

Oct. 14, 1941.

D. A. LARKIN

2,259,041

DISPLAY CARTON

Filed Jan. 23, 1939

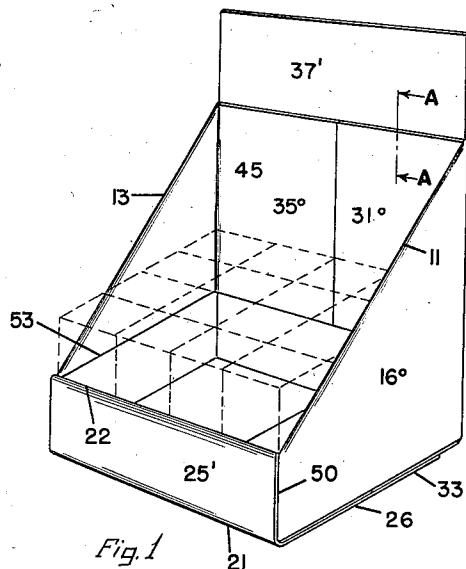


Fig. 1

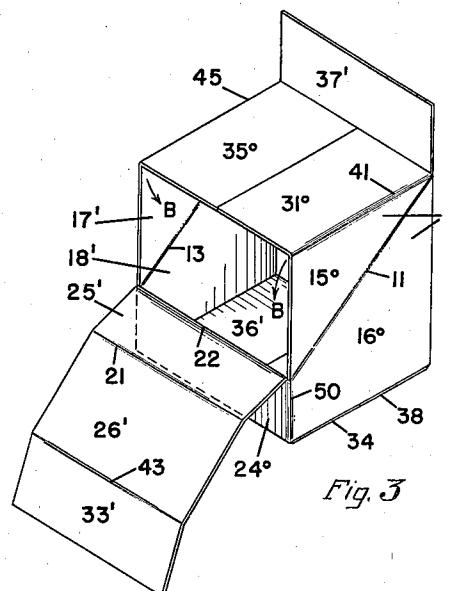


Fig. 3

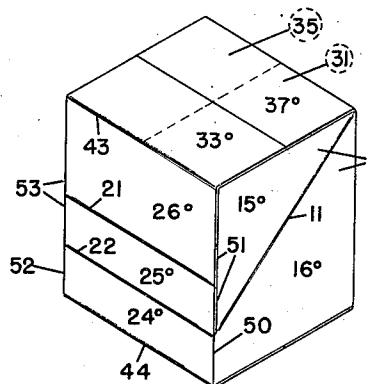


Fig. 2

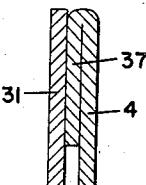


Fig. 1A

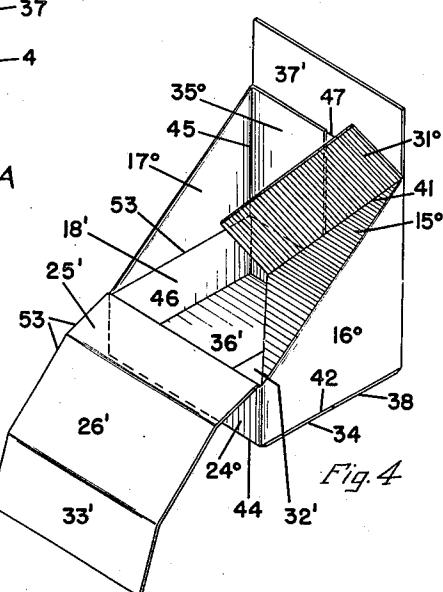


Fig. 4

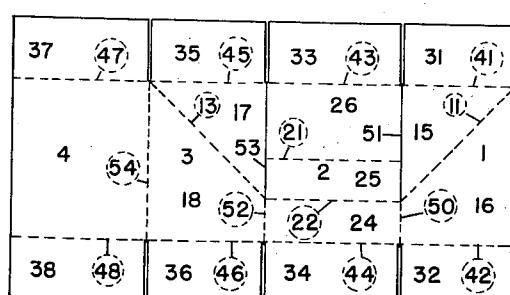


Fig. 5

BY

INVENTOR.
DANIEL A. LARKIN

ROBERT W. WILSON

ATTORNEY.

UNITED STATES PATENT OFFICE

2,259,041

DISPLAY CARTON

Daniel A. Larkin, Sandusky, Ohio, assignor to The
Hinde & Dauch Paper Company, Sandusky,
Ohio, a corporation of Ohio

Application January 23, 1939, Serial No. 252,407

1 Claim. (Cl. 206—44)

This invention relates to cartons, usually made of corrugated board or similar material, particularly adapted for the purpose of shipping or storage when closed and for sales display of retail items when open. It is particularly adapted for carton construction where one side of the material is of ornamental appearance and the other is not, or for cartons in which certain panels may have display material printed or otherwise placed on them and concealed in transit but exhibited when set up. A further purpose of the invention is to have the display back self-locking when set up. Another purpose is to enable such a carton to be made economically with a minimum number of operations and with most efficient use of material, avoiding waste.

It will be appreciated that the embodiment of my invention herein illustrated and described is that of a preferred form to be taken as illustrative and not as limiting, and that the scope of the invention is measured by the claim appended hereto.

In the accompanying drawing—

Fig. 1 is a perspective view of the carton set up for display, retail packages being illustrated therein by broken lines, the scale being larger than that of the other figures;

Fig. 1A is a fragmentary section on line A—A of Fig. 1 showing an alternative set-up;

Fig. 2 is a perspective showing a carton closed for shipping or storage;

Fig. 3 is a perspective illustrating the carton partly opened, the contents being omitted for simplicity.

Fig. 4 is a view similar to Fig. 3 showing the next step of setting up for display; and

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

The blank is of rectangular form, thus avoiding waste. The most convenient order of panels from side to side is that of Fig. 5, side 1, front 2, side 3, back 4, which brings the manufacturer's joint or taping (not shown) at a rear edge. It is a matter of indifference whether the back panel 4 is on the right or left of the blank, this depends upon which face of the blank is up. Obviously the blank might be so divided as to have the manufacturer's joint between panels 1 and 2, or between 2 and 3, but this would have the disadvantages of bringing the joint in front.

The sides 1, 3 are divided by diagonal fold lines 11 and 13 respectively, running upward from near the bottom to the top, thus forming sub-panels 15, 16 and 17, 18. The front panel is transversely divided by fold lines 21 and 22 into

10 a bottom section 24, middle section 25, and upper section 26.

Besides the foregoing divisions, each of the panels 1, 2, 3, 4 carries the usual top and bottom closing half-laps numbered 31 to 38 inclusive and set off in the usual manner by creases 41 to 48 inclusive. Thus in the completely closed carton of Fig. 2, the top and bottom construction is conventional. It is apparent that full laps could be substituted for some of the half-laps, but the blank would not be of rectangular outline.

15 As shown in Fig. 5 the side separation of the half-laps is by wide cuts to allow folding clearance. Sub-panels 15 and 17 are separated from sub-panels 25 and 26 by narrow through cuts 51, 53, taped or otherwise fastened when the carton is closed. However, these could be merely folding creases in the blank, in which case the user would have to cut them down to the junction of fold line 22 in order to set the carton up for a display stand. The other panel and sub-panel divisions are made by creases for bending, indicated by broken lines. Thus panels 1 and 2 are hingedly connected at 50, panels 2 and 3 are hingedly connected at 52, and panels 3 and 4 are hingedly connected at 54.

20 In Figs. 1 to 4 inclusive the same reference characters are used as in Fig. 5, except that the exponent “” is added to the reference characters to designate that face of the panel which is inside the closed carton, and the exponent “” to designate the corresponding outside face.

In setting the carton up for the closed position of Fig. 2, it is set up as a carton with conventional ends, and the panel subdivision lines 11, 13, 21 and 22 perform no function, but they come into use in changing to the display set-up. The change is accomplished by removing the merchandise, setting the back half-lap 37 either up (Fig. 1) or down (Fig. 1A), turning the folds 41, 45 downward and inward as indicated by the arrows B, B of Fig. 3 and by the shaded position of Fig. 4, and bending the panels 25, 26 and 33 successively down around the lines 22, 21 and 43. In Fig. 4 the sub-panel 15 and its half-lap 31 are shown part way down while 17 and 35 are entirely in the display position. The panel 26 and half-lap 33 are folded under the carton, Fig. 1, and the inside surface 25' of sub-panel 25 is thus exposed in front of sub-panel 24.

Thereafter the merchandise is replaced in the carton as shown in Fig. 1 and the carton becomes a counter display, with the outer side sub-panel surfaces 15° and 17° visible, the top sur-

faces 31° and 35° visible, and the inside surfaces $4'$, $16'$ and $18'$ concealed.

The panels $31-15$ and $35-17$ go down, hinging about the folds 41 and 11 on the right side and 45 and 13 on the left, so that the folds 41 and 45 ultimately reach vertical positions with 45 lying against the fold 54 and with 41 lying against the vertical joint between panels 1 and 4 . In this position the vertical edges of 31 and 35 bear against one another and lock the parts into the position of Fig. 1, even if no merchandise is in the carton. Since the merchandise fills the carton up to the level established by the now horizontal edge 53 of sub-panel 17 , the only surfaces which are exposed are on the inside or outside of the carton are outside surfaces, with the exception of $25'$ and $37'$. As shown in Fig. 1A, $37'$ can be turned under and concealed and $25'$ is a narrow panel which can be given ornamental treatment by printing or otherwise. Thus, if it is desired to make a difference between the appearance of the inside and outside surfaces of the carton material, ornamental finish can be used on one entire face of the blank and will show both as a background for the merchandise and as an outside for the carton when set up for display. This idea can be carried further, in case the carton is not to be reclosed, by a severance along the line 22 , in which case the surface 24° would of course be visible. Therefore the present invention is particularly useful for making cartons out of double face corrugated board in which the two faces are of different colors or different finish. The mechanism of the carton permits two-color effects with the panels $25'$ and $37'$ contrasting with the other exposed panels.

From the foregoing it will be seen that I have invented a carton suitable either for packing or for display in which the outer face of the car-

ton is so disposed as to form an inside background when in the display arrangement. Such carton can be selectively set up either to expose nothing but the original outside surface (by severing along the lines 22 and 47), or can be arranged to expose only relatively small areas of the original inside surface. Furthermore, such carton by reason of the reinforcing effect of the panels 17 , 35 , 31 and 15 has great strength and stiffness of sides and back in the display position.

Although I have shown and described a preferred embodiment of the invention, it will be appreciated that the description and drawing are intended by way of illustration only and that the scope of the invention is to be determined by the appended claim.

I claim:

A blank of rectangular outline adapted to be formed into a carton, said blank comprising front and rear panels interposed with side panels, top closure panels respectively bendably connected to the top edges of the said front, rear and side panels, each of said top closure panels being of rectangular shape and stiff throughout its entire area, and being each of a height equal to half the width of said rear panel, a diagonal bend line from the top edge of each side panel to a point substantially below the top edge of the front panel, said diagonal bend lines running at 45° to said respective top edges, and a bend line across said front panel connecting said points, said front panel being separated from said side panels by full cuts extending from said cross bend line to the top edge, and transversely divided by a second cross bend line at a distance above the first-named bend line equal to the distance of the first-named bend line above the bottom.

DANIEL A. LARKIN.