Feb. 12, 1952 M. I. WILLIAMSON 2,585,361

DISPLAY CARTON WITH COVER CONVERTIBLE TO EASEL

Filed Nov. 13, 1946

3 Sheets-Sheet 1

FIG. 1

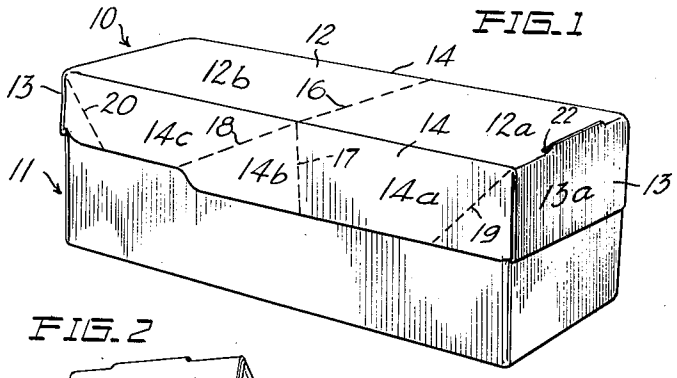


FIG. 2

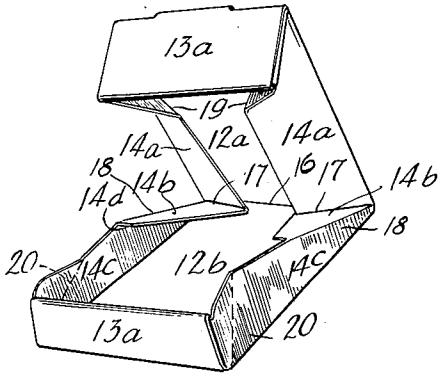


FIG. 3

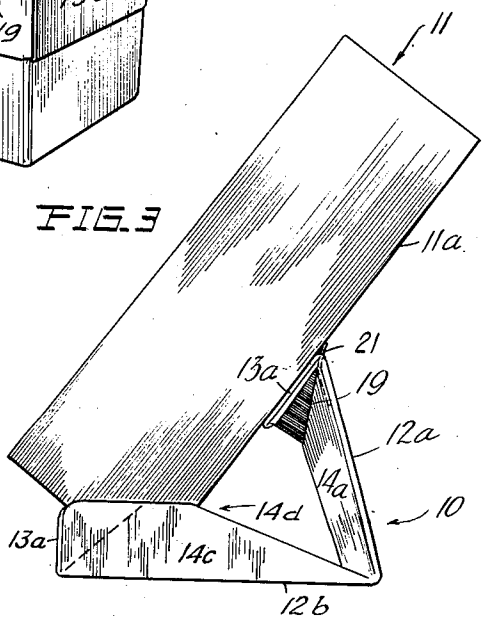


FIG. 5

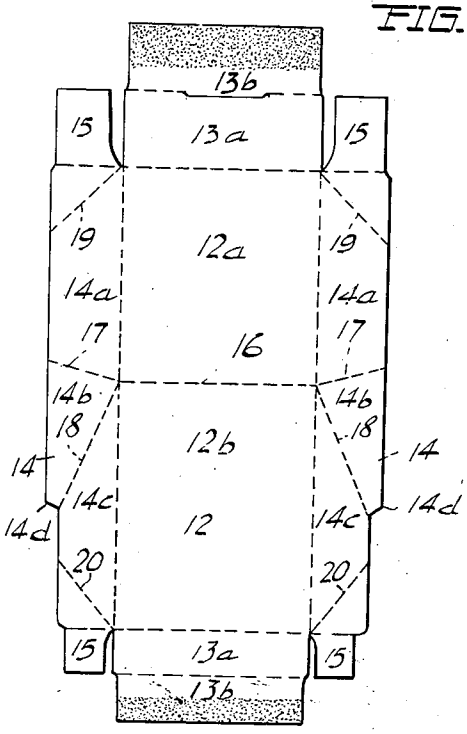
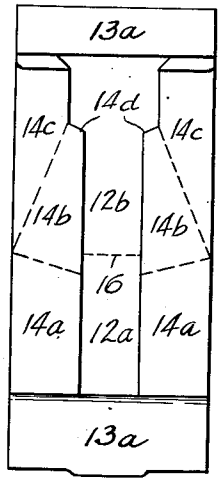


FIG. 4



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FIG. 6

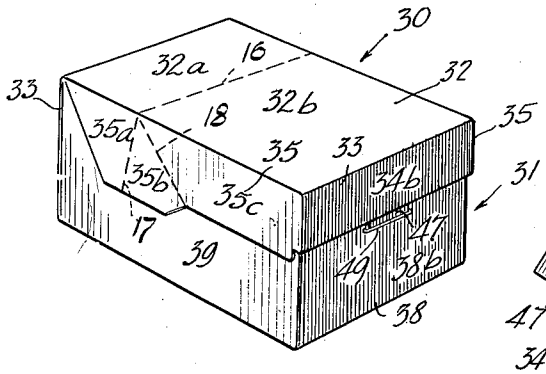


FIG. 8

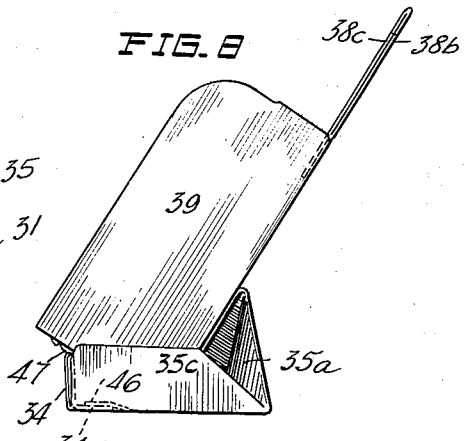


FIG. 9

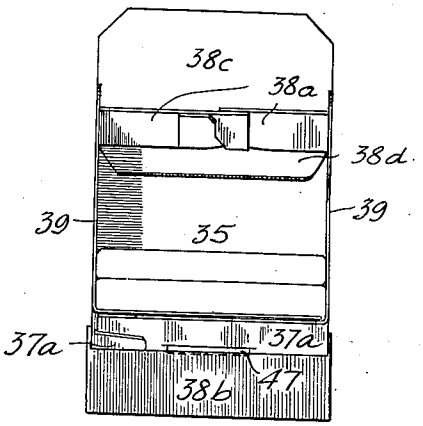
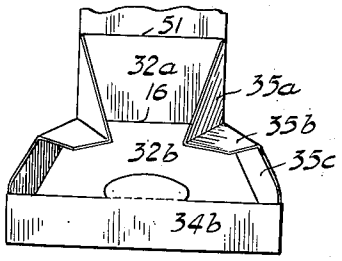


FIG. 10



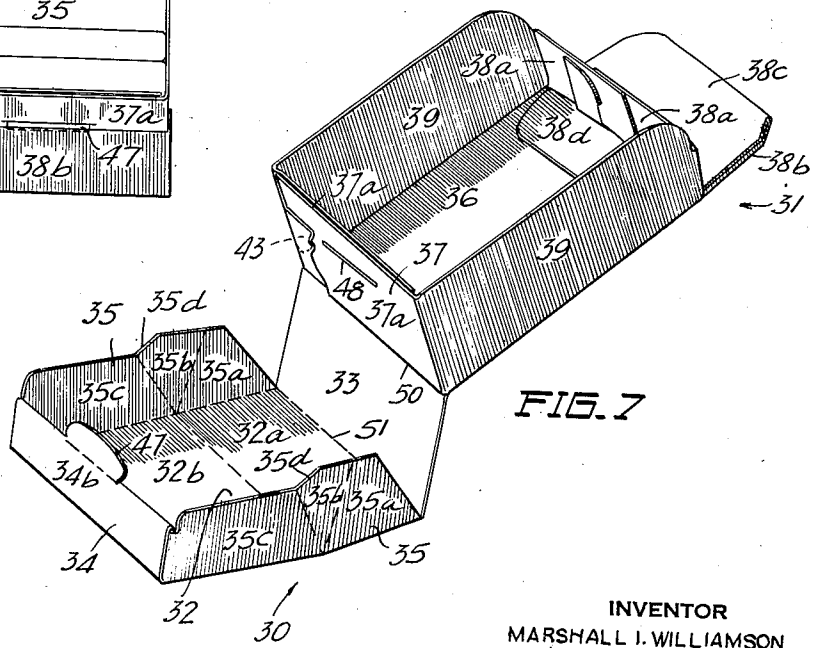


FIG. 7

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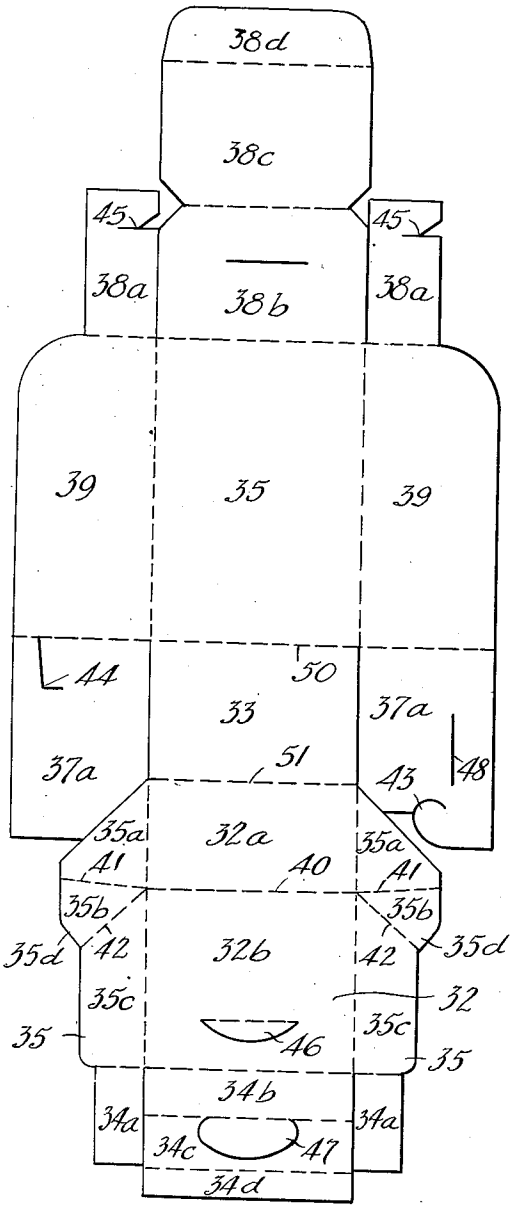
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FIG. 11



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DISPLAY CARTON WITH COVER CONVERTIBLE TO EASEL

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6 Claims. (Cl. 206—45.21)

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This invention relates to display boxes, and more particularly to covered display boxes wherein the covers thereof fold to form an easel for displaying the box and its contents.

Display boxes, pursuant to the invention may have their covers freely separable from the box proper or attached thereto, and, in either case, the covers may be unfolded from easel status and reused to again tightly close the boxes and protect the contents thereof.

An easel-forming cover, pursuant to the invention, is preferably produced from a properly cut and scored blank of foldable sheet material having sufficient rigidity to hold its shape and to support, in its folded easel-formed condition, the box to which it is applied. Ordinarily both the cover and the box will be formed from a blank or blanks cut from sheet paper box board by methods and automatic machinery common in the folding box industry.

An object of the invention is to provide cover structure for a display box such that it may be removed and folded to easel form as and when desired for the display of the box and its contents, and thereafter reused effectively to tightly close the box and again protect the contents.

An object is to provide easel-forming structure in such a cover which will be capable of firmly and securely supporting display boxes containing merchandise of very considerable weight.

An object is to provide easel-forming structure in such a cover whereby, when the cover is formed and in service as an easel to support the box in display position, a smooth, flat, bottom-surface, box-receiving base and sturdy box elevating standard are formed which will permit the box and easel to be slid about on a counter or table top.

A further object is to accomplish the above in a simple and economical manner.

A feature of the invention resides in the scoring of the cover transversely thereof, intermediate its ends, so that when portions of its sides collapse inwardly the cover is folded upon itself, to provide a box-receiving tray and coordinated box-supporting standard.

These and other objects and features of the invention will be more fully understood from the following detailed description of the preferred specific embodiments illustrated in the accompanying drawings, in which:

Fig. 1 is a perspective view of a covered display box pursuant to the invention;

Fig. 2 is an inside perspective view of the cover of the display box of Fig. 1 shown removed from the box and folded as an easel ready to mount the box in its display position;

Fig. 3 is a side elevation of the box of Fig. 1 mounted on its folded easel-forming cover for display purposes;

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Fig. 4 is a perspective view of the cover of the box of Fig. 1 as it appears in collapsed shipping and storage form;

Fig. 5 is an inside face view of the cut and scored blank used in the formation of the easel cover of the foregoing figures;

Fig. 6 is a perspective view of another embodiment of covered display box pursuant to the invention, the covering being jointed to the box proper at one of its ends;

Fig. 7 is a view illustrating the cover of the embodiment of Fig. 6 removed from its box and in the stage of being folded to box-supporting easel formation;

Fig. 8 is a side elevation of the box of Fig. 6 mounted on its folded easel for display purposes;

Fig. 9 is a front elevation of the mounted display of Fig. 8;

Fig. 10 is a fragmentary front elevation of the easel as it appears with the box removed; and

Fig. 11 is an inside face view of the cut and scored blank used in the formation of both the box and easel cover of this second embodiment.

Referring to the drawings: the embodiment of Figs. 1 through 5 is representative of the type of covered display box, according to the invention, in which the cover is formed separate from the box proper.

As illustrated, the cover 10 is made up from the cut and scored blank of paper box board shown in Fig. 5. The box proper 11 may be of any conventional construction, except for the provision of a tab at its bottom for interengagement with a corresponding slot in the cover when the carton is set up into display position.

The cover 10 has a top wall 12, opposite end walls 13, 13, and side walls 14, 14. In certain respects it is of conventional construction. Thus, the end walls 13, 13 are formed by first folding the side wall panels 14, 14 of the blank of Fig. 5 upwardly relative to the top wall panel 12, and by folding the respective end tabs 15, 15 and 15, 15 inwardly so that those of a set are directed toward each other; then by folding the sets of end wall panels 13*a*, 13*b* and 13*a*, 13*b* upwardly and over the respective sets of upstanding end tabs 15, 15 and 15, 15, followed by gluing or other securement of the end wall panels 13*b* and 13*b* against their respective sets of end tabs and end wall panels 13*a* and 13*a*. The cover is now in the set-up condition shown in Fig. 1 as applied to the box 11.

For enabling the cover 12, constructed in the foregoing manner, to be folded into easel form for the reception and support of the box 11, the blank of Fig. 5 is scored transversely thereof intermediate its ends.

As illustrated, a score 16 extends transversely of the top panel 12 intermediate the ends thereof, dividing such panel into a supporting-standard

section 12a and a tray section 12b. Further, sets of angularly related scores 17, 18 and 17, 18 extend transversely of the respective side wall panels 14, 14, as branch continuations of the score 16; thereby dividing such side wall panels into inwardly collapsible or bellows fold panel sections 14a, 14b and 14a, 14b, respectively, and into tray side wall panel sections 14c and 14c, respectively.

It is advantageous, too, that sets of diagonal scores 19, 19 and 20, 20 be provided transversely of the side wall panels 14, 14, respectively, and adjacent their ends, for enabling the cover 10 to collapse into relatively flat shipping and storage condition, as and when required, the scores 19, 19 having a further function, explained hereinafter.

In folding the cover 10 to the box-receiving and box-supporting easel formation of Fig. 2, the cover is removed from the box and the as yet unbroken scores 16, and 17, 17 and 18, 19 broken. The cover is folded inwardly on the transverse score line 16 of its top wall panel, portions of its side wall panels collapsing inwardly on the branched score lines 17, 18 and 17, 18, forming bellows folds, as shown.

Accordingly, it is seen that the cover, as folded, presents a tray portion for receiving the lower end of the box 11, and a supporting-standard portion, which stands up and is forwardly inclined relative to the tray portion, for supporting the body proper of the box 11 in the inclined display position illustrated in Figs. 3 and 4.

The diagonal score lines 19, 19, it should be noted, provide for another set of bellows folds at the ends, respectively, of inwardly collapsible side wall panel sections 14a, 14a adjacent the corresponding end wall 13 of the cover, and permit such end wall to incline inwardly of the easel structure, forming an appropriately inclined plane as a rest for the box 11.

In Fig. 5 it is seen that the side wall forming panels 14, 14 of the cover blank are indentured from the outer termini of the branch score lines 18, 18 to the adjacent ends of such panels, thereby providing shoulders 14d, 14d against which the box 11 rests in display position, see Fig. 3. These shoulders serve to guide the box 11 into proper position within the tray portion of the cover, whereby the weight of box and contents rests directly upon the base panel of the tray and is supported by the table or counter structure on which the display is erected. Such shoulders serve also to maintain the box at a display angle, which is predetermined as desired by the location of the several score lines on which the cover is folded. Thus, the box and contents is maintained tilted in substantial equilibrium, with the weight directed almost entirely upon the supporting surface upon which the erected display stands.

It is desirable that the box 11 be provided with anchoring means for temporarily securing it in inclined display position. To this end, a downwardly directed flap 21 extends outwardly from the bottom wall 11a of the box and is advantageously inserted in a receiving slot 22, preferably provided in the supporting-standard section 12b of the top wall panel 12 adjacent the corresponding end wall 13 of the cover. The anchor flap 21 may conveniently be a part of the bottom wall 11a of the box, the same being marked by perforate lines and pushed out for use at the time of making the box ready for display, see Fig. 4, and, while it is good practice to provide the receiving slot 22, it is not necessary. Anchor flap 21 may merely hang over the back wall 12a.

If, for any reason, it is desired to remove the box 11 from its display position before the merchandise therein is expended, the cover 10 thereof may be unfolded into the set up condition of Fig. 1 and applied as originally, thereby again tightly closing the box and protecting the contents.

The embodiment of Figs. 6 through 11 is representative of the type of covered display box, according to the invention, in which the cover is hinged to the box and is not separable therefrom.

In Fig. 6, the cover 30 is shown in place on the box 31. Both the cover and the box are formed from the single cut and scored blank of Fig. 11, and are, therefore, inseparable.

The cover comprises the top wall 32, opposite end walls 33 and 34, and opposite side walls 35, 35, while the box comprises, see Fig. 7, bottom wall 36, opposite end walls 37 and 38, and opposite side walls 39, 39.

The blank of Fig. 11 is cut and scored to provide cover top wall panel 32, which is divided intermediate its ends by a transverse score 40 into a supporting-standard section 32a and a tray section 32b; cover side wall panels 35, 35, which are divided, respectively, intermediate their ends, by respective sets of branched scores 41, 42 and 41, 42, into respective sets of inwardly collapsible or bellows fold panel sections 35a, 35b and 35a, 35b, and into respective tray side wall panel sections 35c, 35c; the combined hinge panel and cover end wall panel 33; cover end wall tabs 34a, 34a, panels 34b and 34c, and friction locking flap 34d; box bottom wall panel 36; opposite box side walls panels 39, 39; interlocking box end wall supporting panels 37a, 37a; and the interlocking box end wall supporting panels 38a, 38a, end wall panel sections 38b and 38c, and friction locking flap 38d.

Certain of the parts of the blank are cut for interlocking purposes. Thus, the box end wall supporting panels 37a, 37a are provided, one with a tongue member 43, and the other with a cooperating slit 44. Likewise, the bond end wall supporting panels 38a, 38a are provided with mutually similar open-mouthed slits 45, 45, respectively. A tongue 46, directed toward the cover end wall panel members 34 may be provided for receiving and retaining the locking flap 34d.

In setting up this blank of Fig. 11, the scores are broken, so that the various parts will readily fold together. The box end wall supporting panels 37a, 37a are interlocked, as shown in Fig. 7, as are, also, the box end wall supporting panels 38a, 38a. The cover and wall panel sections 34b and 34c are folded over the upstanding and inwardly directed end wall tabs 34a, 34a, and locking flap 34d is inserted under the tongue 46, see Fig. 8. End wall panel 38c is folded over against panel 38b and upwardly against the interlocked supporting panels 38a, 38a, see Fig. 7.

At the stage illustrated in Fig. 7, the box 31 is about to be placed in inclined display position, with its lower end resting in the tray portion of the cover 30. Such display position is illustrated in Fig. 8, the end wall 38 being pushed backwardly as a display panel presenting display matter suitably imprinted or otherwise applied to the exposed face of panel 38c. The box 31 rests against and is partially supported by shoulders 35d, 35d, Figs. 7 and 11. As in the prior embodiment, anchor means are advantageously provided to positively retain the box in this display position. For this purpose, a tongue 47 is cut in cover end

wall panel 34*c*, its base substantially coincident with the score line separating the two cover end wall panels 34*b* and 34*c*, so that it projects upwardly, as the stage of Fig. 7, for insertion in a receiving slit 48 (formed in one of the box end wall supporting panels 37*a*) at the final stage of Fig. 10.

The same anchoring tongue 47 serves to retain the covered box of Fig. 6 closed, by insertion thereof within a slot 49 formed in the box end wall panel 38*b*.

The panel 33 serves, as can be easily seen, as a hinge member joining the lower end of the box 31 to the cover 30, the hinge action occurring along the score lines 50 and 51 which partially define such panel. The panel serves, too, as one of the end walls of the cover, and as a part of the supporting-standard portion thereof when the cover is folded into the display condition.

The cover may be folded into display position and back into protective cover position as desired, and the entire structure may be unfolded, if necessary, into flat shipping and storing condition.

Whereas this invention has been illustrated and described with respect to preferred specific embodiments thereof it should be understood that various changes may be made in said embodiments and various other embodiments may be produced by those skilled in the art without departing from the spirit and generic purview of the invention as defined by the following claims.

I claim:

1. A display container, comprising a box for the retention of merchandise, and a folding cover normally closing said box but adapted, when removed, to provide an easel support therefor, said cover being formed of shape retaining foldable sheet material cut, scored, and folded to provide a top wall, opposite side walls, and opposite end walls, the said top wall of the cover being scored transversely between the said side walls and intermediate the said end walls to fold inwardly upon itself, and the said side walls being scored transversely adjacent the said scoring of said top wall and along lines which converge from the outer margins of the respective side walls to meet with the respective terminations of said scoring of the top wall to define respective bellows folds which collapse inwardly when said top wall is folded, one portion of said cover becoming a tray for the reception of the lower end of said box, and the other portion thereof becoming a standard for supporting the body of said box in an inclined display position, one end wall of said cover being hinged freely, relative to the side walls, on its line of joinder with the top wall, and being joined to one end of the box, adjacent the bottom thereof, along a substantially similar line of hinge joinder.

2. Folding structure formed of shape retaining foldable sheet material and capable of use both as a box cover and as an easel support for mounting a box in display position, comprising a substantially rectangular main cover panel; a pair of opposite side walls and a pair of opposite end walls depending from said cover panel and joined to provide a substantially continuous peripheral wall structure; a transverse line of fold extending across said main cover panel intermediately of and substantially parallel with said end walls, dividing said main cover panel into a box-receiving base portion and a box-elevating standard portion; respective pairs of fold lines

branching outwardly from opposite ends of said transverse line of fold and extending angularly across said side walls to define respective inwardly folding bellows folds, one of the branch fold lines of each of said pairs lying within the box-elevating standard portion of the cover, and the other lying within the box-receiving base portion of the cover and extending deeply thereinto, defining respective elongate bellows fold portions which terminate in shoulders adapted to buttress the bottom of the box in its display position; and respective diagonal fold lines extending across the said side walls from those corners of said box-elevating standard portion which lie remote from said transverse line of fold, to define respective inwardly folding bellows folds thereat.

3. The combination recited in claim 2, wherein respective diagonal fold lines extend across the said side walls from those corners of said box-receiving base portion which lie remote from said transverse line of fold, to define respective inwardly folding bellows folds thereat.

4. A combination display box and easel-forming cover therefor formed of shape retaining foldable sheet material, comprising a bottom wall panel, a pair of opposite side wall panels, and opposite end wall components making up a box for the retention and display of merchandise; a top wall panel, a pair of opposite side wall panels, and an end wall panel making up a cover for said box; an end wall panel hinged in common between the bottom panel of said box and the top wall panel of said cover, opposite the said end wall panel of said cover; a single transverse line of fold extending across said top wall panel intermediately of and substantially parallel with the ends thereof, dividing said top wall panel into a box receiving base portion and a box-elevating standard portion; and respective pairs of fold lines branching outwardly from opposite ends of said transverse line of fold and extending angularly across said side walls to define respective inwardly folding bellows folds, whereby the cover may be set up as an easel for supporting the box in display position.

5. The combination recited in claim 4, wherein the said opposite end wall components of the box include pairs of interlocking flaps.

6. The combination recited in claim 4, wherein one of the branch fold lines of each pair lies within the box-elevating standard portion of the cover, while the other branch fold line of each pair lies within the box-receiving base portion of the cover and extends deeply thereinto defining respective elongate bellows fold portions which terminate in shoulders adapted to buttress the bottom of the box in its display position.

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