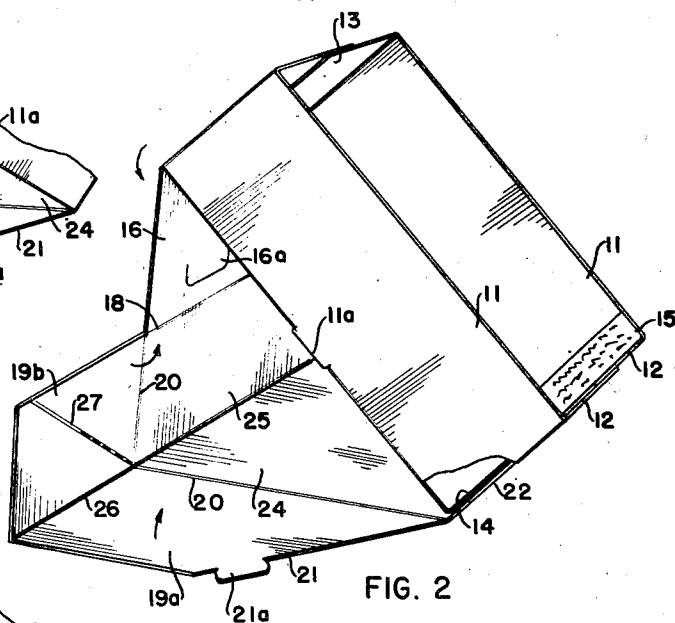


FIG. 2

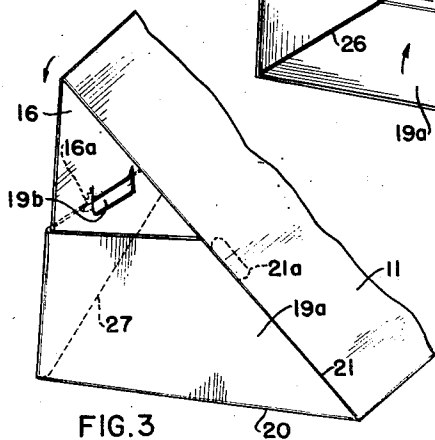


FIG. 3

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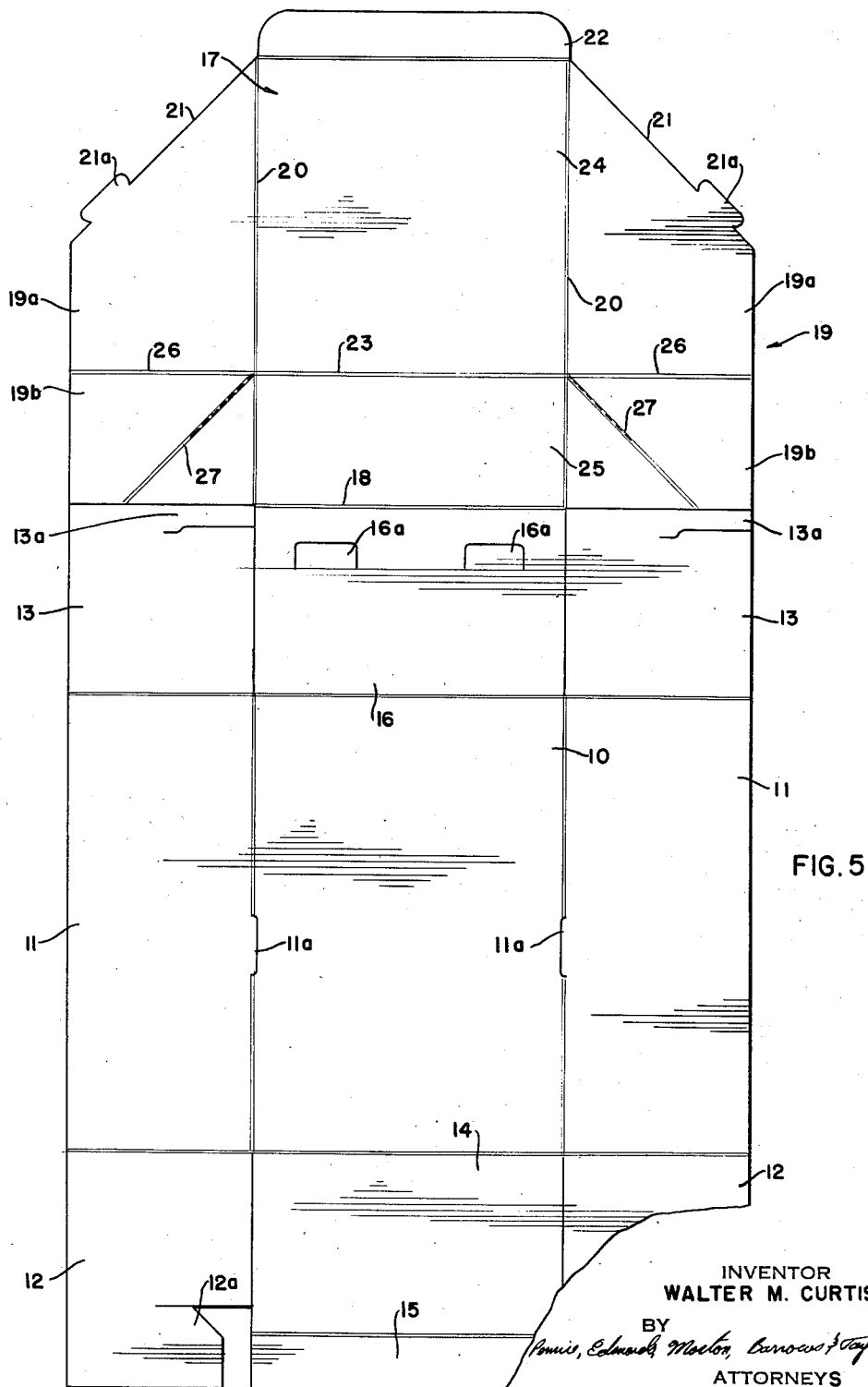
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CONVERTIBLE DISPLAY CARTON

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3 Claims. (Cl. 206—45.21)

This invention has to do with cartons for use in the shipment and display of merchandise for sale and is concerned more particularly with a carton formed with parts normally serving as walls of the carton and foldable to act as parts of an easel for supporting the carton in inclined position for display of its contents with its top open. The carton can thus be employed in the ordinary way for holding articles of various kinds during shipment with the articles well protected against damage, after which the carton may be set up without removal of its contents to lie supported on its easel on a counter or other supporting surface with the articles exposed. Some of the parts of the carton, which form the easel, provide additional wall thickness and thus afford additional strength to the carton structure. Also, the parts of the easel may be arranged in two different ways to hold the carton at different angles to the horizontal and thus exhibit its contents in a way suited to the nature of the contents.

For a better understanding of the invention, reference may be made to the accompanying drawings, in which:

Fig. 1 is a perspective view of the erected carton with parts broken away;

Fig. 2 is a perspective view of the carton showing the easel partially set up to hold the carton at steep angle;

Fig. 3 is a fragmentary perspective view of the carton with the easel completed and holding the carton at a steep angle;

Fig. 4 is a fragmentary perspective view of the carton with the easel set up to hold the carton at a low angle; and

Fig. 5 is a plan view of the blank from which the carton is made.

The blank for the new carton includes a bottom wall 10 and side walls 11 hinged to the side edges of the bottom wall along crease lines, the bottom being formed with cuts along its side edges defining openings in the bottom, which are closed in the blank by tongues 11a attached to the side walls. End flaps 12, 13 with locking tongues 12a, 13a are hinged to the ends of the respective side walls 11 and are adapted to be secured together by interlocking of their tongues to form end walls at opposite ends of the carton. An auxiliary end panel 14 is hinged to the front end edge of the bottom 10 between flaps 12, and a flap 15 hinged to the free edge of panel 14 along a crease line forms a display flap in the erected carton. An auxiliary end panel 16 is hinged to the opposite end edge of the bottom 10 between flaps 13, the panel having a width substantially the same as that of the flaps 13 and being formed with spaced tongues 16a extending toward its upper edge.

A cover 17 is hinged to the free end of panel 16 along a crease line 18 and side flaps 19 are hinged to the side edges of the cover along crease lines 20, the side flaps being of about the same width as the side walls 11 and having end edges 21, which lie at an angle to crease lines 20, and tongues 21a extending outwardly from edges 21. A tuck flap 22 is hinged to the free end of the cover 17.

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The cover 17 is divided by a transverse crease line 23 into a main section 24 and a connecting section 25. The side flaps 19 are also divided by crease line 26, which are continuations of crease line 23, into brace sections 19a and gusset sections 19b, the latter being subdivided by diagonal crease lines 27, which bisect the angles between crease lines 20 and 26 at opposite sides of the blank.

To erect the new carton, the side walls 11 and end panel 14 are folded into upright position, and the end flaps 12 and 13 are folded inwardly and the tongues 12a, 13a on the respective flaps are interlocked, so that the end flaps form the end walls of the carton with the auxiliary front end panel 14 locked inside of the end flaps 13. The back end panel 16 is now folded into upright position against the outer surfaces of end flaps 13. The side flaps 19 are folded inwardly to place their outer side edges within the side walls 11 and the cover is swung downward on the crease line 18 over the top of the carton with the flaps 19 entering the carton and lying against the inner surfaces of walls 11. Before the cover is fully closed, the display flap 15 is folded to horizontal position and the end tuck flap 22 on the cover is folded so that it may be inserted between the closed end wall flaps 13 and the end wall panel 14.

In the erected carton, the panels 14 and 16 and the end wall flaps 12 and 13 provide double end walls and the flaps 19 and side walls 11 form double side walls. In addition, the cover 17 is supported along its front edge by panel 14 and display flap 15 and along its side edges by flaps 19, which extend to and rest upon the bottom wall 10. By this construction, the carton is made strong and rigid so that it affords excellent protection against breakage or damage to merchandise during shipping.

To convert the carton at the point of use from a shipping carton to a display carton lying at a steep angle to the horizontal, the cover 17 and the end panel 16 are folded back along the crease line between the end panel and the bottom wall 10 to lie in a plane beneath the bottom wall at an angle to the latter. The side flaps 19 are then folded to extend outwardly from the cover and the cover and flaps are folded along crease lines 23, 26, so that the end panel 16 and the connecting section of the cover lie in a plane and the main cover section 24 lies at right angles to that plane. The end tuck flap 22 is then inserted between the end flaps 12 and end panel 14 and the side flaps 19 are folded along crease lines 20 and their gusset sections 19b are folded along the crease lines 27. The folding of the side flaps and gusset sections as described brings the inclined edges 21 of the flaps against the under surface of the bottom 10, so that the tongues 21a can be inserted into the openings in the bottom left by removal of tongues 11a. Also, the folding operation brings the upper edges of the folded gusset sections against the outer face of the end panel 16 and in position to be inserted beneath tongues 16a on the end panel. The easel is now complete and the carton rests upon main cover section 24 as a horizontal base and is supported by the brace sections 19a of the side flaps 19 and by the end wall panel 16 and the connecting section 25 of the cover lying in a vertical plane. With the folding back of the cover in the formation of the easel, the contents of the cover and the display flap, which carries price or other information, are exposed.

When it is desired to support the carton at a lower angle, the cover 17 and end wall panel 16 are folded back as a unit on the crease line between the panel and the bottom 10 and the cover is folded relatively to the end wall panel on the crease line 18, until the end flap 22 can be tucked between end wall flaps 12 and the end wall panel 14. The main section 24 and the connection section 25 of the cover lie in a horizontal plane and form the base of the easel, while the back end of the carton is held raised by the end wall panel 16. The side flaps 19

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are folded to extend outward from the cover and lie in the same plane and the inner surfaces of these flaps, which are exposed beyond the sides of the carton, may carry advertising matter.

The easel forms a sturdy and substantial support for the carton in both display positions. The panel 16 is attached to the bottom of the carton across one end and the carton is thus supported for display from beneath instead of depending from a part of the easel. The cover 17 may be used either wholly or in part as the easel base and, with the front end wall formed of flaps 13 and panel 14, the cover may be inserted between the two parts of the front wall at both the top and the bottom of the carton. Regardless of whether the easel is set up for high or low angle display, the front end of the base of the easel is held firmly in place by the flap 22 inserted between the parts of the front wall and the flap also holds the cover securely in place when the carton is in use for shipment of merchandise.

When the easel is set up for high-angle display, the end wall panel 16 and the connecting section 25 of the cover 17 are locked against relative movement by means of the folded gusset flaps 19b and tongues 16a. At the same time, the brace sections 19a of the side flaps engage the bottom wall 10 and are secured firmly in place by insertion of their tongues 21a in the openings through the bottom wall.

The parts used to form the easel or help it holding it set up are also useful, when the carton is used to ship merchandise. Thus, the end flaps 12, 13 and the end wall panels 14 and 16 provide double thicknesses of paper-board material at the ends of the carton and the side flaps 19 and side walls 11 provide double thicknesses of material along the sides of the carton. The side flaps are of such dimensions that, when they are inserted into the interior of the carton, their lateral edges rest upon the bottom, so the cover is supported throughout its length along both sides instead of at the ends only. The carton is, accordingly, of unusually rigid construction and affords excellent protection to fragile articles.

I claim:

1. A carton, which comprises connected bottom and side walls, pairs of end flaps connected to the front and rear end edges of the side walls and having interengageable means for connecting the flaps of each pair to form respective end walls, end wall panels connected to the front and rear ends of the bottom and with the connected pairs of flaps forming double end walls, a cover

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closing the top of the carton and having a connecting section hinged to the top edge of the rear end wall panel and a main section hinged to the front edge of the connecting section, the cover and the rear end wall panel being foldable as a unit about the rear end edge of the bottom to carton-supporting positions beneath the bottom, a tuck flap attached to the free end edge of the main section of the cover and insertable from above and below between the parts of the front end wall to hold the cover in both its carton-closing and carton-supporting positions, and side flaps at opposite sides of the cover with each side flap having a brace section hinged to the main section of the cover and a gusset section hinged to the connecting section of the cover, the side flaps being insertable inside the carton to lie along the side walls and rest upon the bottom and support the cover, the cover and rear end wall panel being foldable to form an easel with the main section of the cover serving as a base and connected by its tuck flap to the lower edge of the front end wall of the carton and the rear end wall panel and the connecting section of the cover lying in a vertical plane at an angle to the plane of the main section of the cover and with the brace sections of the side flaps folded relative to the cover to cause edges of the brace sections to engage the under surface of the bottom of the carton to support it and the gusset sections folded upon themselves to a position against the inner surfaces of the aligned rear wall panel and cover connecting section.

2. The carton of claim 1, in which the bottom has openings along its side edges and the brace sections have tongues projecting from their edges and insertable into the bottom openings to hold the brace sections in position to support the bottom.

3. The carton of claim 1, in which the rear end wall panel has spaced tongues and the upper edges of the gusset sections, when folded upon themselves, are receivable beneath the tongues to be held in erect position thereby.

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