March 24, 1953 E. J. MINSTER, JR., ET AL 2,632,593

MULTIPLE CARTON STRUCTURE

Filed March 31, 1950 2 SHEETS—SHEET 1

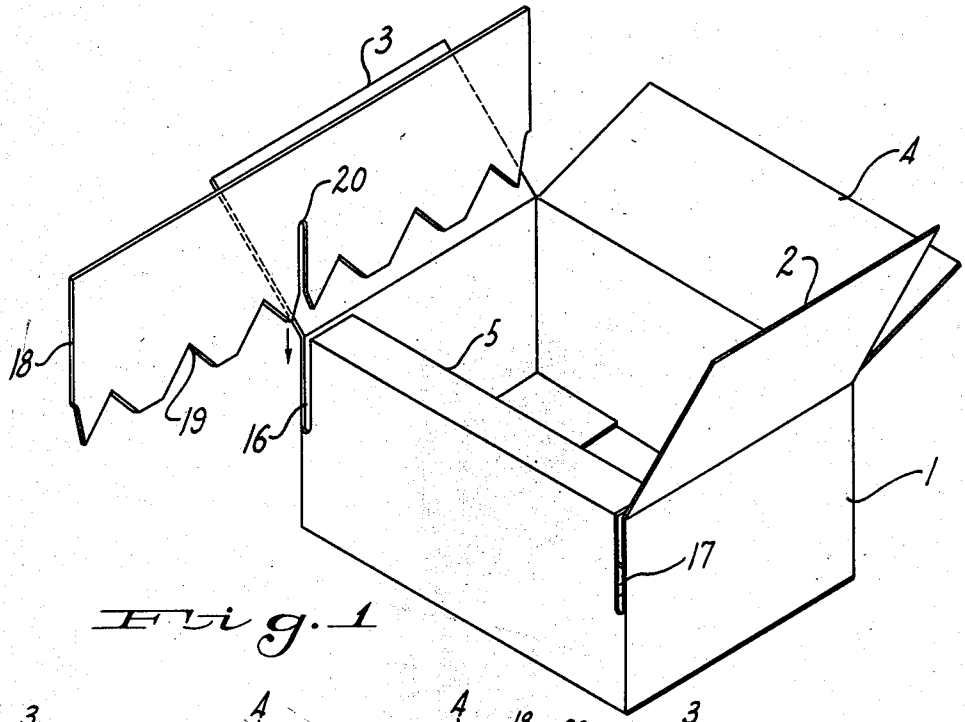


Fig. 1

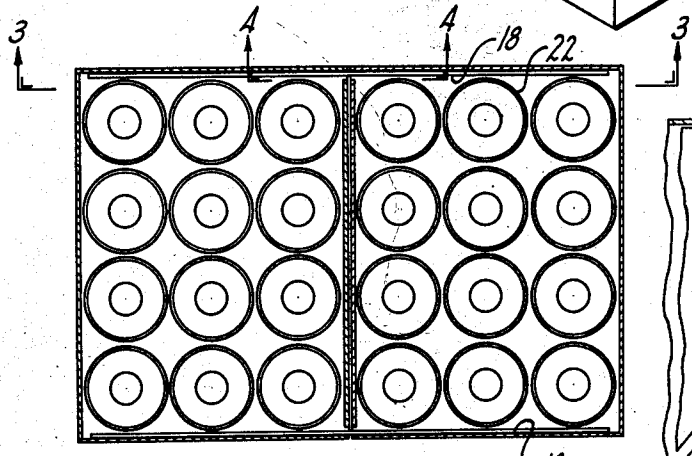


Fig. 2

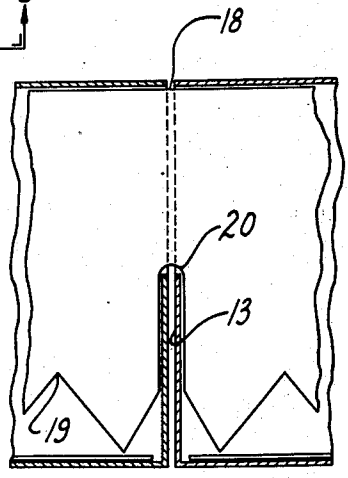


Fig. 4

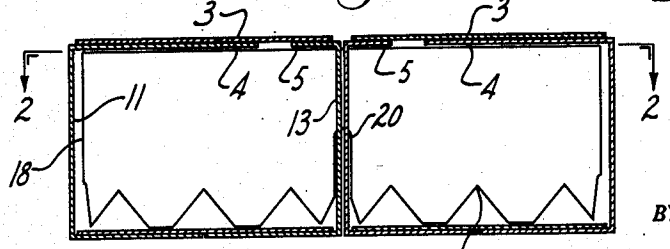


Fig. 3

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MULTIPLE CARTON STRUCTURE

Filed March 31, 1950 2 SHEETS—SHEET 2

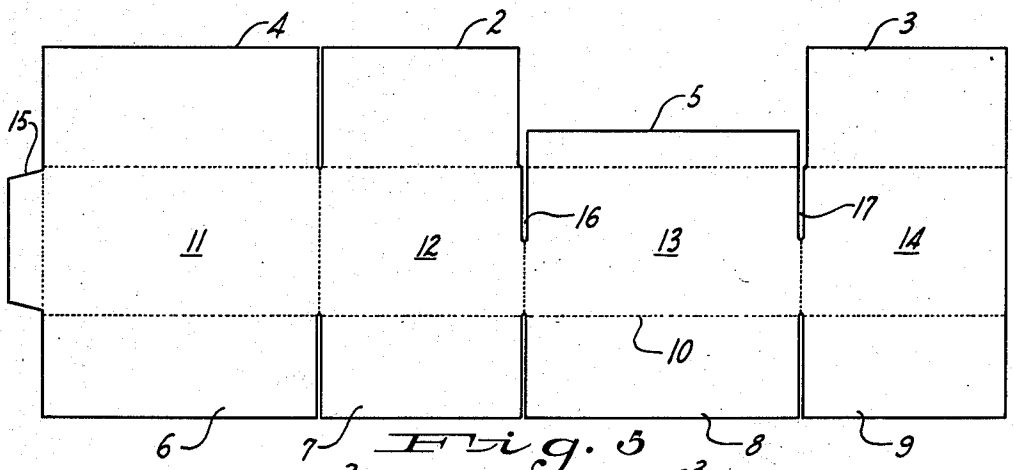


Fig. 5

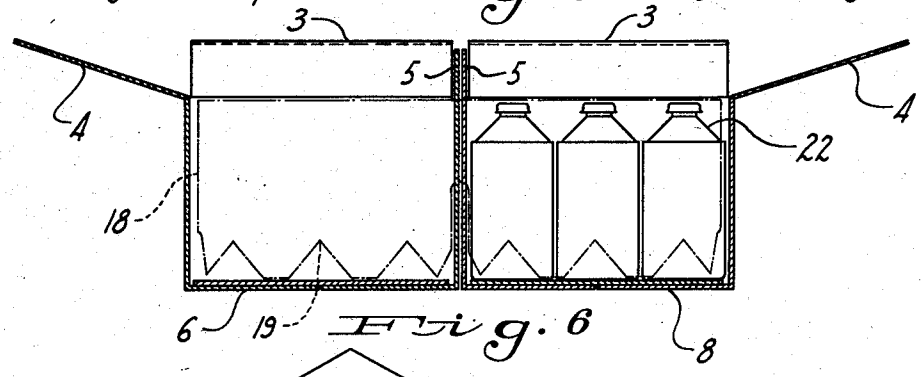


Fig. 6

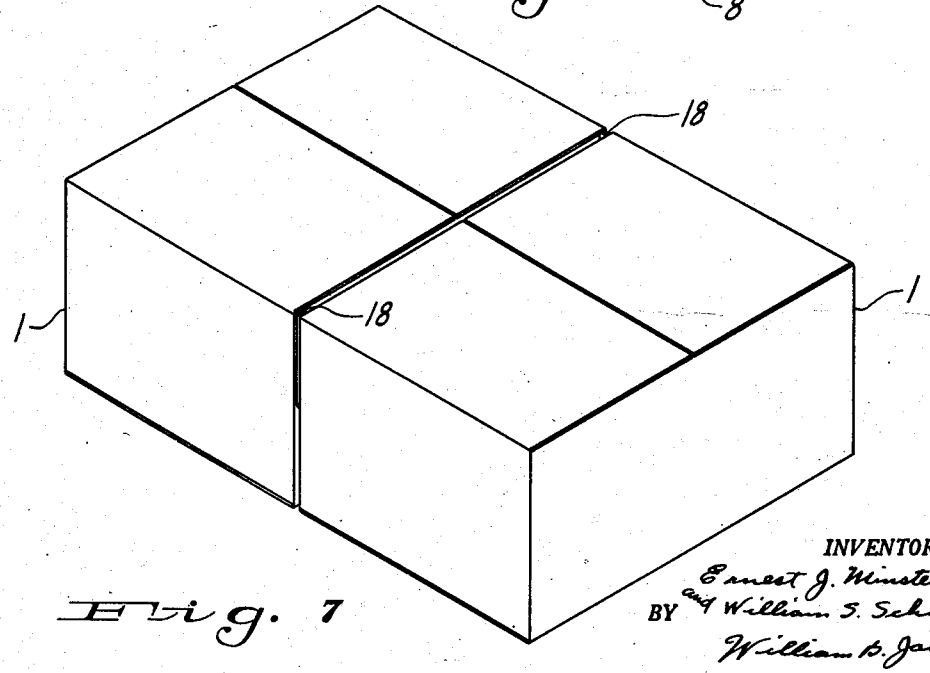


Fig. 7

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MULTIPLE CARTON STRUCTURE

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Application March 31, 1950, Serial No. 153,038

1 Claim. (Cl. 229—15)

1

This invention relates to new and useful improvements in cartons, more particularly for packaging beverage cans or bottles, and it is among the objects thereof to provide a carton for packaging containers which shall be capable of joining in pairs for handling as an integral unit and which can be separated into two cartons by severing a plurality of connecting wall members.

It is a further object of the invention to provide a carton of the above designated character which shall be adapted for use in pairs on packing machinery presently in use that is adapted for packing containers of double the size, without requiring any adjustment of such machinery.

These and other objects of the invention will become more apparent from a consideration of the accompanying drawings, constituting a part hereof, in which like reference characters designate like parts, and in which:

Fig. 1 is a view in perspective of a single carton and connecting member embodying the principles of this invention;

Fig. 2 a top plan view of a double carton or two cartons assembled as a unitary package, taken along the line 2—2, Fig. 3;

Fig. 3 is a vertical cross-sectional view of the assembly of Fig. 2, taken along the line 3—3, Fig. 2;

Fig. 4 is a vertical cross-sectional view taken along the line 4—4, Fig. 2;

Fig. 5 is a plan view of the cut and punched carton before folding and assembly;

Fig. 6 is a vertical cross-sectional view of a pair of cartons showing the packaging of containers in one of them; and

Fig. 7 is an elevational view in perspective of the assembled double unitary carton.

With reference to the several figures of the drawings, the numeral 1 designates a carton of fiber board or the like having the usual end flaps 2 and 3 and side flaps 4 and 5. The flap 5 is very short for the purpose, as shown in Fig. 6, of standing upright when two of such cartons are assembled on the conveyor for packaging so as to clear the loading fingers that place the containers in the carton. As shown in Fig. 5, the flaps 6, 7, 8 and 9 fold at right angles along the line 10 to form the base of the container of Fig. 1, and the numerals 11, 12, 13 and 14 designate the sections defined by the folding lines which, when folded, constitute the side walls of the carton. The short flap 15 folds inside of one of the end walls and is fastened thereto by heavy staples to lock the folded carton in position, as shown in Fig. 1 of the drawings.

2

Again with reference to Fig. 5, it is to be noted that deep notches 16 and 17 are provided below the short flap 5 a substantial distance approximately half-way down the wall of the carton, which, when the carton is assembled, provide the slots as shown in Fig. 1 of the drawings. By placing two of the cartons of Fig. 1 side by side with the sides having the short flap 5 contacting as shown in Fig. 6, a pair of side boards 18, having notches 19 and a deep notch 20, are placed against the walls of the cartons in the manner shown in Fig. 2, the deep notch 20 passing through the notches 16 and 17 to permit the bottom of the boards 18 to rest against the base of the cartons or nearly so. The notch 20 is of sufficient width to accommodate the two walls of the carton 1, as shown in Fig. 4, and when the cartons are thus interlocked by the boards 18 the flaps 2, 3, 4 and 5 are folded over as shown in Fig. 3 and the carton is sealed by the usual automatic gluing machines to constitute an assembled unit as shown in Fig. 7. The short flap 5 serves as an adhesive surface for flaps 2 and 3.

Such cartons may be used for beverage containers of metal or glass, designated by the numeral 22 in the drawings, the cartons being of a size to accommodate 12 beverage containers. Upon delivery of the double carton, it can be readily separated by cutting the connecting wall boards 18 as by a knife, leaving two separate cartons of 12 containers each. The design of carton with the short flaps 5 is especially adapted for packing on conventional loaders or packing machines which are designed for loading 24 container cartons. The short flaps 5 when upstanding as shown in Fig. 6 permit the loading device to insert the containers in the pair of cartons simultaneously without interference with the flap. The notches 19 in the side boards 18 function to clear the walls of the container to permit easy sliding of the wall board 18 into the cartons after the cartons have been loaded, although they may be inserted before loading if desired.

Fig. 3 shows the assembled pair of cartons with the wall boards 18 as a unitary carton with the flaps closed, and Fig. 6 illustrates a partially loaded double carton with the flaps in open position but joined by the wall boards 18.

It is apparent from the above description of the invention that container cartons made in accordance therewith provide a simple and economical means of combining two cartons for loading and shipping purposes and separating them to permit handling them in smaller units.

Although one embodiment of the invention has been herein illustrated and described, it will be

apparent to those skilled in the art that various modifications may be made in the details of construction without departing from the principles herein set forth.

We claim:

A double carton structure for beverage containers and the like comprising a pair of shipping cartons having closure flaps, one flap of each carton being relatively short, said cartons having notches extending substantially half the distance down the wall of the cartons on the short flap side of the carton at the corners thereof, and a pair of wall boards of substantially the height of said cartons and of a length double the width of said cartons, said wall boards having notches for interacting with the notches of the carton wall, whereby upon assembly of a pair of the cartons with their short flap sides in engagement, the wall boards can be placed in the notches of the carton walls and lowered to overlap the walls of adjacent cartons to constitute a pair of cartons a unitary package when the flaps are sealed thereon.

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