

July 23, 1957

M. J. KELLY
ICE CREAM CONTAINER

2,800,266

Filed Dec. 14, 1953

2 Sheets-Sheet 1

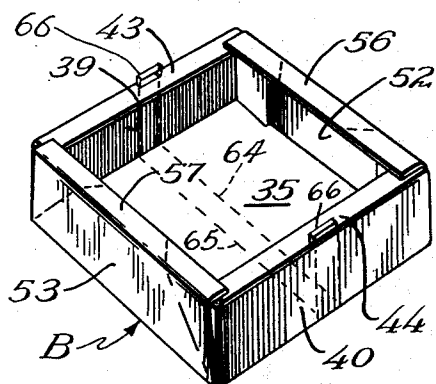


Fig. 3

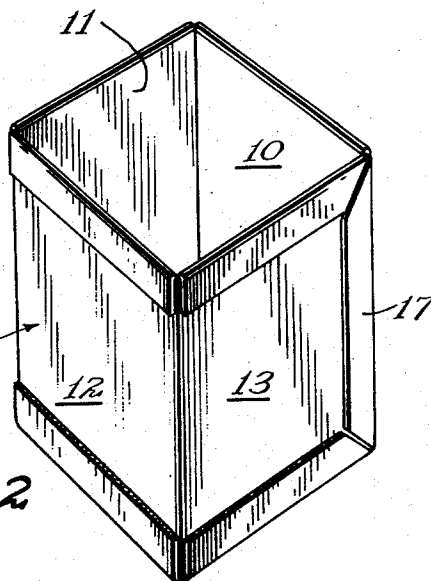


Fig. 2

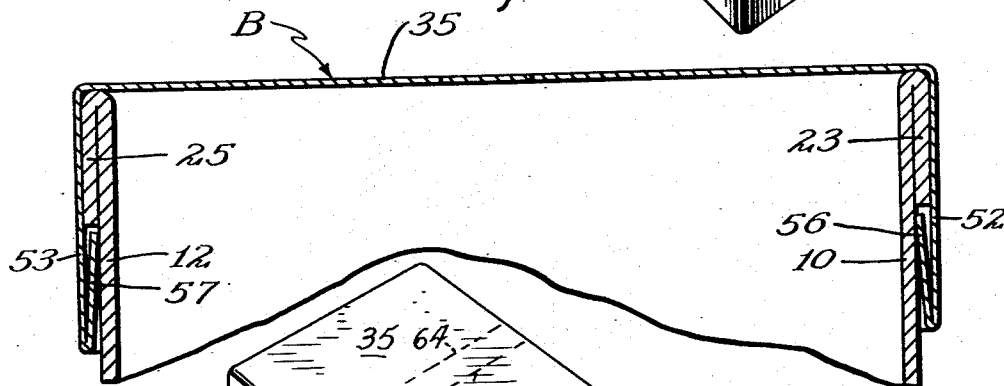


Fig. 4

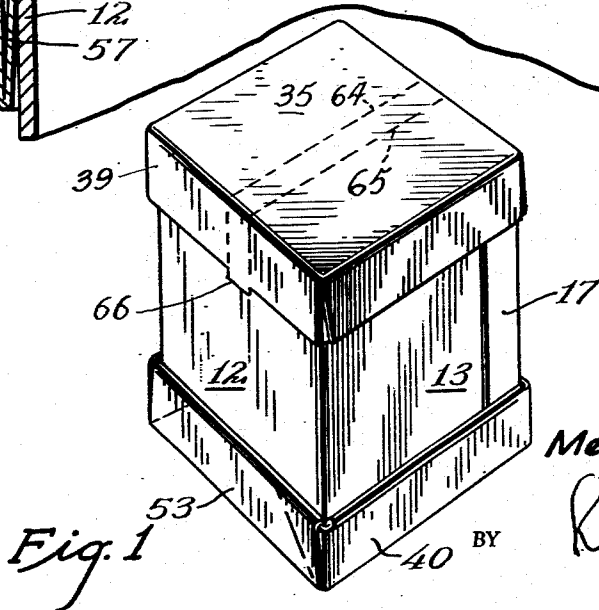


Fig. 1

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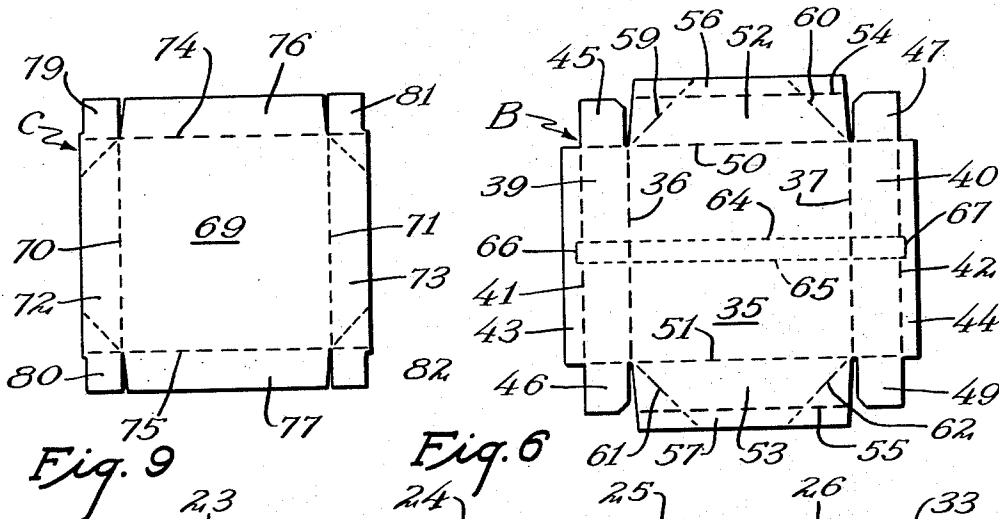
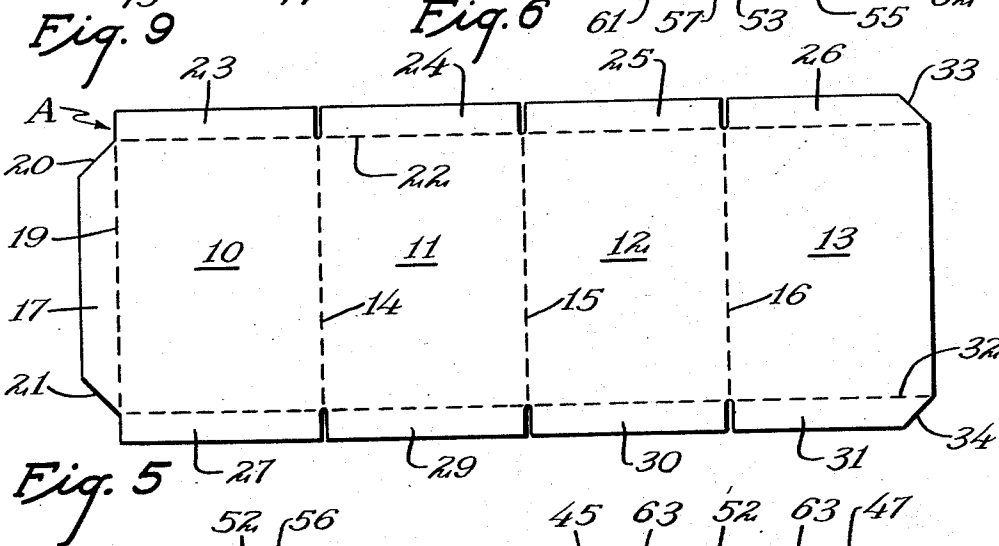
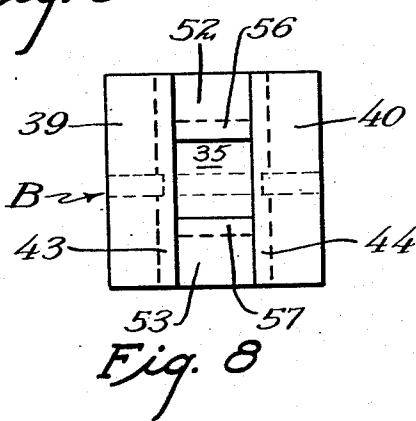
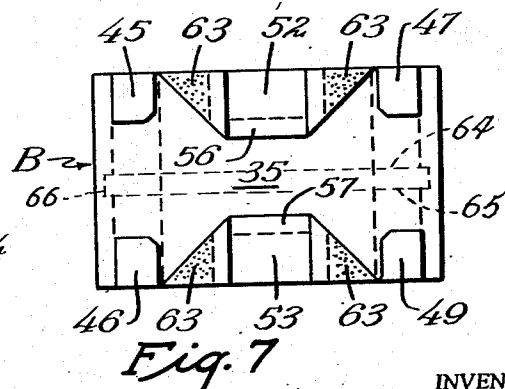
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ICE CREAM CONTAINER

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Application December 14, 1953, Serial No. 397,811

1 Claim. (Cl. 229—37)

This invention relates to an improvement in ice cream container and deals particularly with a package for containing bulk ice cream or similar products.

Ice cream is often sold in containers of one type or another capable of holding two and one-half or three gallons of ice cream. In the past it has been a common practice to sell this product in metal cans or in cylindrical paperboard containers. However, these containers are not conservative from a storage space standpoint and are costly to produce. Furthermore, containers of this type require considerable storage space when empty. An object of the present invention lies in eliminating these previous difficulties.

An object of the present invention resides in the provision of a container for ice cream and the like which is shipped and stored in flat condition and as a result requires a minimum of storage space. The containers normally include a tubular body portion and a pair of removable end portions which are used to close the ends of the tubular body.

A feature of the present invention lies in the novel manner of locking one or both of the end closures to the body portion. The body portion is provided with end flanges which are adhered to the outer surface of the tubular body along the top and bottom edges thereof. One or both of the end closures includes a tray shaped body having marginal flanges which fold inwardly of the side walls and lock against the flanges of the body portion.

An added feature of the present invention resides in the provision of a simple and effective means for opening the top of the container when desired. The cover is provided with a removable strip extending across the top. By removing the strip the cover may be separated into two parts and removed and discarded.

These and other objects and novel features of my 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 prospective view of the closed container.

Figure 2 is a prospective view of the body portion of the container.

Figure 3 is a prospective view of the container bottom. This structure may also be used as the container top.

Figure 4 is a sectional view through the container showing the manner in which the container top may be locked in closed position.

Figure 5 is a diagrammatic view of the blank of which the container body is formed.

Figure 6 is a diagrammatic view of the container bottom and top structure.

Figure 7 is a diagrammatic view showing the container bottom in partially glued position.

Figure 8 shows the container bottom in completely glued position.

Figure 9 is a diagrammatic view of a modified form of container top.

As shown in Figure 5 of the drawings the container body A includes four wall panels 10, 11, 12 and 13 con-

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nected by parallel fold lines 14, 15 and 16. An anchor flap 17 is connected to one end panel of the series such as the panel 10 along a fold line 19. In usual practice the panel or flap 17 is adhered to the panel 13 as shown in Figure 2 of the drawings so as to secure the container in tubular form. The ends of the flap 17 are beveled as shown at 20 and 21.

The wall panels are foldably connected to flanges along a common line of fold 22. Flanges 23, 24, 25 and 26 are secured to the upper edges of the wall panels 10, 11, 12 and 13, respectively. Similar flanges 27, 29, 30 and 31 are foldably connected to the lower edges of these same panels along a common line of fold 32. The ends of the flanges 26 and 31 adjoining the free end of the blank are beveled as indicated at 33 and 34.

As is shown in Figure 2 of the drawings the flanges at the upper edge of the blank are folded back upon the panels to which they are hinged and adhered in this position. The flanges at the lower end of the blank A are also adhered to the outer surfaces of the panels to which they are hinged. The beveled ends 33 and 34 of the flanges 26 and 31 extend in a butting relation with the beveled ends of the flap 17 to form a mitered joint.

In Figures 3, 6, 7 and 8 I disclose a container closure B which may be used at both ends of the container or may only be used at the bottom end thereof. This closure B includes a main panel 35 which is foldably connected along parallel fold lines 36 and 37 to side wall panels 39 and 40. These side wall panels 39 and 40 are foldably connected along parallel fold lines 41 and 42 to locking flanges 43 and 44. Anchoring flaps 45 and 46 project from ends of the wall panel 39 and similar flaps 47 and 49 project from the ends of the wall panel 40.

The main panel 35 is connected along parallel fold lines 50 and 51 to side wall panels 52 and 53. These panels are connected along parallel fold lines 54 and 55 to locking flanges 56 and 57. Diagonal fold lines 59 and 60 extend across the panel 52 and flange 56 form the juncture of the fold line 50 with the right angular fold lines 36 and 37. Similar diagonal fold lines 61 and 62 extend across the panel 53 and flange 57 form the juncture of the fold line 51 with the right angular fold lines 36 and 37. The structure thus formed is in effect an infolded tray with extra locking flanges hinged to the upper edges of the side walls. In gluing the blank B the panels 52 and 53 are folded over the main panel 35 but the triangular areas outwardly of the various diagonal fold lines are folded to overlie the adjoining portions of the panels 52 and 53 and their respective flanges. The closure is then in the position shown in Figure 7 of the drawings. Adhesive such as 63 is applied to the triangular areas of the panels 52 and 53 outwardly of the diagonal fold lines described. In the same operation the flaps 45 and 46 are folded upon the wall panel 39 and the flaps 47 and 49 are folded upon the side wall 40.

To complete the folding operation the side wall panels 39 and 40 with their respective locking flanges are folded over the bottom panel 35 into the position shown in Figure 8. When in this position the various flaps 45, 46, 47 and 49 become adhered to the triangular areas over which they lie. When the structure thus formed is unfolded, it becomes a rectangular tray with locking flanges along the upper edges thereof.

Figure 3 of the drawings shows the closure B in erected form with the various locking flanges folded inwardly to extend substantially parallel to the main panel 35. If an enclosure is erected into this position and the tubular body A is placed above the same and urged downwardly, the locking flanges 43, 44 and 56 and 57 are folded downwardly into substantially parallel relation to the wall panels to which they are hinged. The locking flanges and the wall panels are so proportioned that when the closure

is fully telescoped onto the body the edges of the locking flanges abut against the various flanges adhered to the side walls of the container body A.

When desired, the closure B may be used on both ends of the container body. However, the closures B lock securely in place and are difficult to remove. Accordingly, when the closure B is used as a top as well as a bottom, a pair of parallel weakened lines of separation 64 and 65 extend across the panel 35 and across the wall panels 39 and 40. Transverse cut lines 66 and 67 connect the ends of the perforated or weakened lines 64 and 65. Accordingly, the end of the strip between the weakened lines 64 and 65 may be grasped and separated from the structure by pulling this strip out of the plane of the top. The cover may then be easily removed and discarded. Under normal conditions, once a container of the type described is open, it is not reclosed and the contents are used.

In Figure 9 of the drawings I disclose a modified type of closure C which comprises a simple glued tray which fits by friction on the top of the container. This closure C includes a main panel 69 connected along parallel fold lines 70 and 71 to wall panels 72 and 73 respectively. The panel 69 is also connected along parallel fold lines 74 and 75 to wall panels 76 and 77. Flaps 79 and 80 are foldably connected to the ends of the wall panel 72 and similar flaps 81 and 82 are foldably connected to opposite ends of the side wall 73. When the flaps 79 and 81 are adhered to the wall 76 and the flaps 80 and 82 are adhered to the wall 77 a tray is formed which will telescope onto the body of the container. The walls may be in-folded or outfolded so as to remain flat when glued.

Figure 4 shows a cover such as B applied to the upper end of the container and shows the manner in which the anchoring flaps abut against the flanges of the body portion to resist removal of the cover. When once applied, the closure remains secure and will support the weight of the contained material.

In accordance with the patent statutes, I have described the principles of construction and operation of my ice cream container, and while I have endeavored to set forth the best embodiment thereof, I desire to have it understood that obvious changes may be made within the scope of the following claim without departing from the spirit of my invention.

I claim:

The end closure for a tubular container having angularly arranged connected side walls and flanges on the bottom edges of said side walls adhered to the outer surfaces of the side walls, the closure including a main closure panel and side wall panels foldably connected thereto, locking flanges hingedly secured to the edges of said wall panels and foldable inwardly of said side wall panels to engage in edge abutting relation with the edges of the flanges on the tubular body, and a tear strip defined by weakened lines of separation extending across said main closure panel and two of said side wall panels but not across said locking flanges connected thereto, the ends of said tear strip projecting downwardly below the fold line connecting said two side wall panels and said locking flanges connected thereto.

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