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CARTON CONNECTING MEMBERS

Filed April 12, 1960

2 Sheets-Sheet 1

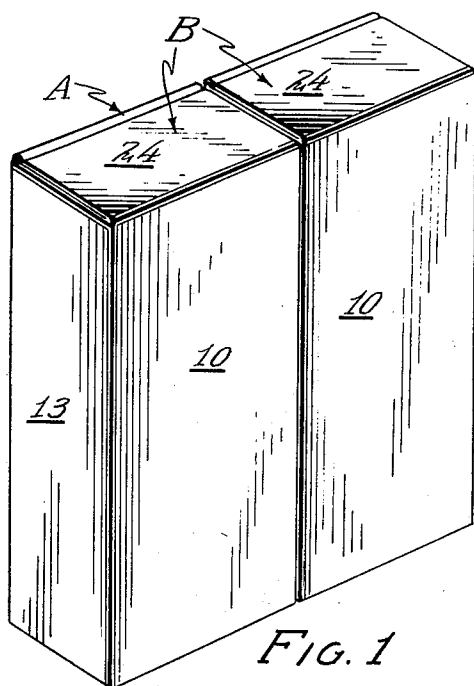


FIG. 1

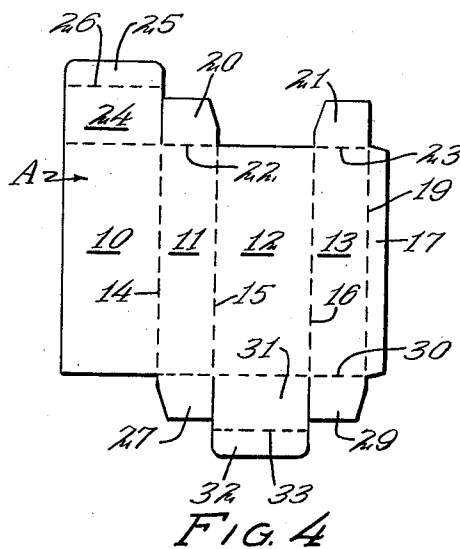


FIG. 4

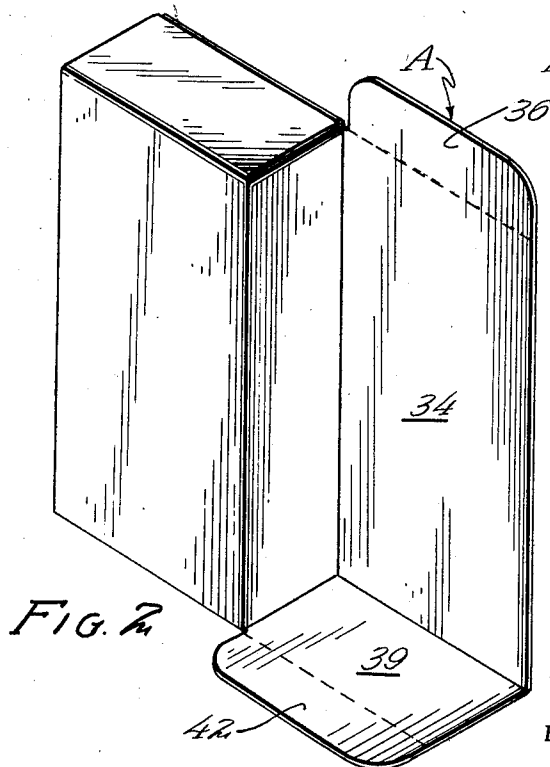


FIG. 2

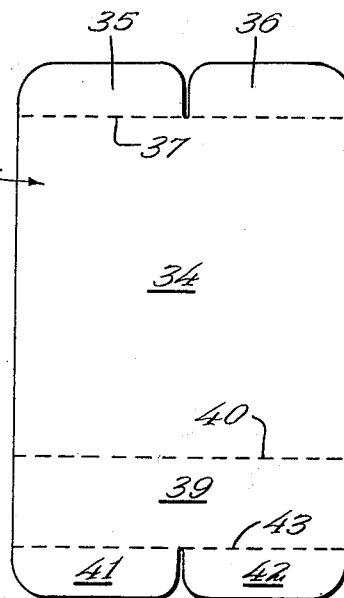


FIG. 3

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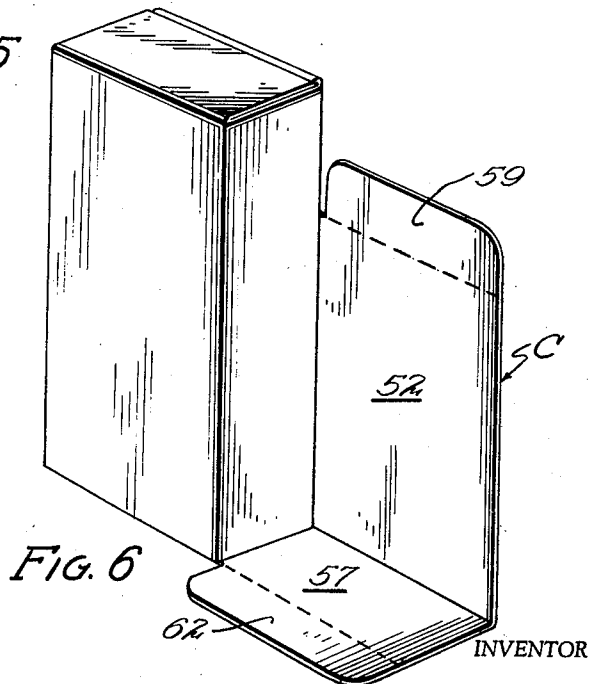
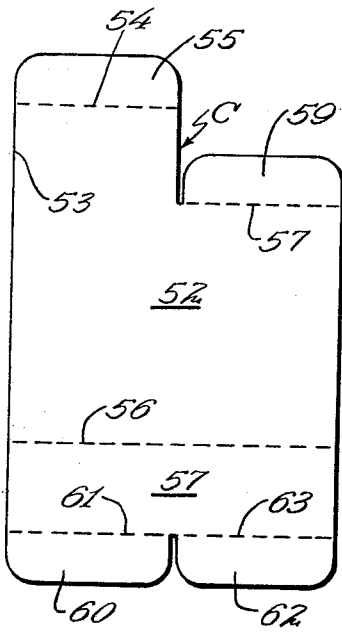
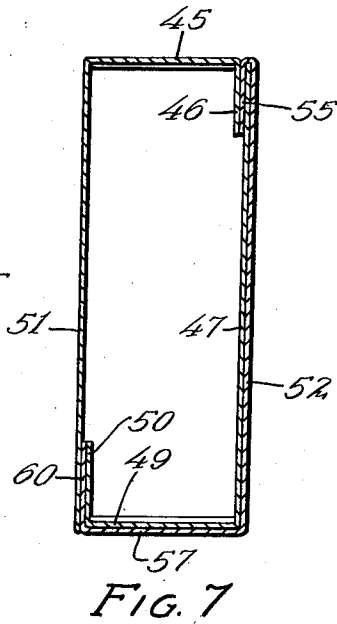
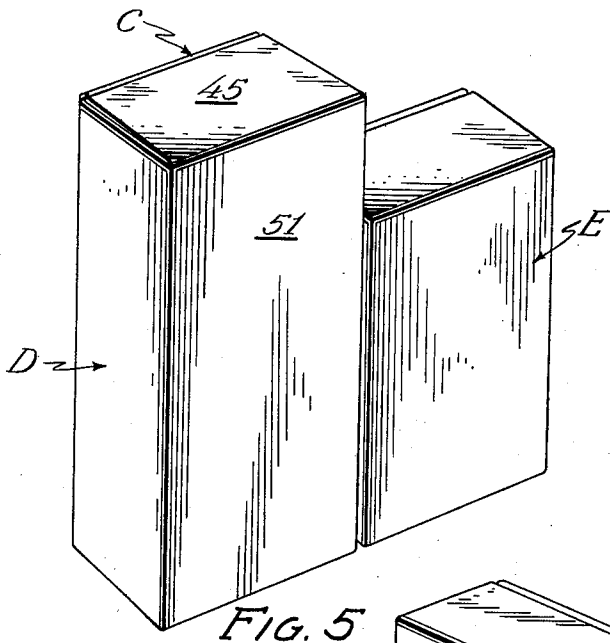


FIG. 8

FIG. 6

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1

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CARTON CONNECTING MEMBERS

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5 Claims. (Cl. 229-15)

This invention relates to an improvement in carton connecting members and deals particularly with a member which can be easily connected to a pair of cartons and which will permit the cartons and their products to be handled as a unit. Various means have been provided for connecting a pair of cartons so that they may be handled and sold as a unit. Many such connectors comprise merely a sleeve of paperboard designed to encircle the two cartons. Tape has also been employed, but the tape usually defaces the display panels of the cartons. If the carton encircling sleeves are of sufficient width to accomplish the right result, they usually hide a considerable portion of the display panels of the cartons. It is an object of the present invention to provide a connector capable of holding a pair of cartons in side by side relation with the front display panel and top panels readily visible and with the outer side walls visible.

A feature of the present invention resides in the provisions of a carton connector comprising merely a panel of paperboard designed to extend over the rear wall of a pair of cartons, a bottom panel designed to extend beneath the bottom walls of the cartons, and tuck flaps designed to extend into the cartons to hold the cartons connected.

A further feature of the present invention resides in the provision of a connector which may, if desired, be used for holding cartons of different sizes.

These and other objects and novel features of the invention will be more clearly and fully set forth in the following specification and claims.

In the drawings forming a part of the specification:

FIGURE 1 is a perspective view of a pair of cartons held in side by side relation by the connecting means.

FIGURE 2 is a perspective view similar to FIGURE 1, but showing the arrangement when only one carton has been connected thereto.

FIGURE 3 is a diagrammatic view of the blank from which the connector is formed.

FIGURE 4 is a diagrammatic view of the type of cartons with which the connector is normally used.

FIGURE 5 is a perspective view of a pair of cartons of different size supported in side by side relation by the connector.

FIGURE 6 is a view similar to FIGURE 5, but with only one carton attached to the connector.

FIGURE 7 is a sectional view showing the manner in which the connector is attached to the cartons.

FIGURE 8 is a diagrammatic view of the blank from which the connector is formed.

The connector A illustrated in FIGURES 1 through 4 of the drawings is normally used to connect a pair of cartons B which are shown as being of the tuck end type. While this type of carton is conventional, one such carton is illustrated in FIGURE 4 and is shown as including a front panel 10, a side wall panel 11, a rear panel 12, and a side wall panel 13 which are foldably connected along parallel fold lines 14, 15 and 16. A glue flap 17 is hingedly connected along a fold line 19 to one end panel of the series, such as the panel 13 and this glue flap is normally adhered to the inner surface of the panel 10 to form a tubular structure.

Top closure flaps 20 and 21 are hingedly connected along aligned fold lines 22 and 23 to the upper edges of the side walls 11 and 13. A top closure panel 24 is fold-

2

ably connected to the front wall panel 10 along an extension of the fold line 22. A tuck flap 25 is hingedly secured to the end edge of the top closure panel 24 along a fold line 26. When closed, the closure flaps 20 and 21 are folded into a common plane, the closure panel 24 folded to overlie the flaps 20 and 21, and the tuck flap 25 is inserted between the forward edges of the flaps 20 and 21 and the rear wall 12.

The opposite end of the carton, which is described as the lower end for the purpose of convenience, a pair of closure flaps 27 and 29 are foldably connected to the lower edges of the side wall panels 11 and 13 along a fold line 30. A bottom closure panel 31 is also connected to the rear wall 12 along the fold line 30. A tuck flap 32 is foldably connected to the end edge of the bottom closure panel 31 along a fold line 33. When the carton is closed, the flaps 27 and 29 are folded into right angular relation to the walls to which they are secured the bottom closure panel 31 is folded to underlie these flaps 27 and 29, and the tuck flap 32 is inserted between the forward edges of the flaps 27 and 29 and the front wall panel 10.

It is common practice to hingedly connect one closure panel to one of the display panels and the other closure panel to the opposite wall. Thus the carton A which has been described is conventional.

The connector A is formed as illustrated in FIGURE 3 of the drawings. The connector A includes a rear panel 34 which is generally rectangular and is substantially equal in width and height to the rear areas of the cartons B when these cartons are in side by side relation. Tuck flaps 35 and 36 are foldably connected to the upper edge of the panel 34 along a fold line 37. A bottom panel 39 is foldably connected to the lower edge of the back panel 34 along a fold line 40. The bottom panel 39 is equal in length to the enclosure panels 24 and 31 of the cartons A. Tuck flaps 41 and 42 are hingedly connected to the edge of the bottom panel 39 along a fold line 43.

The connector A is attached to the cartons B by folding the top flaps such as 35 downwardly into substantially parallel relation with the back panel 34 and inserting the flap 35 between the tuck flap 25 of the top closure panel 24 of the carton A and the rear wall 12 of the carton. The bottom panel 39 is folded along the fold line 40 to underlie the carton, and the tuck flap 41 is inserted between the tuck flap 32 of the carton and the front wall 10 thereof. The second carton is attached in the same manner. In actual practice, the tuck flaps 41 and 42 are usually simultaneously inserted into the lower ends of the two cartons A. When in place, the two cartons are held in side by side relation but the top panels, the front display panels, and one side panel of each carton is visible.

In FIGURES 5 through 8 of the drawings, I disclose a modified form of construction in which the connector which is indicated in general by the letter C is used to connect cartons such as D and E which are of different height. The width of the two cartons need not be the same nor is it essential that the cartons be of the same thickness, although in connecting cartons together, the cartons are preferably of the same thickness so that they can be more easily packed. The cartons D and E are of the tuck end type illustrated in FIGURE 4 of the drawings and are preferably arranged with a top closure panel 45 provided with a tuck flap 46 which tucks down forwardly of the rear wall 47 while the lower ends of the cartons are closed by closure panels 49 hingedly connected to the rear wall 47 and including a tuck flap 50 which lies inwardly of the front carton wall 51.

The connector C includes a rear wall panel 52 which is shaped similarly to the rear walls of the cartons D

3

and E when these cartons are in side by side relation. In the drawings, carton D is shown as being somewhat higher than carton E and accordingly one side of the panel 52 which lies rearwardly of the carton D is of greater height than the other side thereof which lies rearwardly of the carton E. In other words, the panel 52 includes an upwardly extended portion 53 which is approximately the same width as the carton D and which is foldably connected along a transverse fold line 54 to a tuck flap 55. The distance between the fold line 54, and a parallel fold line 56 which connects the lower edge of the panel 52 to the bottom panel 57, is approximately equal to the height of the carton D.

The opposite side of the panel 52 is connected along the fold line 57 to a tuck flap 59. The distance between the fold lines 57 and 56 is substantially equal to the height of the carton E. The length of the bottom panel 57 is substantially equal to the thickness of the cartons D and E.

The bottom panel 57 is connected to a first tuck flap 60 along a fold line 61 and is foldably connected to a second tuck flap 62 along a fold line 63. The two tuck flaps 60 and 62 are spaced apart, as in the previous construction. In the particular arrangement illustrated, the fold lines 61 and 63 are aligned, as the two cartons D and E are shown of the same thickness. However, the distance between the fold lines 61 and 63 and the parallel fold lines 56 may be varied and offset in relation in the event the cartons are of different thicknesses.

The connector C is attached to the cartons D and E in the manner previously described by inserting the upper tuck flaps 55 and 59 between the downwardly extending tuck flaps 46 of the cartons D and E and the rear wall of these cartons. The tuck flaps 60 and 62 are similarly inserted between the upwardly extending tuck flaps 50 of the cartons and the front walls 51 thereof.

In accordance with the patent statutes, I have described the principles of construction and operation of my improvement in carton connecting members, and while I have endeavored to set forth the best embodiment thereof, I desire to have it understood that changes may be made within the scope of the following claims without departing from the spirit of my invention.

I claim:

1. A package including a pair of tuck end cartons and a carton connector, the cartons each having one end closure panel and tuck flap hingedly connected to one wall panel at one end of the carton, and each carton having a second end closure panel and tuck flap secured to the opposite carton wall, the connector including a first panel overlying said opposite carton wall of both cartons and in face contact therewith, a first pair of tuck flaps hingedly connected to said panel along lines of fold parallel to, and adjacent to, said one end of said opposite wall of each carton, each said tuck flap of said pair being folded between the tuck flap of said one closure at said one carton end and said opposite panel thereof, an end panel foldably connected to said first

4

panel along a line of fold parallel to the lines of fold connecting said first panel to said tuck flaps of said pair, said end panel lying in face contact with the said second closure panels of both of said cartons, and a second pair of tuck flaps secured to said end panel along fold lines parallel to said line of fold connecting said panels and each spaced therefrom a distance substantially equal to the distance between said one wall and said opposite wall of a corresponding one of said cartons, said tuck flaps of said second pair extending between said tuck flaps hinged to said second closure panels and said one carton wall of a corresponding carton.

2. The structure of claim 1 and in which the line of fold connects the tuck flaps of said first pair to said first named panel along aligned fold lines.

3. The structure of claim 1 and in which the lines of fold connecting the tuck flaps of said first pair to said first named panel are offset, and parallel.

4. A package including a pair of tubular cartons each having rectangularly arranged side and end walls, and having one end closure and tuck flap hingedly connected to one wall panel at one end of the carton, and having a second end closure and tuck flap secured to the opposite wall panel at the other end of the carton, a connector including a first panel overlying said opposite wall panel of both cartons and in face contact therewith, a first pair of tuck flaps connected to said panel along lines of fold parallel to and adjacent to, said one end of each carton, each said tuck flap of said pair being folded between the tuck flap of said one closure and said opposite panel, an end panel foldably connected to said first panel along a line of fold parallel to the lines of fold connecting said first panel to said tuck flaps of said pair, said end panel lying in face contact with said second end closures of both of said cartons, and a second pair of tuck flaps hingedly connected to said end panel along lines of fold parallel to said line of fold connecting said panels and each spaced therefrom a distance substantially equal to the distance between said one wall and said opposite wall, said tuck flaps of said second pair extending between said tuck flaps of said second pair extending between said tuck flaps on said second closure and said one carton wall of a corresponding carton, said tuck flaps of said pairs being substantially the full width of said one wall panel and said opposite wall panel.

5. 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.

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