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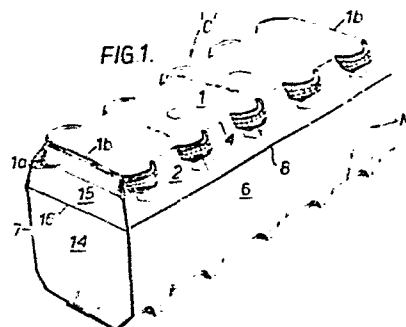
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(54) Article carrier.

(57) A wraparound type article carrier (C) for use in connection with a plurality of articles comprising top (1), bottom (10,11) and side walls (6,7) interconnected to form a main sleeve (M) and a closure preferably in the form of a sleeve (s) enveloping one or more articles at one end of the carrier, the closure sleeve comprising a main panel (14) of a size and configuration substantially to close said one end of the carrier.



EP 0 086 055 A2

-1-

ARTICLE CARRIER

This invention relates to carriers for the packaging of multiple articles such as bottles and which is particularly suitable for protecting bottled beverages whose organoleptic properties can be affected
5 by ultraviolet light.

Article carriers which are similar to this invention are known in the prior art, for example, such as those disclosed in U.S. patents 1,888,855; 2,205,437; 3,217,924; 3,337,045; and 4,119,902.

10 One aspect of this invention provides a wraparound type article carrier comprising a main sleeve wrapped about a group of articles and in which each article is held therein by cooperation with retaining means provided by the main sleeve, characterized by a
15 closure sleeve located about at least one article disposed adjacent one end of the carrier so that the axis of said closure sleeve is perpendicular with respect to that of the main sleeve and wherein the closure sleeve includes a main panel of a size and configuration sub-
20 stantially to close said one end of the carrier.

Another aspect of the invention provides a wraparound type article carrier having a plurality of articles disposed therein comprising a closure element associated with at least one article disposed at one end
25 of the carrier, characterized in that said closure element comprises a main panel of a size and configuration sub-

stantially to close an end of the carrier and an auxiliary panel joined to the upper edge of said main panel, said auxiliary panel being angularly related to said main panel and extending inwardly of said carrier, and means for securing said closure element to said one article.

Yet another aspect of the invention provides an article carrier closure sleeve blank comprising a main panel, a side panel joined to a side edge of said main panel, a composite panel joined to the opposite side edge of said main panel, a back panel joined to the edge of said side panel remote from said main panel, another composite panel joined to the edge of said back panel remote from said side panel, characterized by an auxiliary panel joined to the upper edge of said main panel.

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

FIG. 1 is a perspective view of an article carrier formed according to this invention;

FIG. 2 is a perspective view of one form of the closure sleeve formed according to this invention;

FIGS. 3 and 4 depict intermediate stages of the formation of the carrier;

FIGS. 5 and 6 are side views of a portion of the carrier with part of one side wall broken away;

FIG. 7 is a plan view of a pair of closure sleeve blanks shown in a nested condition;

FIG. 8 is a perspective view of a modified form of the closure sleeve; and

FIG. 9 is a plan view of the blank from which the closure sleeve of FIG. 8 is formed.

In the drawings and with particular reference to FIG. 3 the basic blank 'B' forming the main sleeve 'M' for the carrier 'C' is shown. More specifically the numeral 1 designates the top wall of the carrier to the side edges of which sloping panels 2 and 3 are joined respectively along fold lines 4 and 5. At each end of

top wall 1, an end panel 1a is joined thereto along fold line 1b. End panels 1a are further joined to the sloping panels by means of web panels 1c. Side walls 6 and 7 are joined to lower edges of sloping panels 2 and 3 along fold lines 8 and 9. To complete the basic elements of the carrier, bottom wall panels 10 and 11 are foldably joined to the lower edges of side walls 6 and 7 respectively along fold lines 12 and 13.

As is well known, multiple neck receiving apertures a are formed in sloping panels 2 and 3 and, in similar fashion, multiple heel receiving apertures b are formed in the lower portions of side walls 6 and 7. Also as is well known, machine tightening apertures c are formed in bottom wall panels 10 and 11; locking tabs d are formed in bottom wall panel 11 and locking apertures e are formed in bottom wall panel 10.

According to this invention, a closure sleeve 's' is provided and comprises main panel 14. To the top edge of main panel 14, auxiliary panel 15 is joined thereto along fold line 16. Similarly side panel 17 is joined to a side edge of main panel 14 along fold line 18. Back panel 19 is joined to side panel 17 along fold line 20 and a nesting notch 19a is formed along the upper portion thereof. Composite panel 21 is joined to main panel 14 along fold line 22 and composite panel 23 is joined to back panel 19 along fold line 24. Composite panels 21 and 23 combine to form the side panel of the closure sleeve opposite side panel 17. In order to accomplish economy of material, the closure sleeve shown in FIG. 7 can be nested with an adjacent closure sleeve by means of the cooperation between auxiliary panel 15 of one blank and nesting notch 19a of an adjoining blank as shown by the phantom lines in FIG. 7.

In order to form the closure sleeve from the blank shown in FIG. 7, it is necessary to make an

application of glue to composite panel 23 as shown by stippling in FIG. 7. Then the blank of FIG. 7 is manipulated to a position whereby composite panel 23 is adhered to composite panel 21 and the elements
5 of the blank are disposed in positions whereby main panel 14 and back panel 19 are parallel and, similarly, side panel 17 is parallel to side panel 21, 23.

To complete formation of the carrier, the articles to be packaged are placed on a carrier blank
10 as shown in FIG. 3. Following this operation a closure sleeve as shown in FIG. 2 is simply slipped over the end two articles at each end of the carrier as shown in FIG. 4. Then the elements of the main blank are simply wrapped around the articles whereby the necks
15 of the articles are inserted into neck receiving apertures a and the heels of the articles are inserted into heel receiving apertures b. Then the blank is simply locked in position by the known cooperation between locking tabs d and locking apertures e. In order to complete
20 the carrier, auxiliary panel 15 is folded inwardly of the carrier along fold line 16 and the end panels 1a are folded downwardly respectively in overlapping face contacting relation with the outer surface of auxiliary panels 15. This operation is best shown in FIGS. 5 and
25 6. The carrier then appears as shown in FIG. 1 and the contents thereof are protected from the damaging effects of light. This invention would also be well adapted for use in connection with a wraparound carrier of the shrink film variety.

30 The modified form of the closure sleeve is shown in FIGS. 8 and 9. More specifically this version of the closure sleeve comprises dual main panels 25 and 26. Auxiliary panels 27 and 28 are foldably joined respectively to main panels 25 and 26 along fold lines
35 29 and 30. Also side panel 31 is joined to main panels 25 and 26 respectively along fold lines 32 and 33. The opposite side panel comprises composite panels 34 and

35 which are joined respectively to main panels 25 and 26 along fold lines 36 and 37. To form the closure sleeve as shown in FIG. 8, it is simply necessary to adhere composite panel 34 to composite
5 panel 35 as described in connection with the closure sleeve shown in FIG. 7.

While a sleeve is shown and described as end closure means, it will be understood that for some applications of the invention some sleeve panel elements
10 may be omitted and other suitable means could be employed to hold the closure panel in attached relation to one or more end articles.

By this invention an article carrier is provided which is especially well adapted for the
15 packaging of bottled products such as beer which are extremely sensitive to the effects of light.

-6-

CLAIMS

1. A wraparound type article carrier (C) comprising a main sleeve (m) wrapped about a group of articles and in which each article is held therein by cooperation with retaining means (a,b) provided by the
5 main sleeve, characterized by a closure sleeve 'S' located about at least one article disposed adjacent one end of the carrier so that the axis of said closure sleeve is perpendicular with respect to that of the main sleeve and wherein the closure sleeve includes a main
10 panel (14) of a size and configuration substantially to close said one end of the carrier.

2. An article carrier according to claim 1, further characterized in that said carrier comprises a pair of side walls (6,7), a top wall (1), and a bottom
15 wall (10,11) interconnected to form said main sleeve and wherein an end panel (1a) is hinged to each end of said top wall.

3. An article carrier according to claim 2, further characterized in that one of said end panels
20 is disposed in overlapping relationship with said main panel of the closure sleeve.

4. An article carrier according to any of the preceding claims, further characterized in that said closure sleeve comprises a pair of side panels (21,23:17) joined respectively to the end edges of said main panel and a back panel (19) joined to the edges of said side panels remote from said main panel, said side panels and back panel being disposed within said main sleeve.

5. An article carrier according to claim 4, further characterized in that a nesting notch (19a) is formed in said back panel along the upper portion thereof.

6. A wraparound type article carrier (c) having a plurality of articles disposed therein comprising a closure element (s) associated with at least one article disposed at one end of the carrier, characterized in that said closure element comprises a main panel (14) of a size and configuration substantially to close an end of the carrier and an auxiliary panel (15) joined to the upper edge (16) of said main panel, said auxiliary panel being angularly related to said main panel and extending inwardly of said carrier, and means for securing said closure element to said one article.

7. An article carrier according to claim 6, further characterized in that said closure element comprises a closure sleeve telescoped over said one article.

8. An article carrier according to claim 6 or claim 7 further characterized in that said carrier comprises a pair of side walls (6,7), a top wall (1), and a bottom wall (10,11) interconnected to form a sleeve and wherein a pair of end panels (1a) are joined respectively to the ends of said top wall.

9. An article carrier according to any of claims 6 to 8 further characterized in that one of said end panels is disposed in overlapping relationship with said auxiliary panel.

5 10. An article carrier according to claim 7, further characterized in that said closure sleeve comprises a pair of side panels (21,23:17) joined respectively to the end edges of said main panel and a back panel (19) joined to the edges of said side panels
10 remote from said main panel.

11. An article carrier according to claim 10, further characterized in that a nesting notch (19a) is formed in said back panel along the upper portion thereof.

15 12. An article carrier closure sleeve blank comprising a main panel (14), a side panel (17) joined to a side edge of said main panel, a composite panel (21) joined to the opposite side edge of said main panel, a back panel (19) joined to the edge of said side panel
20 remote from said main panel, another composite panel (23) joined to the edge of said back panel remote from said side panel, characterized by an auxiliary panel (15) joined to the upper edge of said main panel.

13. An article carrier closure sleeve blank
25 according to claim 12, further characterized in that a nesting notch (19a) is formed in the upper portion of said back panel.

FIG.1.

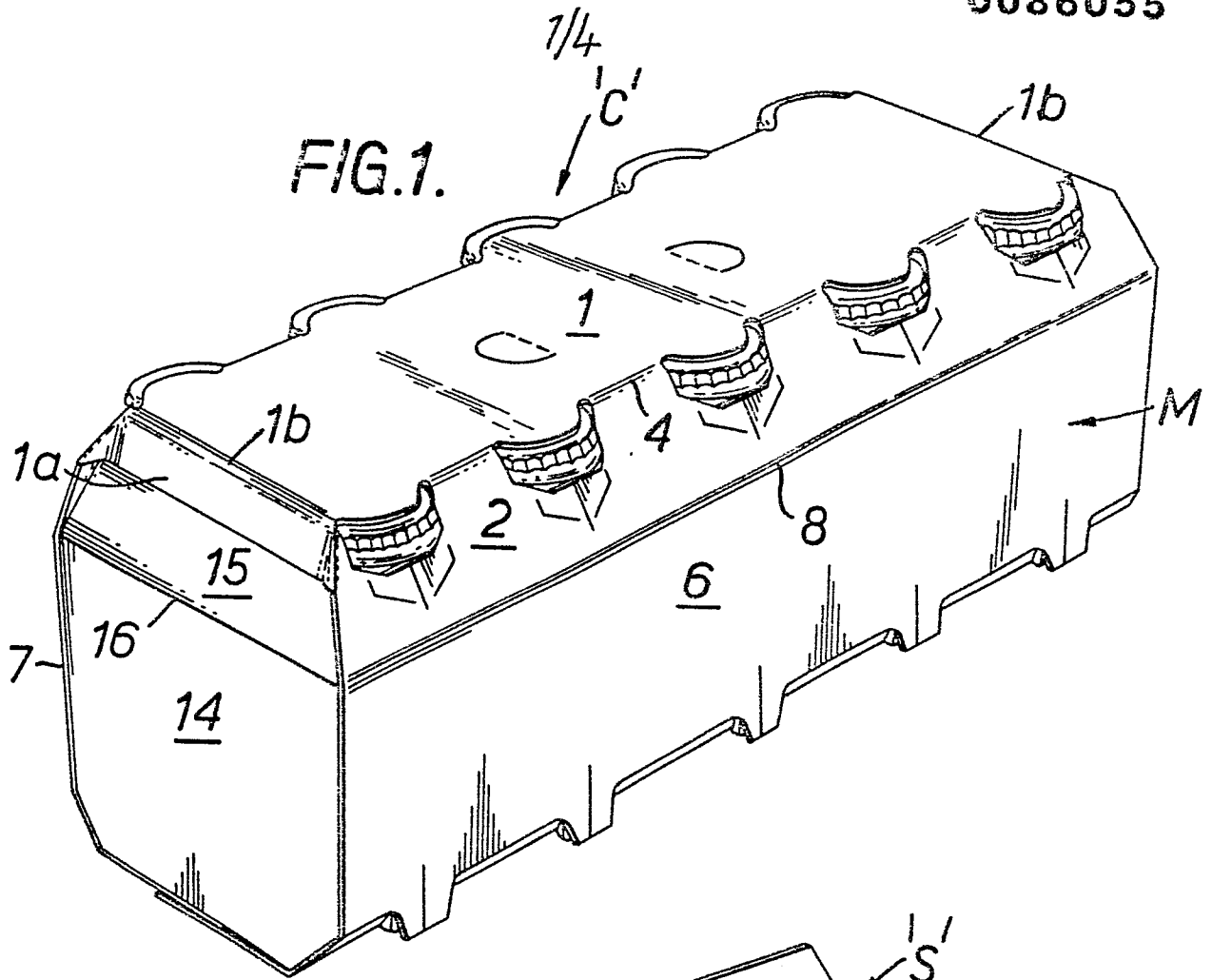
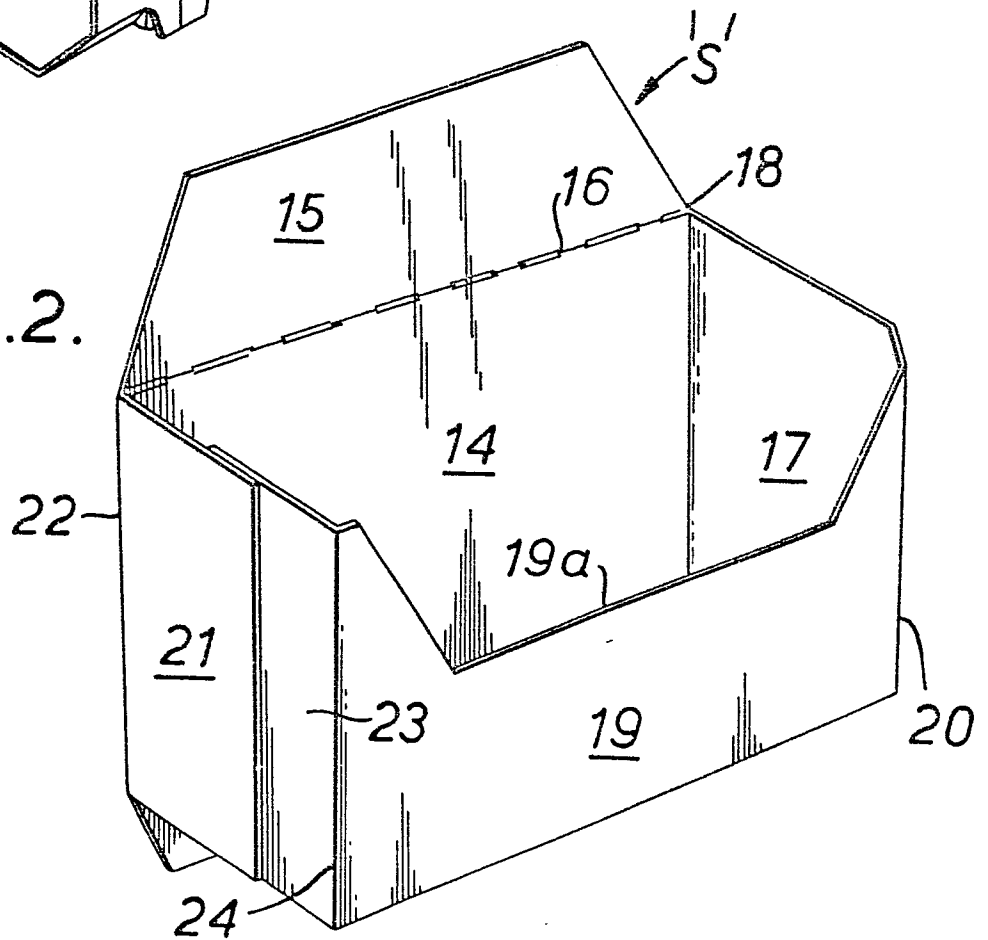


FIG.2.



2/4

FIG. 3.

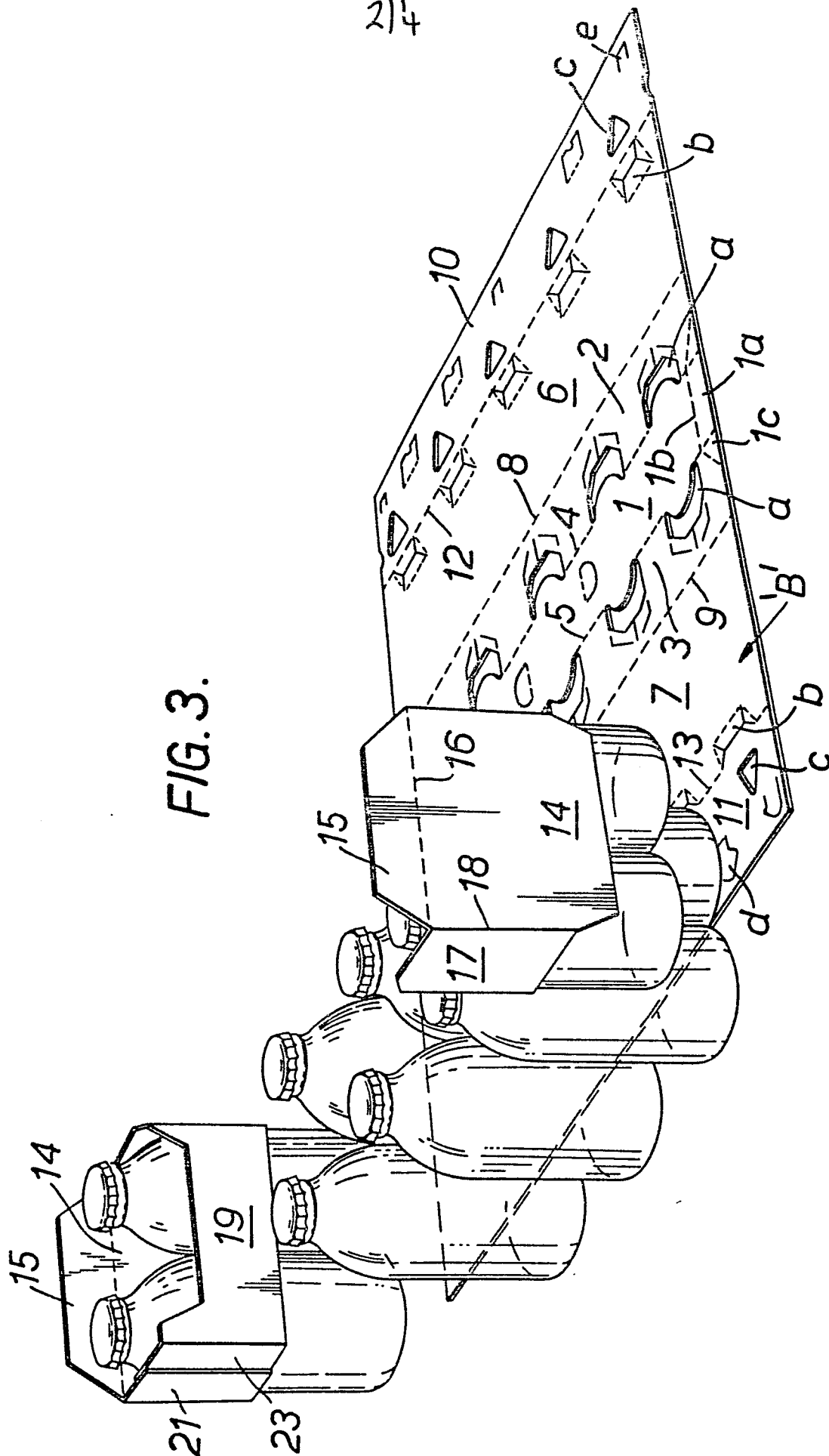


FIG. 4.

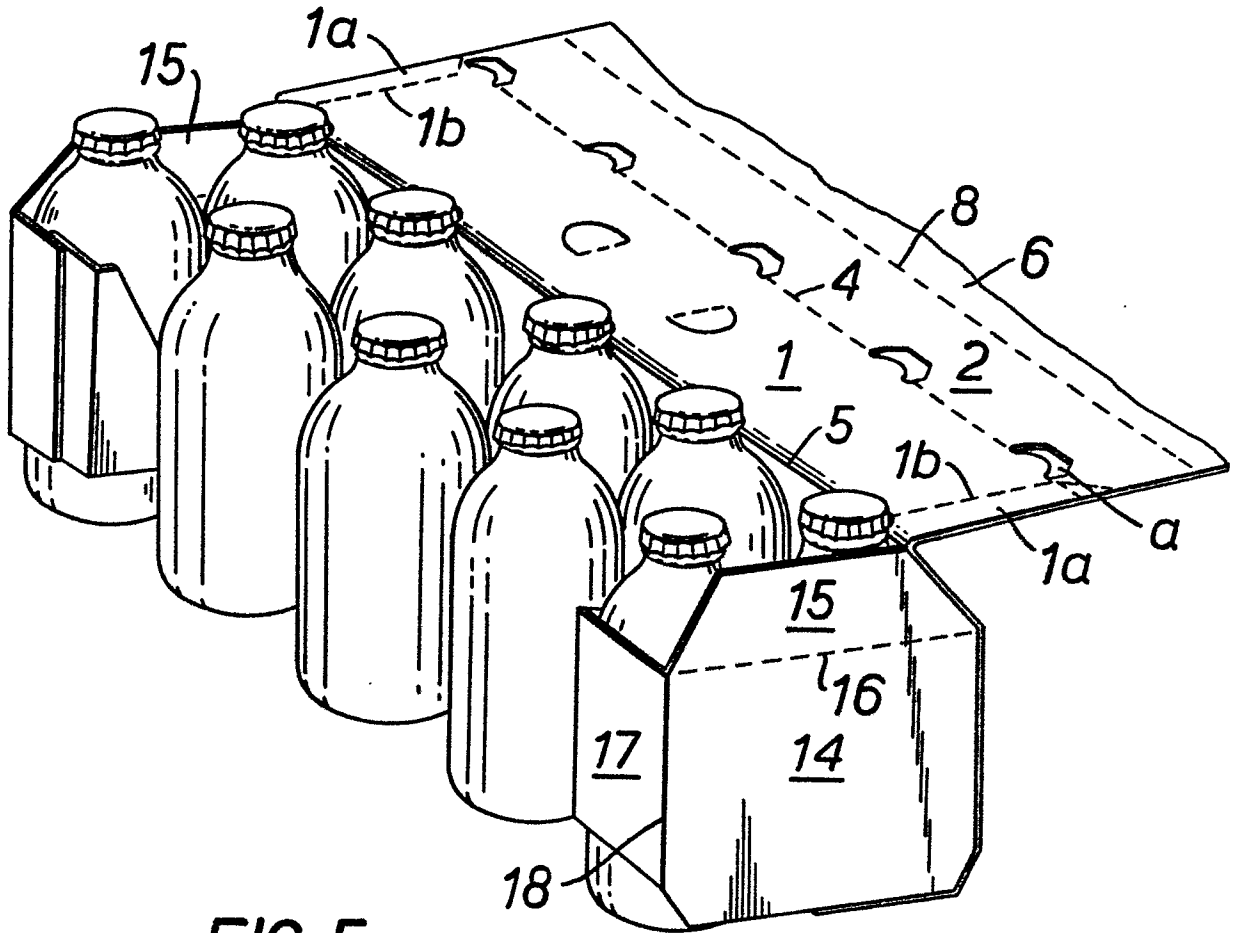


FIG. 5.

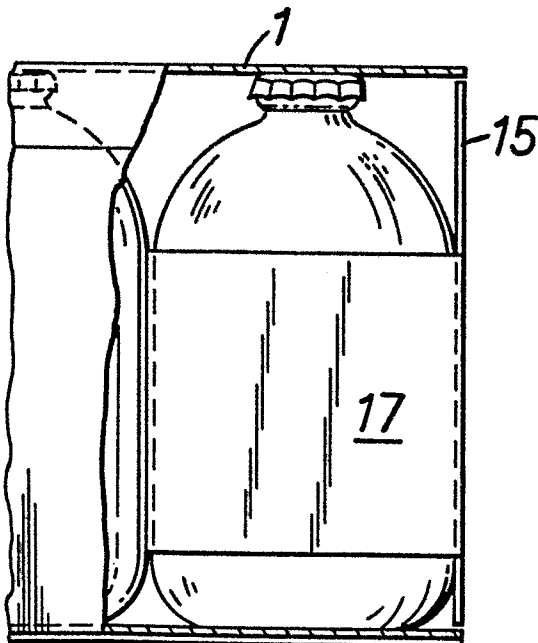


FIG. 6.

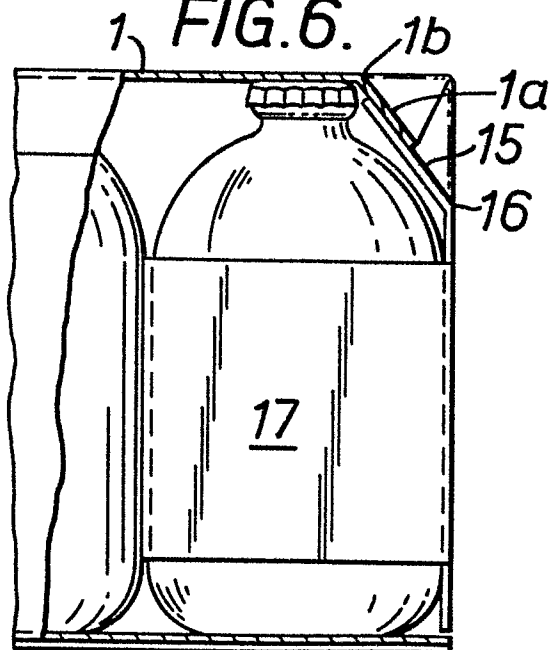


FIG. 7.

4/4

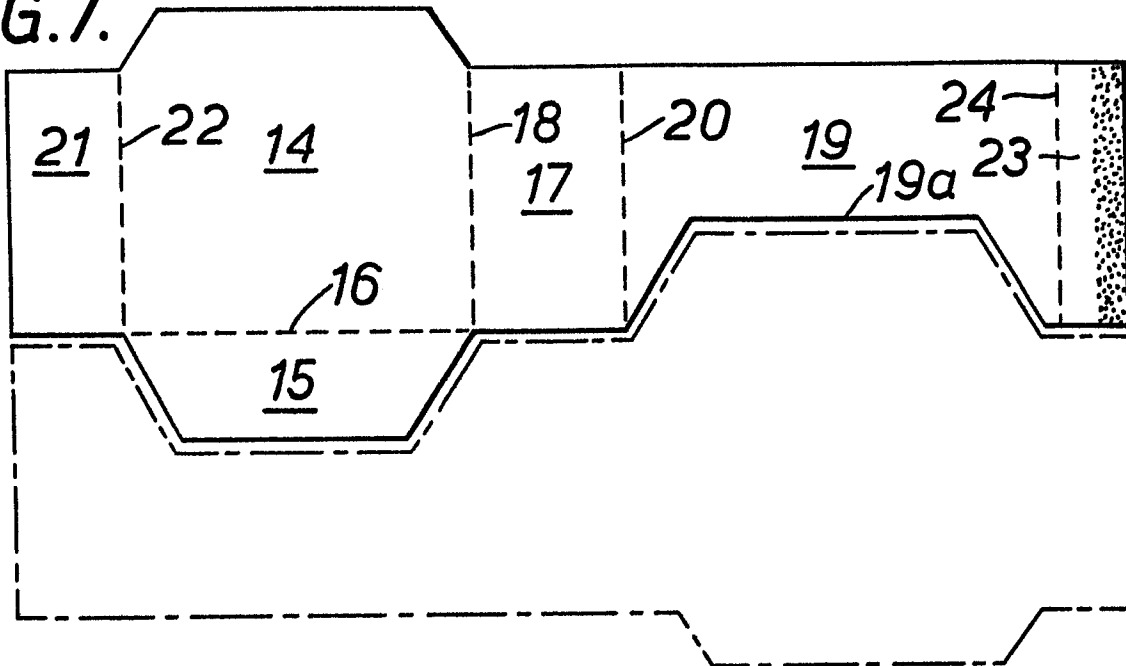


FIG. 8.

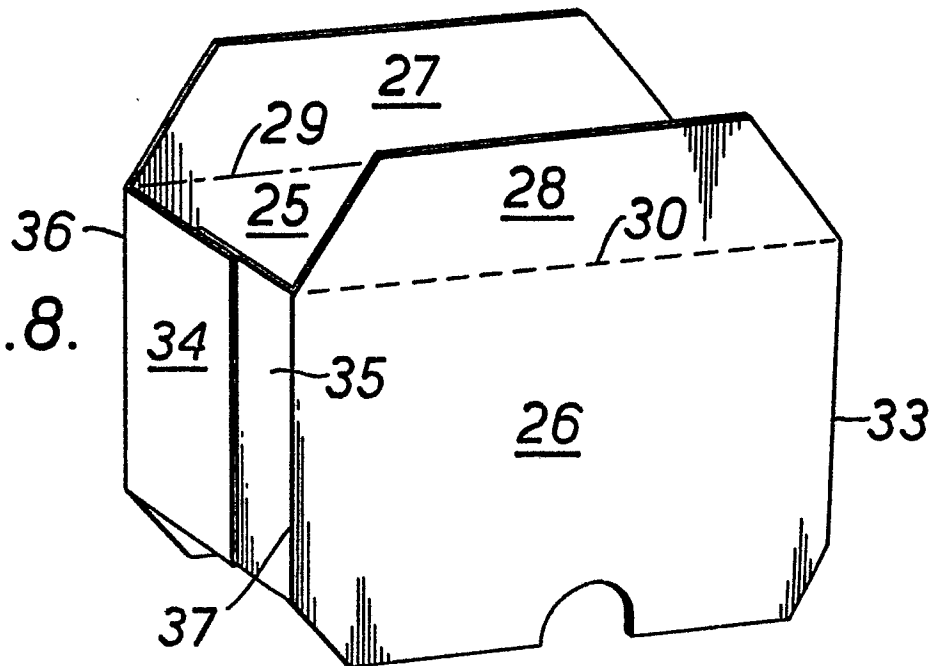


FIG. 9.

