Jan. 27, 1942. G. T. HENDERSON 2,271,258

DISPLAY BOX

Filed Nov. 29, 1940

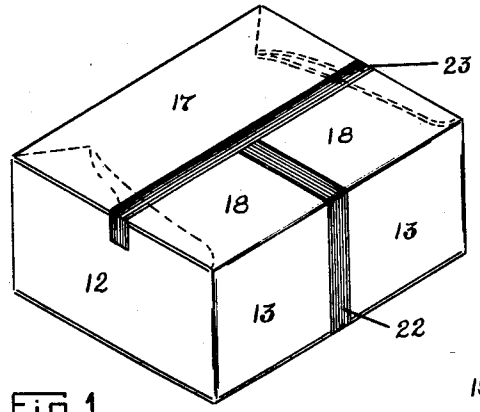


Fig. 1

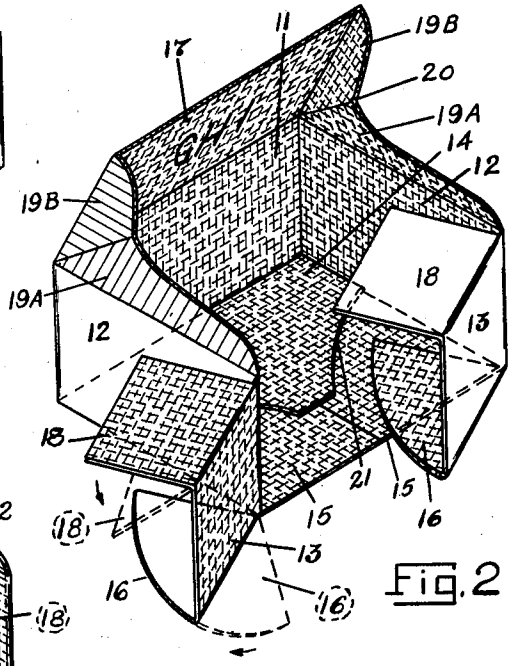


Fig. 2

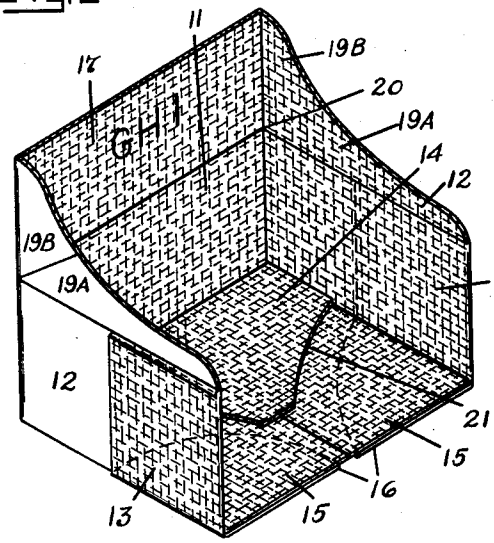


Fig. 3

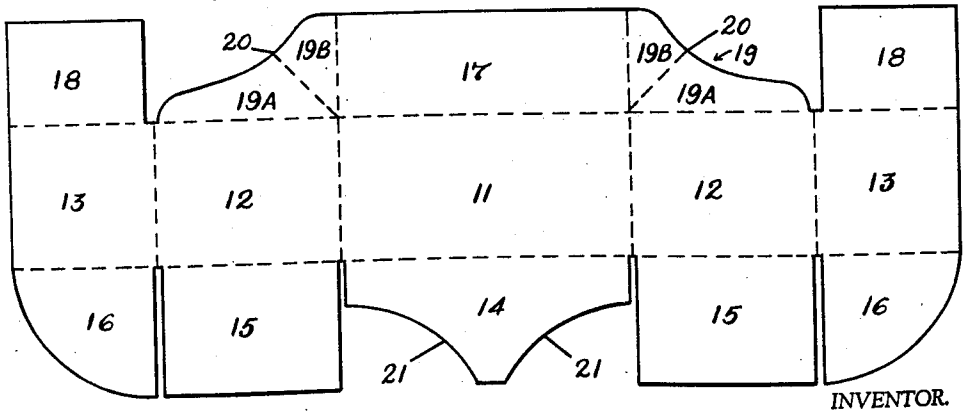


Fig. 4

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DISPLAY BOX

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2 Claims. (Cl. 206—44)

This invention relates to containers of the type which have the combined functions of shipping boxes when closed and of display containers when open and set up. Such containers are generally but not necessarily made of fiber board, double-faced corrugated board being most commonly used for the purpose. Among the advantages of the containers herein shown and described are economy of material in cutting the blanks, simplicity of folding, provision of additional ornamental side panels which also form part of the container structure when closed for shipping, and provision of integral attachments which serve to hold such ornamental panels in display position without taping, stitching or other fastening. A further advantage is that by my invention it becomes possible to finish one entire face of the blank in any ornamental coloring or pattern or apply printing thereto or to any panels thereof, and such ornamentation or printed matter will be on the inside of the closed carton, hence entirely protected during transit or storage, but exposed when the carton is set up for display. When closed for shipment or storage the general appearance is that of an ordinary slotted container.

Although I show in the accompanying drawing and describe in detail herein a preferred specific embodiment of the invention, it will be understood that such illustrations and description are exemplary rather than limiting, and that the invention may be embodied in other forms within the general scope and character indicated herein.

In the accompanying drawing Figs. 1 to 4 inclusive illustrate a form of my box particularly intended for a wide display.

In detail,

Fig. 1 is a perspective of the box closed, sealed, ready for storage or shipping;

Fig. 2 is a perspective showing a position intermediate between closed and set up;

Fig. 3 is a perspective showing the box set up for display, the contents being omitted;

Fig. 4 is a plan of the blank for the above box;

The blank of Fig. 4 is shown as consisting of a plurality of panels defined by creases (indicated by dotted lines) in a single piece of suitable material, ordinarily double-face corrugated board. It will be appreciated that although a unitary blank is employed in accordance with the customary and most economical practice, nevertheless the box of my invention might be made of more than one piece.

For identification the panels of the blank are designated as follows: back 11; sides 12, 12; front 13, 13; bottom 14, 15, 15, and 16, 16; top 17, 18, 18; side wings 19, 19. The wings are each divided into a lower section 19A and upper section 19B by a folding score or crease 20. Where the reference character 19 is used alone it refers to both 19A and 19B collectively. When the box is assembled, either for display or shipping, the outer bottom is formed by the panels 15, 15, which are preferably half-laps mutually abutting on a transverse median line of the box. The outer bottom may be further reinforced by the inner panel 14, which is conveniently cut away along the curves 21 at its front corners. The quarter round laps 16 hinged to the lower edges of the respective front panels 13 also over-lie the respective bottom half-laps 15 when the box is closed. The front panels 13 also join vertically in the middle and can be sealed by box-maker's tape as indicated at 22.

The top is closed by folding the half-lap 17 down horizontally as partly shown in Fig. 2 and complety shown in Fig. 1, at the same time folding the wings 19 inward along their crease lines 20. The top quarter laps 18 are then folded down to abut each other on the transverse median line of the box, and where the proportions of parts are those illustrated in the present drawing, also to abut the free edge of the half-lap 17 on the longitudinal median line, all as indicated in Fig. 1, and are taped as at 22 and 23 or otherwise suitably fastened.

To set the box up for display the sealing tapes are cut or other fastening means opened, the cover half-lap 17 is raised, as indicated partly in Fig. 2 and completely in Fig. 3, thus straightening the wings 19; the front half-laps 13 (which when open constitute side display panels), are swung out and the quarter-laps 18 and the quarter rounds 16 are reversed on their hinge lines. An intermediated position of such outward swing is shown at the right of Fig. 2, a further position at the left, and the ultimate position which can be reached is shown in Fig. 3. The bottom quarter rounds 16 are swung down through 180°, while the top quarter laps 18 are swung through 270°, from their respective initial positions to final positions which will bring the quarter-laps 18 between the half-laps 13 and the side walls 12, and will bring the quarter rounds 16 under the bottom of the carton, where they are held in position by the weight of the contents. If the user prefers a wider display effect the front half-laps 13 need not be carried back so far as shown in Fig. 3, but set at some intermediate position, in an arrangement similar to that of Fig. 6.

The effect of this is to expose the original inner

faces of 13 outwardly as side display panels, which together with the elements 17 and 19 constitute an effective setting to carry advertising messages and show off the merchandise.

In the drawing, in order to show the display possibilities, the inner face of the material is indicated as colored, and arbitrary letters are shown on certain of those panels which are exposed when the box is set up for display; such lettering is indicative of advertising or other printing. It will be observed that all the colored and ornamental or printed surfaces are on the inside of the closed box, so protected in storage or shipping, but are automatically carried to visible positions by the necessary steps of transforming the box to its display arrangement.

For shipping and storage purposes such cartons closely resemble a standard slotted container and require no special allowances of storage space or other unusual treatment for piling, loading or other handling.

From the foregoing description of a preferred embodiment it will be seen that I have invented a combined packing and display container adaptable for manufacture in a variety of proportions, with differences in detail, but always having the characteristics of protecting the ornamental surfaces until set up for display, and then of exposing such surfaces; that the change from closed to display position does not require unpacking any of the contents, and that when closed there are no projecting or irregular parts exposed which might interfere with piling or handling.

The scope of the invention is indicated by the following claims.

I claim:

1. A combined shipping and display container comprising in combination a front composed of two half-laps each vertically hinged to a front edge of an end wall, panels hinged respectively to top and bottom of said half-laps, said bottom-hinged panels being adapted to overlie the container bottom when the container is closed and to underlie the container bottom when the container is set up for display, said top-hinged panels being adapted to form top quarter-lap closures when the container is closed and to be swung down behind said front half-laps when the container is set up for display, and a cover half-lap hinged to the top of the back wall, said cover half-lap being adapted when closed to meet said quarter-laps and with them comprise a complete cover.

2. A combined shipping and display container comprising in combination a front composed of two half-laps each vertically hinged to a front edge of an end wall, panels hinged respectively to top and bottom of said half-laps, said bottom-hinged panels being rounded along one edge and adapted to overlie the container bottom with the rounded edges inward when the container is closed and to underlie the container bottom when set up for display, an inner bottom panel having corners relieved approximately to the size and shape of said bottom-hinged panels and adapted to form with them a substantially complete inner bottom when the container is closed, said top-hinged panels being adapted to form top quarter-lap closures when the container is closed and to be swung down behind said front half-laps when the container is set up for display, and a cover half-lap hinged to the top of the back wall, said cover half-lap being adapted when closed to meet said quarter-laps and with them comprise a complete cover.

GEORGE T. HENDERSON.