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S. J. LEONE

2,973,128

CARTON CONNECTOR

Filed June 14, 1960

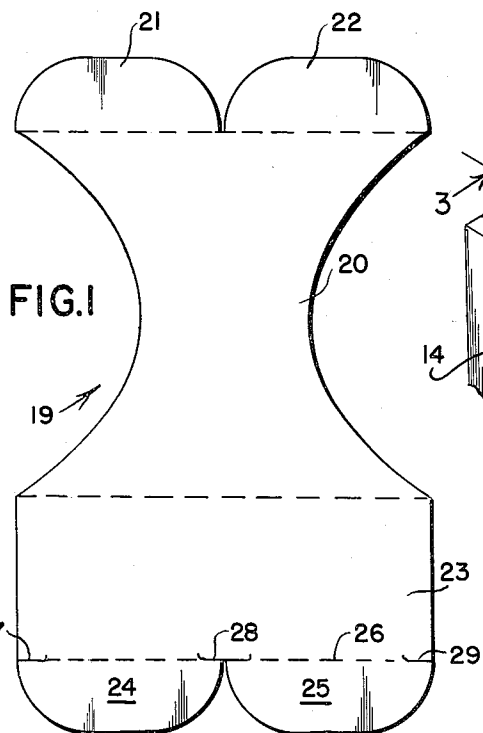


FIG. 2

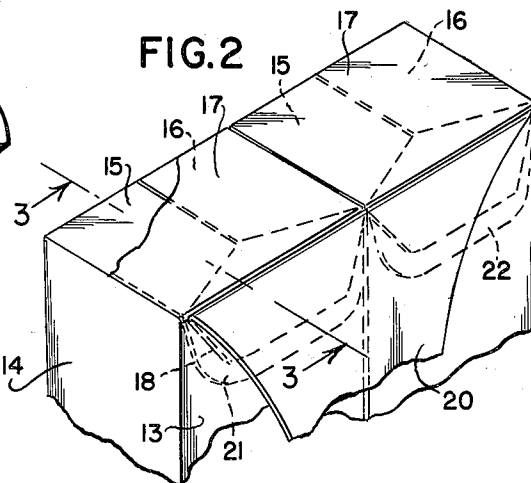


FIG. 3

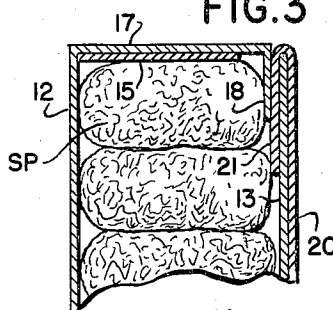
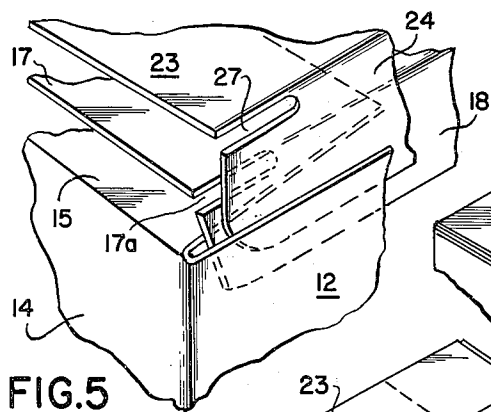


FIG. 5

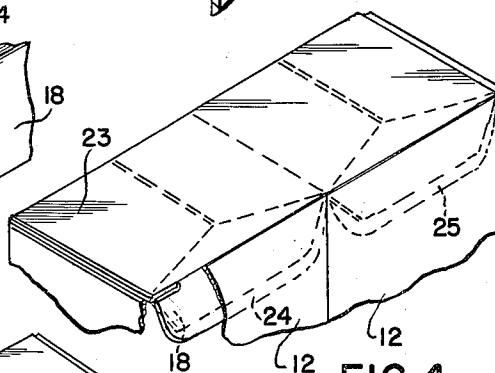


FIG. 4

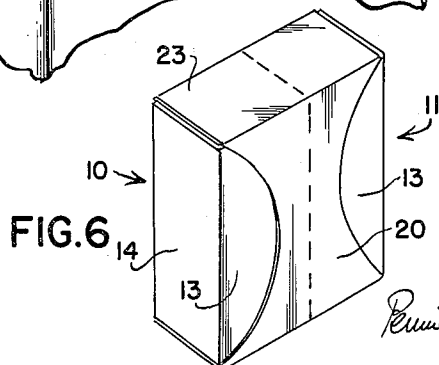


FIG. 6

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CARTON CONNECTOR

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5 Claims. (Cl. 229—15)

This invention relates to packages made up of a plurality of cartons containing merchandise and is concerned more particularly with a novel package formed of two or more cartons and a new connector which secures the cartons together. The connectors can be shipped flat with the cartons and, when multiple carton packages are to be made, as, for example, for a special sale, the cartons can be quickly joined together into packages by the connectors. Although the cartons forming a package are held together securely by the connector, so that the package can be handled as if it were a single carton, the connector can be easily detached from the cartons, if desired, so that the cartons can be sold singly.

The cartons, which can be united by the connector to form a package, are of the type having top and bottom closures including an outer closure flap overlying inner short flaps and having a tuck flap insertable between a wall of the carton and adjacent edges of the short flaps. In such a carton, each closure may be considered to have a slot between the outer surface of the tuck flap and the adjacent carton wall and, in forming the new package, these slots are used for the reception of parts of the connector.

For a better understanding of the invention, reference may be made to the accompanying drawing, in which

Fig. 1 is a plan view of one form of the new connector that can be employed to form a two-carton package of the invention;

Fig. 2 is a fragmentary perspective view showing the manner, in which the upper end of the connector is secured to a pair of cartons;

Fig. 3 is a sectional view of the line 3—3 of Fig. 2;

Fig. 4 is a perspective view showing the bottom of a pair of cartons connected together by the new connector;

Fig. 5 is a fragmentary perspective view showing the parts at one end of the package in separated positions; and

Fig. 6 is a view in perspective of a two-carton package of the invention.

The package shown in Fig. 6 comprises a pair of like cartons 10, 11 which are suitable for holding such articles as the scouring pads SP. The cartons are rectangular in cross-section with relatively wide front and rear walls 12, 13 connected by narrower side walls 14 and the cartons have similar top and bottom closures. Each such closure includes a pair of narrow flaps 15, 16 attached to the side walls 14 and extending inwardly therefrom and an outer closure flap 17 attached to one of the wide walls 12 or 13 and having a tuck flap 18 insertable between the inner face of the opposite wide wall and the adjacent edges of the flaps 15, 16. Since the tuck flap is not secured to the wide wall against which it lies, the inner surfaces of the wall and the outer surface of the tuck flap may be spread apart to form a slot extending across the carton from one side wall to the other. The slot in one closure is defined in part by one side wall and the slot at the other end of the carton is defined in part by the opposite wide wall.

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In order to connect a pair of cartons of the construction described together to form a package, the connector 19 shown in Fig. 1 is employed. This connector is made of a suitable paperboard material and it comprises a side panel 20 which is about as wide at its ends as the combined widths of the cartons to be connected and may be narrower at its middle than at its ends. At one end, the panel has flaps 21, 22 hinged thereto and each flap is of a width such that it may be received in the slot in the closure at one end of a carton. The flaps are somewhat longer than the tuck flaps 18 of the carton closure and, when they are inserted in the slots at one end of a carton, they extend downwardly into the carton beyond the adjacent tuck flaps.

At its other end, the side panel 20 is hinged along one edge of a bottom panel 23, which is of approximately the shape and size of the combined bottoms of the cartons to be connected together. Along its other edge, the bottom panel 23 has flaps 24, 25 hinged thereto. These flaps are of the shape and size of flaps 21, 22 and are insertable in the closures at the opposite ends of the cartons. The flaps 24, 25 are connected to the bottom panel 23 along a hinge line 26, in which cuts 27, 28, and 29 may be formed, the cuts extending inward along the hinge line at opposite ends of each of the flaps 24, 25.

To secure a pair of cartons together to form a package by means of the new connector, the flaps 21, 22 of the connector are inserted in the slots in the closures at the tops of the cartons and the side panel 20 is then folded down against the wide walls 13 of the cartons. The bottom panel 23 is next folded to lie against the bottoms of the carton and, as this operation is performed, the flaps 24, 25 are folded relatively to the bottom and inserted in the closures at the bottom of the cartons. When the bottom panel 23 lies tight against the bottoms of the cartons with the flaps 24, 25 in the slots in the closures at the bottom of the cartons, the two cartons are held securely together by the connector and can be distributed and handled as a single package.

If the cartons are formed with slots 17a at the ends of the hinge line between each outer closure flap 17 and its tuck flap 18, it is desirable to form the cuts 27, 28, and 29 in the hinge line 26 between the bottom panel 23 and the flaps 24, 25. When the tuck flaps 18 of the carton are inserted behind the wide walls 12 or 13, the edges of the narrow flaps 15, 16 enter the slots 17a between the wide closure flap and the tuck flap and the edges of the narrow flaps in the slots hold the outer closure flap against rising. As the flaps 24, 25 of the connector are inserted in the slots, the cuts 27, 28, and 29 are entered by the edges of the narrow flaps 16, 17 so that accidental withdrawal of the flaps 24, 25 from the slots is prevented. If desired, cuts may be made in a hinge line between the side panel 20 and the flaps 21, 22 extending inward from the end of each flap. These cuts function in the same manner as the cuts 27, 28, and 29.

The package illustrated is formed of two like cartons and the connector 19 is, therefore, symmetrical about its longitudinal axis. However, it will be apparent that the package can be made up of more than two cartons and that the cartons may be unlike. If unlike cartons are to be connected to form a package, the connector will be formed with ends of a width equal to the combined widths of the cartons to be secured together and the flaps at the ends of the connector will be of suitable sizes and locations to permit insertion in the slots in the closures at the opposite ends of the cartons.

I claim:

1. A package which comprises a pair of cartons disposed side by side, the cartons being of rectangular cross-section with relatively wide front and rear walls and

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having top and bottom closures with a slot in one closure of each carton lying adjacent to one wall and a slot in the other closure of each carton lying adjacent to the other wall, and a connector for securing the cartons together and having flaps entering respective slots in the closures at the top of the cartons, a side panel connected to the flaps and extending down along the outer surfaces of the carton walls adjacent to the slots entered by the flaps, a bottom panel connected to the lower edge of the side panel and extending across the bottoms of the cartons, and flaps connected to the free edge of the bottom panel and entering respective slots in the bottom closures of the cartons.

2. The package of claim 1, in which the flaps connected to the bottom panel are hinged to the panel along fold

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lines and slits extend inward along the fold lines from each end of each tab.

3. The package of claim 1, in which the side panel is wider at its ends than in the middle.

4. A connector for securing cartons together to form a package, which comprises a side panel, a plurality of flaps hinged to one end edge of the panel, a bottom panel hinged along one edge to the other end edge of the side panel, and a plurality of flaps hinged to the opposite edge of the bottom panel.

5. The connector of claim 4, in which slits are formed between the second pair of flaps and the bottom panel at the ends of the flaps.

No references cited.