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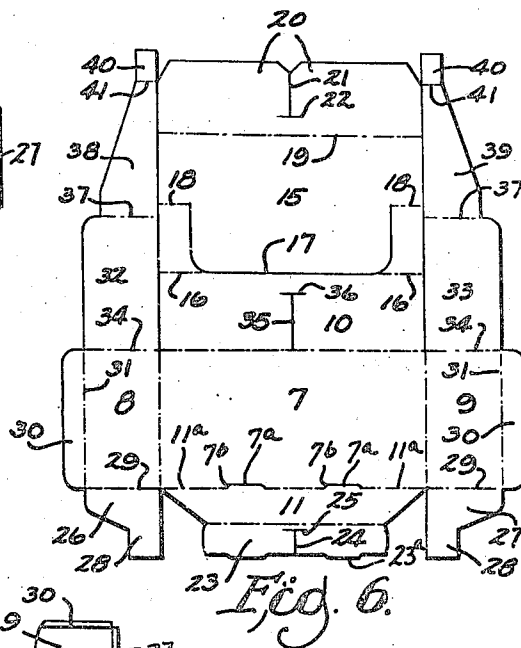
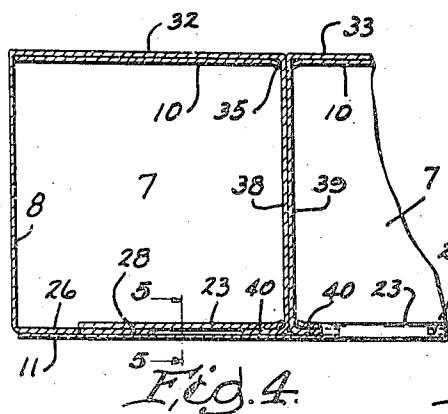
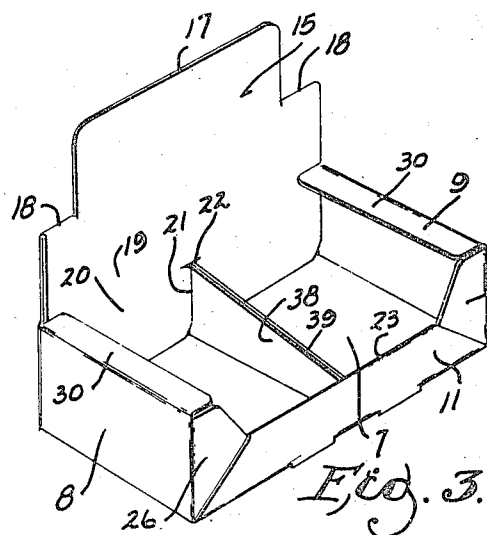
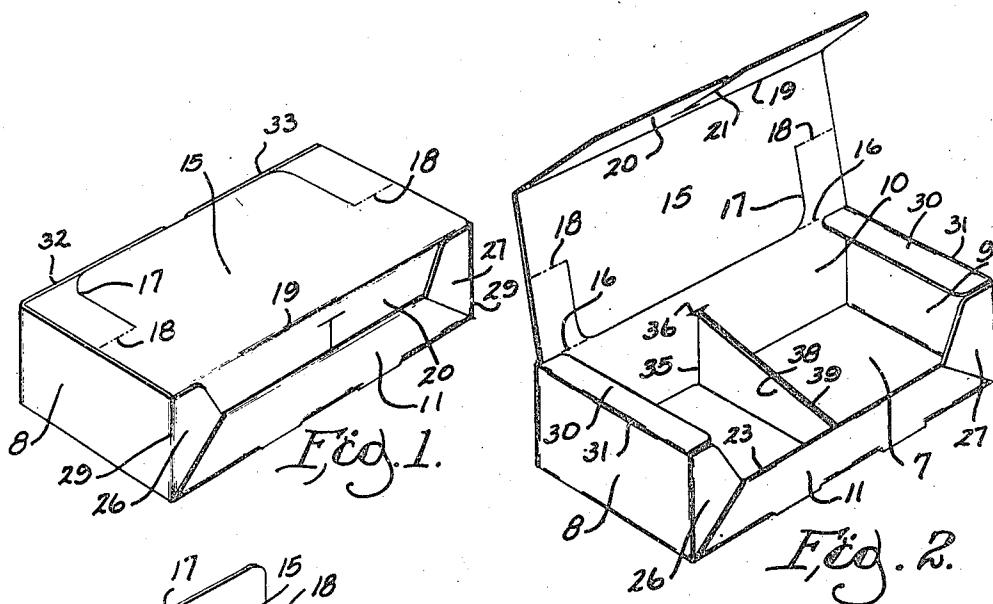
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2,457,291

CARTON AND DISPLAY STAND

Filed Feb. 10, 1945

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

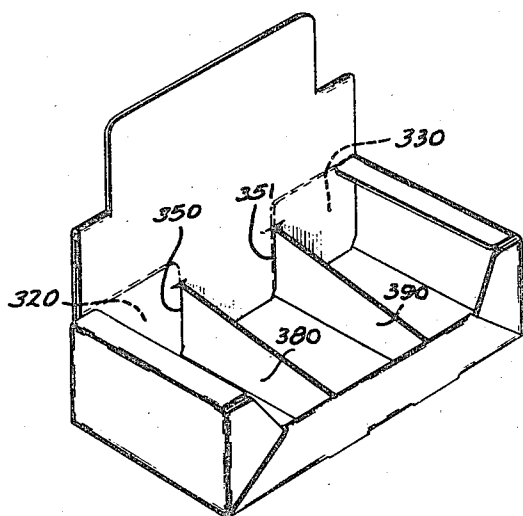


Fig. 7.

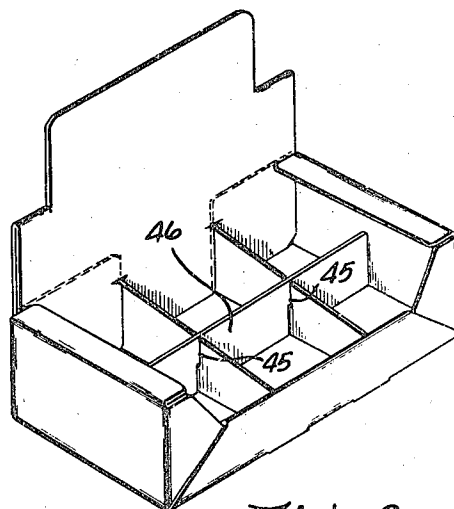


Fig. 8.

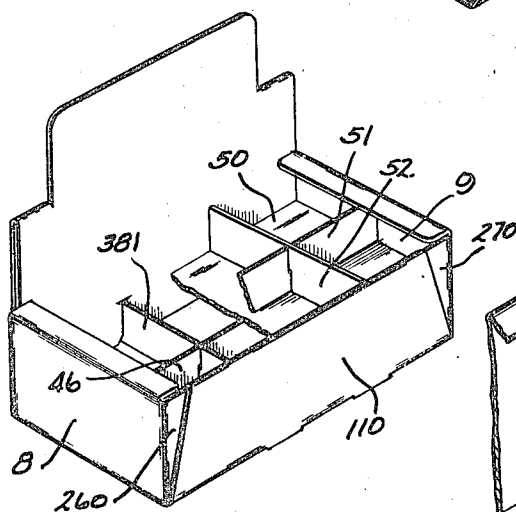


Fig. 9.

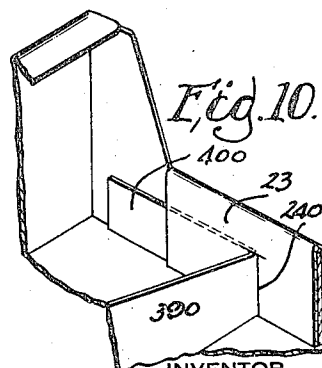


Fig. 10.

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CARTON AND DISPLAY STAND

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5 Claims. (Cl. 229—27)

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This invention relates to a carton and display stand.

It is a primary object of the invention to provide a novel and improved construction for a carton of the type which is convertible by a merchant to display the wares packed in the carton. More specifically stated, it is my purpose to provide a novel and improved means for interlocking the several parts of such a carton in a manner to provide a partition or partitions therein, in the course of carton erection; to provide novel and improved means by which the carton cover interlocks with other portions of the carton both in its closure position and in its display position, the cover serving as an advertising display medium when open; to provide a carton which may be cut in one piece from a compact blank involving little wastage of material; to provide a blank which may be printed or otherwise finished on but one face in an organization in which the face thus finished becomes substantially the only portion of the carton visible from the front when the carton is converted for use as a display stand; and otherwise generally to improve the interlocking organization and other features of a carton of the general type specified, as will hereinafter more fully appear.

In the drawings:

Fig. 1 is a view in perspective showing a closed carton embodying the invention.

Fig. 2 is a view in perspective showing in a raised position the open cover of the carton illustrated in Fig. 1.

Fig. 3 is a view in perspective showing the carton of Figs. 1 and 2 as it appears when converted to function as a display stand.

Fig. 4 is a view taken in horizontal section fragmentarily illustrating the carton shown in Fig. 3, portions thereof being shown in plan.

Fig. 5 is a fragmentary detail view taken in section on the line 5—5 of Fig. 4.

Fig. 6 is a plan view of the blank from which the carton shown in the remaining views may be erected.

Fig. 7 is a view in perspective showing a modified embodiment of the invention in which a number of partitions extending from front to rear are provided.

Fig. 8 is a view similar to Fig. 7 showing its further modified embodiment in which longitudinal as well as transverse partitions are provided.

Fig. 9 is a view similar to Fig. 8 showing a further modified embodiment in which the front wall is full height, the built-in partitions are horizontal along their top edges, and a false bottom is provided on which other partitions may be superposed.

Fig. 10 is a fragmentary detail view in perspective looking at the inside of the carton shown in Figs. 7 and 8.

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Like parts are identified by the same reference characters throughout the several views.

Referring first to the blank as illustrated in Fig. 6, it will be noted that the blank comprises a bottom panel 7, and panels 8 and 9, a rear panel 10, and a front panel 11, all defined by scoring to provide suitable fold or hinge lines. The front panel is partially severed from the bottom panel 7 by slits 1a slightly offset from the fold line 11a to which the ends of the slits are connected by short slit extensions 7b.

The cover panel 15 is connected to the rear wall panel 10 by spaced score lines 16, between which the material of the blank is completely severed by a U-shaped cut at 17 having a broad rectilinear bottom portion connecting the score lines 16 upon which the cover folds over the rear wall. The upper legs of the U-shaped cut 17 terminate substantially on the longitudinal center line of the top or cover 15 and from them extend in opposite directions along the center line score lines 18. Another score line at 19 defines the hinged connection with the cover panel 15 of the cover marginal flap 20 which is bifurcated by a slit at 21 terminating in a short cross slit 22.

The front wall 11 of the carton has a flap at 23 which is somewhat similar to the flap 20, although smaller both in length and width and provided, on each side of its central portion, with tongue-like extensions 23a. The central portion of flap 23 is bifurcated by a slot at 24 terminating in a short cross slit 25.

To the forward ends of the end walls 8 and 9 are connected the corner flaps 26 and 27, each of which is abruptly reduced in height to provide a terminal tongue at 28.

Score lines 29 define the hinged connection of the respective corner flaps 26, 27 with the end wall panels 8, 9.

To the top edges of the end wall panels 8 and 9 are connected narrow flange members 30, score lines 31 defining the hinged connection of flanges 30 with the end wall panels 8 and 9.

To the rear ends of the end wall panels 8 and 9 are connected the back reinforcing panel sections 32, 33 hinged to the respective end walls 8, 9, upon score lines 34. The length of the reinforcing panels 32, 33 is such that these panels are approximately half the length of the rear wall panel 10 so that each of the panels 32, 33, is capable of extending behind the rear wall 10 to the vicinity of the slit 35 in the rear wall; such slit terminating at its upper end in a short cross slit at 36.

In hinged connection with the respective reinforcing panels 32, 33 upon the score lines 37 are partition panels 38, 39, respectively. These panels preferably taper in width toward their free ends and are provided at such free ends with

anchor tabs 40 foldable on score lines 41 with respect to the partition panels 38, 39.

To erect the carton from the blank shown in Fig. 6 and above described, the rear wall panel 10 is folded vertically upwardly from the bottom panel 7. The end wall panels 8 and 9 are then turned upwardly at the ends of bottom 7 and the rearward extensions are manipulated behind the rear wall in such a manner that the tabs 40 are forced through the slit 25, followed by the partition panels 38, 39. The partition panels 38, 39 will thereupon extend forwardly from the slit 35 in the rear wall 10 to constitute a two-ply partition as best shown in Fig. 2 and Figs. 3 and 4. This will bring the reinforcing panels 32, 33 immediately behind the two end portions of the rear wall 10, substantially meeting at the center to provide a two-ply rear wall as best shown in Fig. 4.

The tabs 40 at the front ends of the partition forming panels 38, 39 will be spread in opposite directions and the front wall panel 11 will be folded upwardly against these and against the inwardly folded corner tabs 26, 27, as shown in Fig. 4. The flap 23 will then be folded inwardly against the inner faces of the tabs 26 of the corner flaps 26, 27 and the inner faces of the respective tabs 40, the slit 24 engaging over the two-ply partition comprising panels 38, 39 whereby frictionally to hold in its infolded position the flap 23 and to complete the erection of the carton. The extensions 23a will be tracked with the slits 17a, the latter being spread by the upward bending of the flap 11.

With the carton thus erected, the cover panel 15 may be folded on the hinge scoring 16 to close the carton, its flap 20 extending downwardly between the forward ends of flanges 30 and the adjacent corner flaps 26, 27. The central slit 21 which bifurcates the cover flap 20 will enable the flap 20 to be received over and frictionally to engage the partition comprising the plies 38, 39. It will be evident that if the back face of the blank, as viewed in Fig. 6, is decorated or finished either by printing or applying a finishing ply thereto, or in any other manner, all portions of the completed carton which are exposed in the closed position of the carton, as shown in Fig. 1, will have the desired finished appearance.

When the carton is converted to a display stand for the merchandising of its contents, the cover will be opened to the position shown in Fig. 2 and will thereupon be folded centrally upon itself on the score lines 18, the flap 20 now being flattened out and engaged in a perfectly flat position over the partition 38, 39 and against the inner face of the rear wall 10 of the carton. In this position, the portion of panel 15 defined by the slit 17 will stand erect, as shown in Fig. 3, above the fold lines 18 to constitute an advertising display of which the finished surface will extend the whole height of the display to the bottom 7 of the carton. In reaching the position shown in Fig. 3, the flap 20 will have to be passed between the rear wall 10 and the rear margins of the flanges 30 which project inwardly from the end walls 8, 9. Thus a secure interlock of those portions of the cover and its flap which comprise the display panel is provided in the display position as well as in the closure position of such cover.

The cross slits provided at 22, 25, and 35 tend to prevent tearing when the various interlocks are effected with the portions of the blank in which the respective slits 21, 24, and 35 are located.

Not only is the finished exterior surface of the

color panel and flap exposed forwardly in the display position shown in Fig. 3, but, as will be noted, the inwardly overhanging flanges 30, which have their upper surfaces finished, tend to obscure the unfinished inner surfaces of the end walls 8 and 9, while the fold provided between the front wall 11 and its flap 23 presents a finished surface across the front of the display so that all portions of the display readily visible are finished.

The partition means greatly reinforces the carton and also separates its contents into rows, thereby assisting in keeping the display neat as the articles therein are dispensed.

In the disclosures of the modified embodiments shown in Figs. 7 to 10, inclusive, a number of partitions are provided. Referring first to Fig. 7, it will be noted that instead of a single slit 35 in the rear wall, two spaced slits 350, 351 are provided. The reinforcing panels 320, 330 are sufficiently reduced in length to terminate at the respective slits 350, 351 and the partition panels 380, 390, instead of making a single two-ply partition, are brought through the respective slits to constitute separate partitions which may, as shown, divide the carton into thirds. Their anchor tabs 400 will be individually locked behind the flap 23 of the front wall, each being received in an individual slot 240 as shown in Fig. 10.

If desired, the partitions may be vertically slotted at 45 as indicated in Fig. 8 to receive one or more similarly slotted longitudinal partitions 46 whereby the area of the box is further compartmented.

In the construction shown in Fig. 9, the portions 260 and 270 of the carton are preferably the full height of the end walls 8 and 9, as is also the front wall 110. The partitions, in this construction, do not taper but have horizontal top edges as shown at 381. These simple changes from the construction previously described permit the partitions 381 and 46 to support a false bottom 50 upon which a further set of longitudinal and transverse partitions 51, 52 may be positioned. This arrangement obviously provides two layers of compartments where the box is adapted to receive articles of smaller size.

I claim:

1. In a carton, the combination with a tray portion having a bottom and front, rear and end walls, the rear wall having upright slit means, of rear reinforcing panels connected to the respective end walls and extending therefrom behind the rear wall toward said slit means, partition plies connected with said panels and extending through said slit means and forwardly across said bottom, and means interlocking the extremities of said partition plies with said front wall, the rear wall being provided with a cover panel in hinged connection therewith having at its free margin a slit terminal flap, said cover panel being transversely foldable substantially upon its longitudinal center line, and the slit portion of its flap being adapted for interlocking engagement with the partition plies.

2. In a carton, the combination with a tray portion having a bottom and front, rear and end walls, the rear wall having upright slit means, of rear reinforcing panels connected to the respective end walls and extending therefrom behind the rear wall toward said slit means, partition plies connected with said panels and extending through said slit means and forwardly across said bottom, and means interlocking the extremities of said partition plies with said front wall, the rear wall being provided with a cover panel in hinged con-

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nection therewith having a slit flap at its free margin, said cover panel being transversely foldable substantially upon its longitudinal center line, and the slit portion of its flap being interchangeably adapted for interlocking engagement with the partition plies both adjacent the rear wall and the front wall of the carton, whereby said cover panel is adapted to constitute both a closure for the carton and a display card for said tray portion, the end walls of the carton having flanges projecting inwardly from their upper margins and respectively terminating adjacent front and rear walls of the carton tray portion, the ends of said flanges cooperating with the front and rear walls of the tray portion to provide channels into which the cover flap is receivable in its respective closure and display positions.

3. A carton and display tray of the character described comprising the combination with a bottom panel and front and end wall and back panels in hinged connection with the bottom panel, said back wall having a slit, flanges on the upper edges of the end walls projecting inwardly therefrom, reinforcing panels in hinged connection with the rear ends of the end walls and lapping said back wall toward said slit, partition plies in hinged connection with the ends of the reinforcing panels and extending together through said slit and forwardly across said bottom toward the front wall panel, tabs at the free ends of the partition plies mutually divergent along the inner face of the front wall panel, corner flaps on the end wall panels folded inwardly within the front wall panel, a finishing flap in hinged connection with the upper margin of the front wall panel and folded inwardly toward the inner face of the front wall panel about portions of the respective corner flaps and about the tabs aforesaid, the finishing flap of the front wall panel having a central bifurcating slit opening to its lower margin and into which said partition plies are conjointly received, whereby said plies are held in face contact and said last mentioned flap is frictionally secured in interlocking engagement with said corner flaps and end tabs, together with a combination cover and display panel in hinged connection with the rear wall panel aforesaid and foldable on a longitudinal center line and provided at its free margin with a flap having a central bifurcating slit, said flap being receivable when said cover is folded between the rear wall panel and the rear ends of the respective flanges with its slit portion in frictional engagement with the respective partition plies, said flap being further engageable in a closure position of the cover panel between the forward ends of the respective flanges and the inner faces of the respective corner flaps, said panel in said closure position being unfolded and superposed upon said flanges to constitute a closure for the carton.

4. A carton and display tray of the character described comprising the combination with a bottom panel and front and end wall and back panels in hinged connection with the bottom panel, said back wall having a slit, flanges on the upper edges of the end walls projecting inwardly therefrom, reinforcing panels in hinged connection with the rear ends of the end walls and lapping said back wall toward said slit, partition plies in hinged connection with the ends of the reinforcing panels and extending together through said slit and forwardly across said bottom toward the front wall panel, tabs at the free ends of the partition plies mutually divergent along the inner face of the front wall panel, corner flaps on the end wall

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panels folded inwardly within the front wall panel, a finishing flap in hinged connection with the upper margin of the front wall panel and folded inwardly toward the inner face of the front wall panel about portions of the respective corner flaps and about the tabs aforesaid, the finishing flap of the front wall panel having a central bifurcating slit opening to its lower margin and into which said partition plies are conjointly received, whereby said plies are held in face contact and said last mentioned flap is frictionally secured in interlocking engagement with said corner flaps and end tabs, together with a combination cover and display panel in hinged connection with the rear wall panel aforesaid and foldable on a longitudinal center line and provided at its free margin with a flap having a central bifurcating slit, said flap being receivable when said cover is folded between the rear wall panel and the rear ends of the respective flanges with its slit portion in frictional engagement with the respective partition plies, said flap being further engageable in a closure position of the cover panel between the forward ends of the respective flanges and the inner faces of the respective corner flaps, said panel in said closure position being unfolded and superposed upon said flanges to constitute a closure for the carton, said cover panel having adjacent its respective ends score lines upon which it is foldable, said score lines being joined by a U-shaped slit extending from said score lines downwardly toward the carton rear wall, whereby, upon the central folding of said panel a portion thereof will be erected to stand above said score lines.

5. A box comprising the combination with front rear and end walls and a bottom, the rear wall being higher than the front wall and being provided with vertical slit means extending less than its total height, of reinforcing flaps connected with the end walls and extending behind the rear wall in supporting relation thereto, said flaps having partition extensions extending through the slit means and across the bottom of the box and having means interlockingly connecting them with said front wall and a cover connected with the rear wall and foldable over the box, said cover having a transverse fold line upon which it is foldable to stand erect at the rear of the box as a display, and a terminal flap on the cover provided with a slit marginal portion releasably engageable with the partition extensions of the reinforcing flaps in both positions of the cover aforesaid.

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