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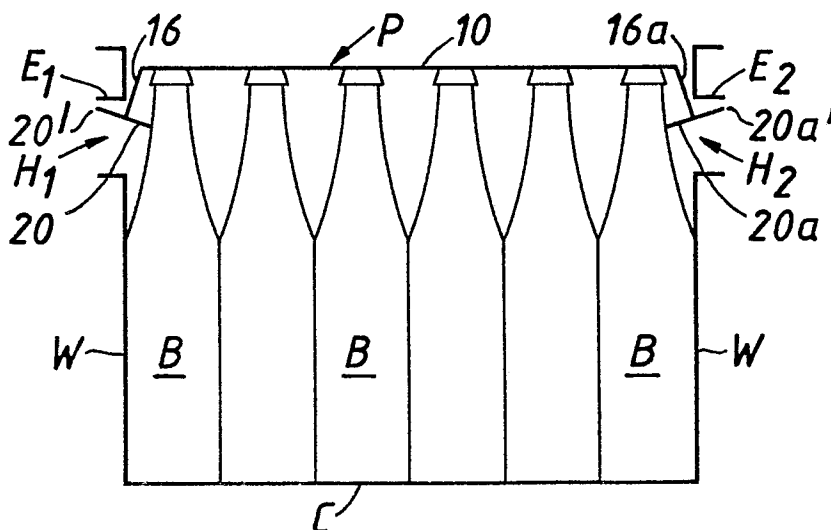
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Hepworth Lawrence & Bryer 36 Regent Place
Rugby Warwickshire CV21 2PN(GB)(54) **Bottle crate cover panel.**

(57) A cover panel (10) for insertion into the top of a crate (C) so that the panel overlies the tops of the articles accommodated in the crate. The panel is sized so as to substantially close the crate and has foldable end panels (12, 14) at each of its opposite ends which include hinged anchoring flaps (20, 20a) for cooperation with adjacent handle openings in the crate to retain the panel in the crate.

FIG. 3.



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BOTTLE CRATE COVER PANEL

This invention relates to a cover panel for overlying the tops of articles e.g. bottles in a crate to provide a dust inhibiting panel on which information can be displayed.

Cover panels for containers have been known for some time, for example, as disclosed in US Patent No 3,498,492 to J McCrea. The McCrea disclosure shows a container lid which comprises a main panel having opposed foldable end panels which cooperate with the end walls of the container to secure the lid in position.

Paperboard cover panels for bottle crates also are known in which so called "sunburst" openings are provided in the panel through which neck portions of bottles extend so that the panel is secured under the bottle caps thereby to locate and retain such a cover panel inside a crate. In order to fit such a cover panel it is necessary to deposit the panel correctly inside the crate and to apply a downward pressure to it by some form of applicator to marry the panel with bottle necks. This procedure is not always successfully accomplished and, of course, when the panel is inserted in the crate, its upper display surface is interrupted by the protruding bottle necks.

The present invention seeks to provide a bottle crate cover panel having an uninterrupted display surface which can be used for advertising purposes and in which a foldable end panel arrangement which takes advantage of the natural resilience of paperboard allows the panel to be readily inserted into the crate and readily detached therefrom in order to gain access to the contents of the crate.

To this end, one aspect of the invention provides a cover panel of foldable sheet material, such as paperboard, for insertion into the top of a bottle crate so that the panel overlies the tops of the bottles or other articles accommodated in the crate, said panel having a main sheet sized so as to substantially close the crate, and having a foldable end panel arrangement at each of two opposite ends of the sheet, characterised in that each foldable end panel arrangement comprises an end panel foldable with respect to said main sheet so that it can be directed downwardly towards the base of the crate and an anchoring flap struck from said end panel which anchoring flap is foldable with respect to said end panel so as to present an end part for cooperation with an adjacent part of the crate which end part projects outwardly beyond the foldable connection between the end panel and the anchoring flap for cooperation with adjacent parts of the crate to retain the panel in position.

Another aspect of the invention provides a crate having a cover panel as defined in the imme-

diately preceding paragraph secured therein.

Two embodiments of the invention will now be described, by way of example, with reference to the accompanying drawings, in which:-

FIGURE 1 is a schematic plan view of a first crate cover panel according to the invention with its end flaps shown prior to being folded;

FIGURE 2 is a view similar to Figure 1 but showing the end flaps after having been folded through 180 degrees;

FIGURE 3 is a schematic side view of the crate with a side wall cut away and in which the first cover panel is fitted;

FIGURE 4 is a schematic plan view of a second crate cover panel according to the invention with its end flaps shown prior to being folded;

FIGURE 5 is a perspective view of a crate in which the second crate cover is shown being inserted; and

FIGURE 6 is an end view of the crate of Figure 5 showing the anchoring flap of the second crate cover engaged in an adjacent hand aperture in the crate.

Referring first to Figures 1 and 2 of the drawings, a crate cover panel P comprises a substantially rectangular planar main sheet 10 of paperboard or like material having at each of its shorter ends a foldable end panel arrangement 12, 14 respectively. End panel arrangement 12 comprises an end panel 16 hinged centrally to an end edge of panel 10 along transverse fold line 18 and is shorter than that end edge of panel 10. End panel arrangement 12 further comprises an anchoring flap 20 struck partially from end panel 16 and is hinged thereto along short transverse fold lines 22 and 24 disposed at opposite ends of end panel 16. Thus, end panel 16 is foldable with respect to sheet 10 and anchoring flap 20 is foldable through 180 degrees with respect to end panel 16.

Figure 2 shows the anchoring flap 20 after having been folded through 180 degrees relative to panel 16. It will be seen that the inwardly directed edge of flap 20 adjacent fold line 18 and which is struck from panel 16 extends, after folding, beyond the fold lines 22 and 24 and constitutes the end-most edge 20' of the cover panel.

The opposite end panel arrangement 14 is similar and like parts with respect to end panel arrangement 12 have like reference numerals with the addition of suffix 'a'.

In order to fit the cover sheet into a crate, both end panels 16, 16a are folded downwardly out of the plane of sheet 10 about their respective transverse fold lines 18, 18a so that when the panel is introduced into a crate 'C' to overlie bottles 'B',

those end panels are directed towards the base of the crate and clear the adjacent end walls 'W' of the crate. Also, anchoring flaps 20 and 20a are folded relative to their associated end panels through 180 degrees so that an end part including end edge 20', 20a' of the anchoring flap which is struck from the associated end panel forms the opposite extremities of the cover panel.

In crates which have hand holes H1, H2 in the opposed end walls, the anchoring flaps are sized so that as they back-fold due to the resilience of the paperboard material they extend into the hand holes and engage their end part with the upper peripheral edges E1, E2 of the respective hand holes to retain the cover panel within the crate.

Referring now to Figures 4 to 6 of the drawings, a crate cover panel P1 comprises a substantially rectangular planar main sheet 11 of paperboard or like material having at each of its shorter ends a foldable end panel arrangement 13, 15 respectively. End panel arrangement 13 comprises an end panel 17 hinged to an end edge of panel 11 along transverse fold line 19 and is of the same width as that of end edge of panel 11. End panel arrangement 13 further comprises an anchoring flap 21 struck wholly from end panel 17 and is hinged thereto along a shallow 'V' fold line 23 in panel 17 in which the apex of the 'V' is directed towards main panel 11. Thus, end panel 17 is foldable with respect to sheet 10 and anchoring flap 21 is folded through up to 180 degrees with respect to end panel 17. The opposite end panel arrangement 15 is similar and like parts with respect to end panel arrangement 13 having like reference numerals with the addition of suffix 'a'.

Referring more specifically to Figures 5 and 6, in order to fit the cover sheet into a crate, both end panels 17, 17a are folded downwardly out of the plane of sheet 11 through substantially 90 degrees about their respective transverse fold lines 19, 19a so that when the panel is introduced into a crate 'C1' those end panels are directed towards the base of the crate and clear the adjacent end walls 'W' of the crate. Also, anchoring flaps 21 and 21a are folded outwardly relative to their associated end panels so that the anchoring flaps 21, 21a form the opposite extremities of the cover panel.

In crates which have hand holes H1, H2 in the opposed end walls, the anchoring flaps are sized so that they are inserted into the hand holes and as they back-fold due to the resilience of the paperboard material and the 'V'-shaped fold line they engage their inside faces (relative to the crate) with the upper peripheral edges E1, E2 of the respective hand holes to retain the cover panel within the crate.

Thus, in each embodiment described above retention of the cover panel is achieved without

having to interrupt the main surface of the panel itself and, moreover, the panel is readily detached and removed from the crate.

Claims

1. A cover panel of foldable sheet material, such as paperboard, for insertion into the top of a bottle crate so that the panel overlies the tops of the bottles or other articles accommodated in the crate, said panel having a main sheet sized so as to substantially close the crate and having a foldable end panel arrangement at each of two opposite ends of the sheet, characterised in that each foldable end panel arrangement comprises an end panel foldable with respect to said main sheet so that it can be directed downwardly towards the base of the crate and an anchoring flap struck from said end panel which anchoring flap is foldable with respect to said end panel so as to present an end part for cooperation with an adjacent part of the crate which end part projects outwardly beyond the foldable connection between the end panel and the anchoring flap for cooperation with adjacent parts of the crate to retain the panel in position.

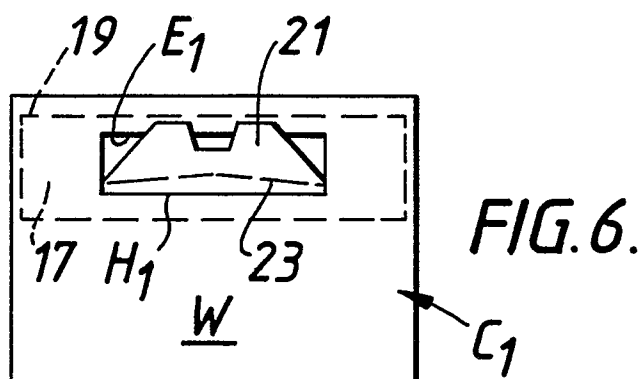
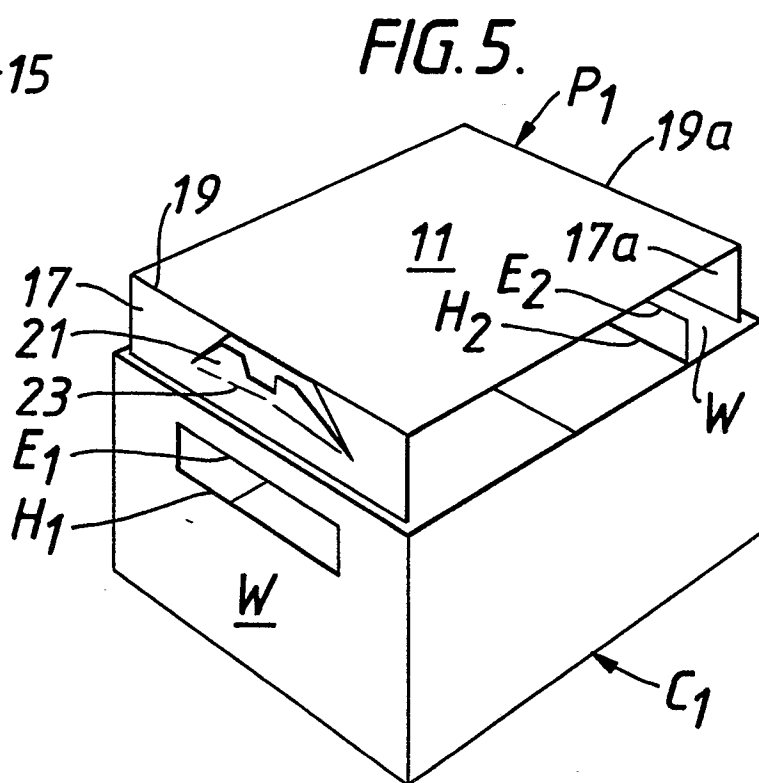
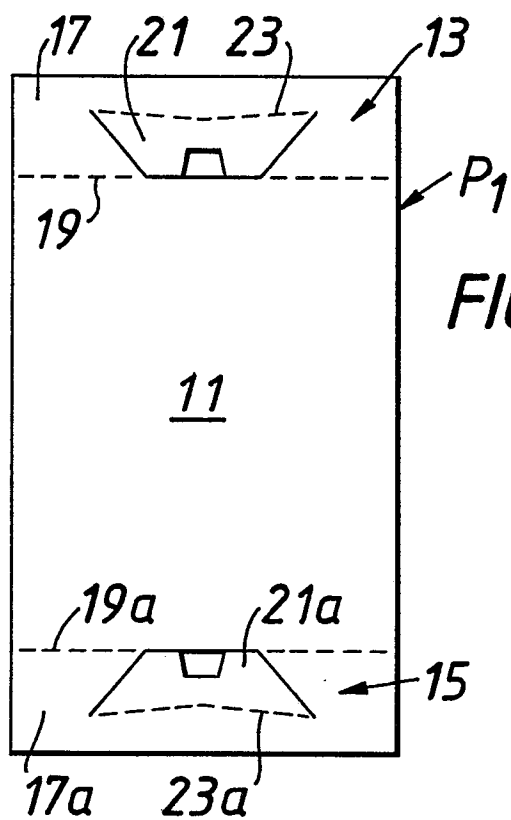
2. A cover panel according to claim 1, further characterised in that said foldable connection comprises a pair of spaced fold lines each which fold lines are disposed adjacent opposite side edges of said end panel assembly.

3. A cover panel according to claim 1, further characterised in that said foldable connection comprises a fold line formed intermediate opposed ends of said end panel.

4. A cover panel according to claim 2, further characterised in that said fold line is of 'V'-shaped configuration.

5. The combination of a crate and a top cover panel as claimed in any of the preceding claims which cover panel is inserted into the top of a crate so that a main panel of the cover overlies the tops of the articles accommodated in the crate and substantially closing the crate and in which said end parts of the anchoring flaps are engaged with adjacent parts of the crate to retain the panel in the crate.

6. The combination according to claim 5, further characterised in that said adjacent parts of the crate comprise hand holes in the crate end walls.





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EUROPEAN SEARCH REPORT

Application Number

EP 90 30 1926

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	US-A-2 116 431 (GULLO) * Page 1, left-hand column, line 49 - right-hand column, line 31; figures * ---	1	B 65 D 77/20 B 65 D 43/02
A	GB-A-1 513 587 (METAL BOX) * Page 2, lines 84-109; figures * -----	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			B 65 D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 03-05-1990	Examiner NEWELL P.G.
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