Jan. 9, 1940. H. G. HALL 2,186,170

COMBINATION SHIPPING AND DISPLAY CONTAINER

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FIG. 1.

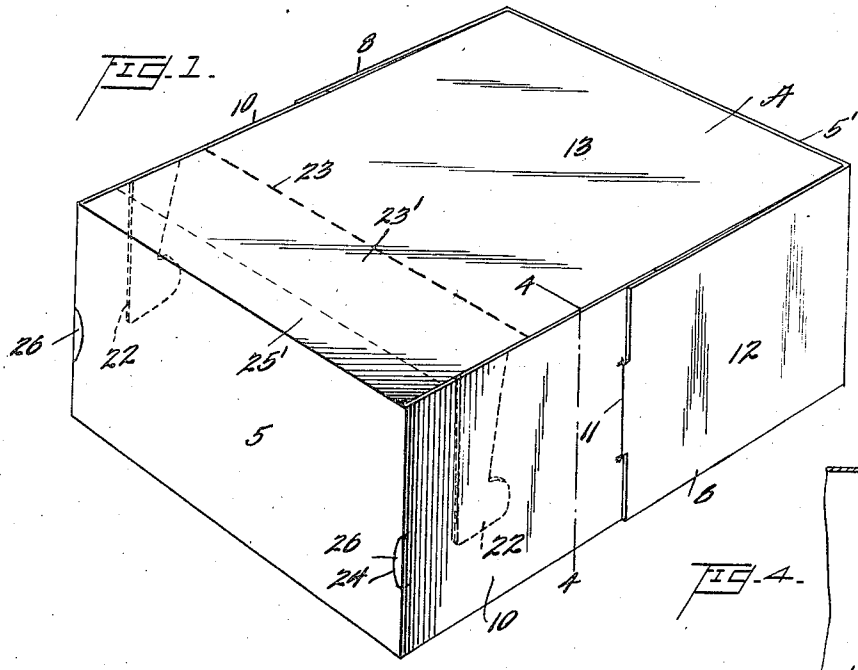


FIG. 4.

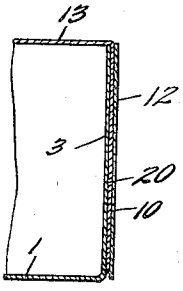


FIG. 2.

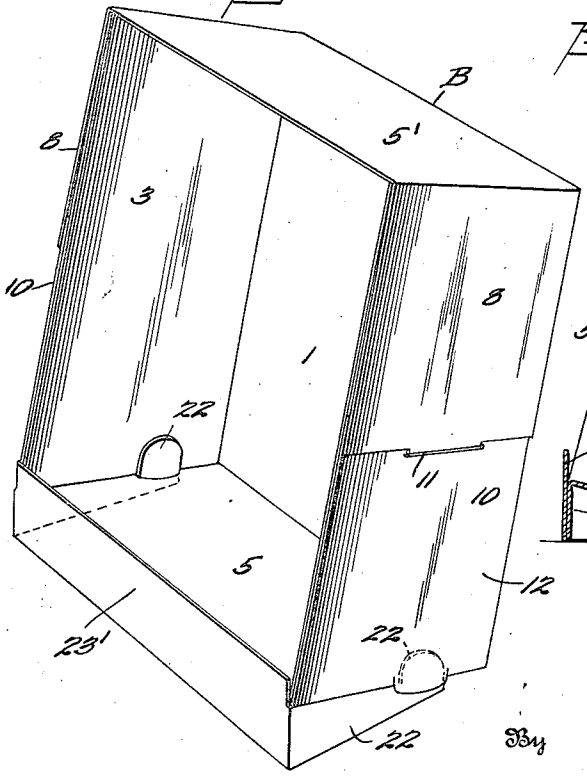
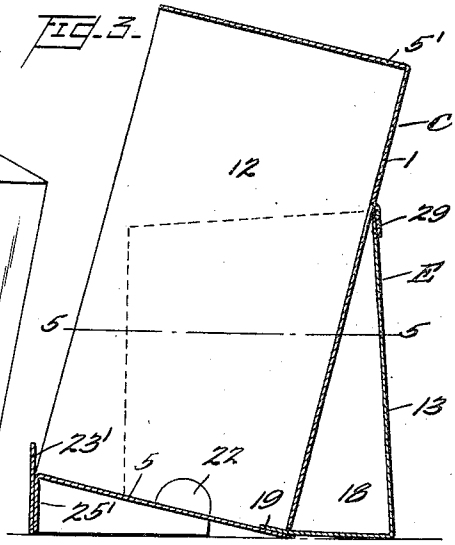


FIG. 3.



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FIG. 5.

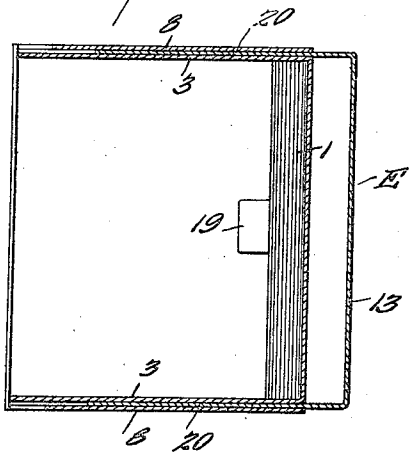


FIG. 6.

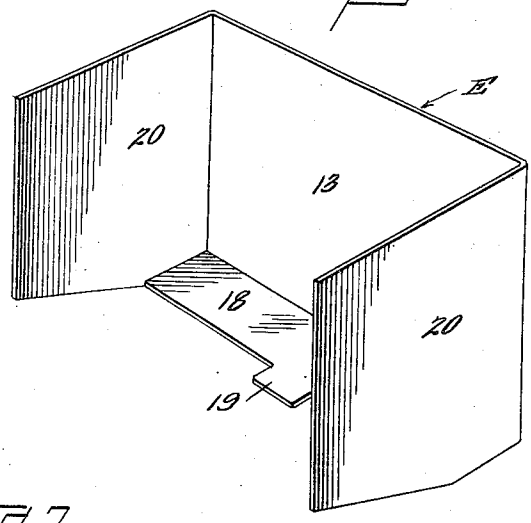


FIG. 7.

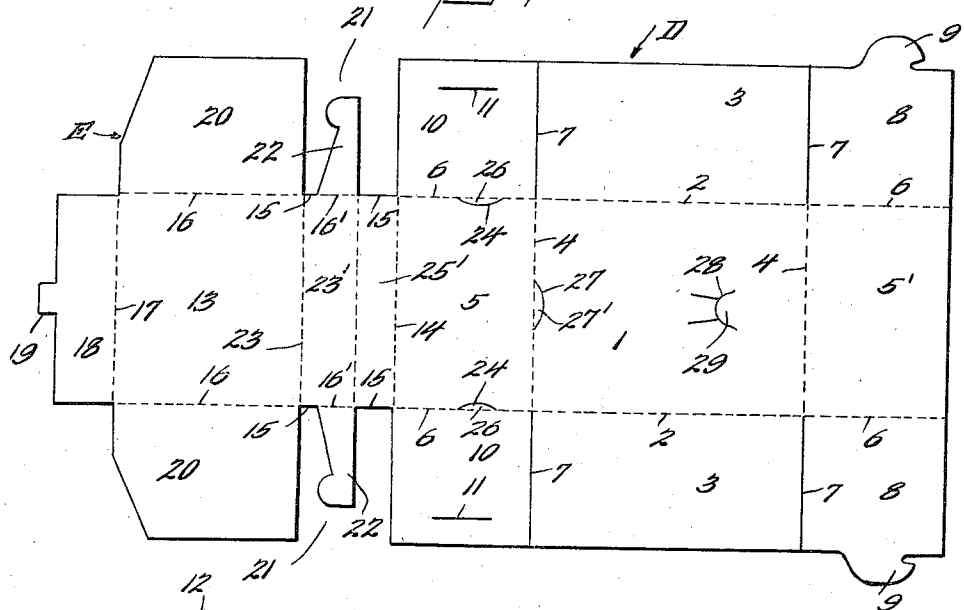


FIG. 8.

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COMBINATION SHIPPING AND DISPLAY CONTAINER

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Application April 30, 1937, Serial No. 140,027

5 Claims. (Cl. 206—44)

Generically this invention relates to foldable containers of the knockdown type, but it more especially is directed to such containers adapted to be used as a shipping container and thereafter as a display medium for its contents.

One of the principal objects of this invention is the provision of a foldable knockdown shipping container constructed from a one-piece cardboard blank and foldable to provide means for supporting the container in a manner to display the contents when positioned upon a store counter or other supporting medium.

Another important object of this invention is the provision of a foldable combination shipping and display device formed from a one-piece blank having portions constituting an operative portion of the container when used for shipping purposes and foldable to provide a base for supporting the container in tilted position when being utilized as a display container.

A further important object of this invention is the provision of a convertible shipping and display container formed from a one-piece blank comprising a minimum of material, simple in its folding and locking arrangement, a portion of the top adapted to form an easel member to support the container in tilted display position.

A further important object is the provision of a knockdown shipping container and display carton constructed from a one-piece blank having foldable easel portions constituting an operative part of the box when employed as a shipping container, a portion of the top member being severable, the remaining top portion having interlocking latch portions and adapted to support the container in tilted display position, and the severed portion adapted for interlocking engagement with said container to provide an extending easel base to support the container in stable position when the contents are of a heavy nature.

A still further object is the provision of a knockdown foldable container of this character formed from a one-piece blank so designed as to present a simple folding arrangement and to effect a saving in material, and to provide a selective easel supporting arrangement depending upon the nature of the particular contents to be displayed.

With these and other objects in view, which will become apparent as the description proceeds, the invention resides in the construction, combination and arrangement of parts, hereinafter more fully described and claimed, and illustrated in the accompanying drawings, in which like characters of reference indicate like parts throughout the several figures, of which:

Fig. 1 is a perspective view of the box embodying a preferred form of the box.

Fig. 2 is a perspective view of the container or box illustrated in display position.

Fig. 3 is a vertical section through the box as shown in Fig. 2.

Fig. 4 is a sectional view taken on the line 4—4 of Fig. 1.

Fig. 5 is a sectional view taken on the line 5—5 of Fig. 3.

Fig. 6 is a perspective view of the detachable portion.

Fig. 7 is a view of the blank form from which the box and cover are formed.

Fig. 8 is a reduced top plan view of Fig. 1, showing formation of lip portion.

Boxes of this general type with which I am familiar have proven deficient in many respects, such as being formed from more than one blank, and, where formed from one blank, being of complex and cumbersome foldable construction, and where portions are utilizable as supporting mediums it being difficult to position the supporting means, such portions being unsatisfactory in supporting the container in display position when the contents are of a heavy nature, and presenting a cumbersome appearance; and it was to overcome such deficiencies and to provide a knockdown shipping container and display device constructed from a one-piece blank, of simple foldable arrangement, so designed that a portion of the top is foldable and rigidly secured to support the box as a display container, a portion of the top section being severable and adapted to be employed as a bracing and supporting member to cooperate with said first mentioned supporting element to increase the supporting base area and maintain the carton in stable position when functioning as a display container for heavy contents, that I designed the device forming the subject matter of this invention.

In the illustrated embodiment characterizing this invention there is shown a shipping box or receptacle A, selectively convertible into the display containers B and C, and formed from a one-piece blank D developed in accordance with Fig. 7.

Fig. 7 illustrates a blank substantially rectangular in shape and comprises a bottom section 1 bounded by score lines 2 extending lengthwise at a distance from the outer edges of the blank equal to the desired depth of the box and forming auxiliary sides 3 and transverse score lines 4

forming end sections 5 and 5'. At the ends of end sections 5 and 5' are score lines 6 and at right angles to score lines 6 are cuts 7 forming, respectively, side sections 8 formed with locking tabs 9 and side sections 10 formed with slots 11 adapted to interlockingly receive tabs 9 to form the sides 12 when the sections are brought into operative relation as will hereinafter more fully appear.

Top section 13 is hinged to the upper end of section 5 along score line 14 and is bounded by cuts 15 and score lines 16 and 16' forming continuations of score lines 6, and transverse score line 17 forming end flap 18 formed with locking tongue 19. Said score lines 16 define side flaps 20, the formation of side sections 10 and side flaps 20 being completed by cut out portions 21 forming elongated locking tabs 22.

The top section 13 is formed with a transverse line of perforations 23, at which point easel member E is adapted to be severed when it is desired to convert the container into a display device. The top 13 in addition to easel member E comprises easel section 25' connected by hinge line 14 to end 5 and to the easel panel section 23' formed with the elongated tabs 22 foldable with respect thereto on score lines 16'. End section 5 connected to section 25' is cut as at 24 to receive the elongated locking tabs 22 and which forms reinforcing ears 26. Bottom section 1 is similarly cut as at 27 to receive tongue 19 and to form ear 27', and at 28 to form anchor tab 29 engageable with the detached edge of easel section E, as and for a purpose directly more fully appearing.

With further reference to the construction of receptacle "A", it will be observed that the arrangement of side walls 3 and 12 not only provides a space for concealing and holding in place the side flaps 20 and elongated tabs 22 when the top 13 is in closed position, but effects a reinforced side structure, which is increased by the insertion of side flaps 20 and tabs 22, during handling of the container. It is evident that such arrangement tends to strengthen and add stability to the container, at the same time tending to prevent collapse thereof during shipment and handling.

The facility with which a box may be constructed from a single blank according to my invention, as above outlined, is at once apparent. The pattern as clearly shown in Fig. 7 can be easily and quickly cut and owing to the few necessary score lines the entire preparation preparatory to putting the blank in condition for setting up a completed box requires but a minimum expenditure of time and labor.

After the blank has been prepared as shown in Fig. 7 to erect the box it is only necessary to raise auxiliary side sections 3 to perpendicular position, then raise end 5 with side sections 10 overlying auxiliary sides 3 and bring the remaining end 5' to erect position and insert locking tabs 9 in slots 11, which forms sides 12, and raise top 13 which is hinged as at 14, and in closing said top insert tabs 22 and side flaps 20 between auxiliary sides 3 and sides 12 and insert end flap 18 in the container, whereupon the box is assembled in erected position in the form used for shipping purposes, as illustrated in Fig. 1.

When it is desired to display the contents of the box or container A and to convert it into a display carton B, it is only necessary to sever section E along perforated line 23 and fold easel section 25' rearwardly on score line 25 and bring it into overlying relation with respect to said section 25, which projects said sections outwardly beyond end 5 at the upper or open edge of the container, and insert locking tabs 22 in slots 24, whereby ears 26 tend to grippingly contact the outer surfaces of said tab members and constitute reinforcing elements to assist in maintaining said easel support in rigid position.

It is therefore apparent that when the box is positioned with said easel on a counter or other supporting medium, said box will be maintained in stable tilted position to display its contents, as above referred to. It will also be noted that easel section 23' when in such folded position extends upwardly above the end 5, which is now the bottom, providing a ledge adapted not only to retain the contents within the container but effects a panel portion concealing the lower edge of the container and affording a space for carrying the advertisement of the product which is packed in the box.

In this connection, if desired, the blank may be prepared with the perforations of line 23 extending inwardly from line 16 only to full lines 30, Figure 8, said full lines representing cut lines to form the lip 31 constituting a continuation of panel 23' and providing an additional space for advertising purposes.

In cases where the contents of the shipping container are of a heavy nature and/or to provide a more substantial and increased easel supporting base structure, it is only necessary to take section E severed at line 23 insert tongue 19 in slot 27 and side flaps 20 between sides 12 and auxiliary sides 3 and insert the upper or severed edge under anchor tab 29, whereupon an increased supporting base area and bracing structure at the rear of said folded container is effected. The bottom section 18 being in the same plane and cooperating with the tilt easel supporting base portion forms an extended display container supporting base, as will be apparent. In this connection it will be noted that ear 27', formed by cut 27, extends rearwardly in the plane of end 5 and constitutes a reinforcing ledge for supporting bottom section 18, as will be clear without further discussion.

From the above it will be apparent that I have designed an easily constructed and assembled convertible shipping case and display device, whereby no open spaces are visible when the box is in display position, and the easel supporting structure is so designed and arranged as to present a compact display container of pleasing appearance adapted to effect a stable display structure with the easel sections rigidly interlocked with the container, and so that the display container may be handled as a unitary structure.

It is further apparent that I have designed a knockdown shipping container structure that may be initially stacked and shipped in compact formation thereby effecting a saving in space during shipment and handling, easily erected as a shipping container, quickly and expeditiously converted into a simplified display device where the contents are of light weight and susceptible of reinforcement into a stronger and extended supporting base where the contents are of a heavy nature, manufacturable from a minimum of material and labor and at a low production cost, versatile in its adaptive use, and efficient for the purposes intended.

Although in practice I have found that the form of my invention illustrated in the accompanying drawings and referred to in the above

description as the preferred embodiment, is the most efficient and practical; yet realizing the conditions concurrent with the adoption of my invention will necessarily vary, I desire to emphasize that various minor changes in details of construction, proportion and arrangement of parts, may be resorted to within the scope of the appended claims without departing from or sacrificing any of the principles of this invention.

Having thus described my invention, what I desire protected by Letters Patent is as set forth in the following claims:

1. A container formed from a one-piece blank, comprising a bottom section and upwardly foldable side and end sections, foldable interlocking side sections carried by the end sections adapted to overlie said first mentioned side sections, a top section hingedly carried by one of the end sections, said top section being transversely perforated to effect a line of severance for a portion of said top, the remaining section being scored to provide foldable easel sections, the end section connected to said top is formed adjacent its ends with slots, one of said easel sections carrying latch tabs for interlocking engagement with said slots to effect, when said easel sections are folded into superimposed relation, a base structure adapted to support the container in tilted display position.

2. A combination shipping and display container comprising a bottom section, upwardly foldable side and end sections, foldable interlocking side sections connected to the end sections adapted to overlie said first mentioned side sections, said bottom formed with a slot adjacent one end and with an anchor tab spaced from the other end, a top section having foldable easel sections, one of said sections having tab portions, said top section hingedly carried by one of the end sections and having lateral extensions foldable for insertion intermediate said overlying side sections, and a tuck flap formed with a tongue member extending within the container when said top is in closed position, a portion of said top including said lateral extensions and tuck flap is severable, the remaining easel sections being foldable and interlockingly engageable with said container to form at the front an easel tilt container supporting base, the tongue carried by said tuck flap of the section is adapted for insertion in the slot in said bottom, the lateral extensions insertable between the overlying side sections, and the severed edge of said detached portion engageable under said anchor tab, whereby said severed portion constitutes in effect a continuation of said first mentioned support at the rear of the display carton.

3. A container formed from a one-piece blank, comprising a bottom section and upwardly foldable side and end sections, foldable interlocking side sections carried by the end sections adapted to overlie said first mentioned side sections, a top section hingedly carried by one of the end sections, said top section being partially transversely perforated and cut to effect, respectively, a severance of a portion of the top and form a lip on the remaining section for advertising indicia, said remaining section being scored to provide foldable easel sections, one of said sections when folded providing an advertising panel extending above and below the content supporting section and carrying latch tabs for interlocking engagement with said container to effect, when said easel sections are folded, a tilt display container supporting base.

4. A container formed with bottom, side and end sections, a top section hingedly carried by one of said end sections, a predetermined portion of said top being severable, the remaining section being scored to provide foldable easel sections, the end section connected to said top being formed adjacent its ends with openings, said easel section carrying latch tabs for interlocking engagement with said openings to effect, when said easel sections are folded into superimposed relation, a base structure adapted to support the container in tilted display position.

5. A container formed with bottom, side and end sections, a top section hingedly carried by one of said end sections, a predetermined portion of said top being severable, the remaining section being scored to provide foldable easel sections, the end section connected to said top being formed adjacent its ends with openings, said easel section carrying latch tabs for interlocking engagement with said openings to effect, when said easel sections are folded, a base structure adapted to support the container in tilted display position, and means associated with said bottom section to effect, with said easel base structure, an increased supporting area and bracing structure at the rear of said container in the same supporting plane as said easel base.

HARRY G. HALL.