

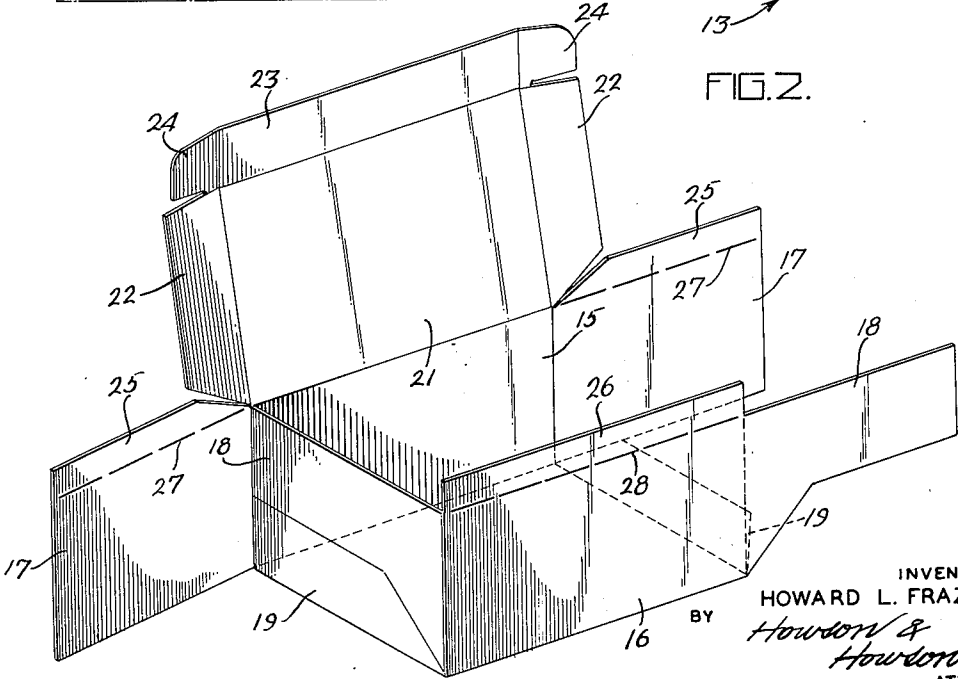
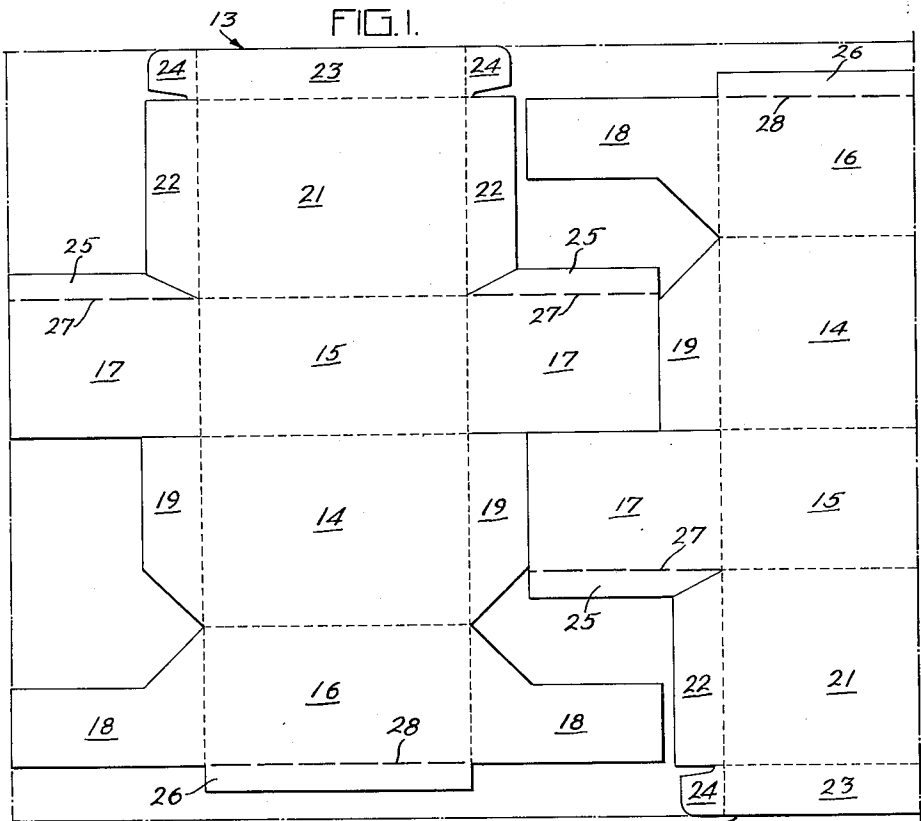
Sept. 19, 1961

H. L. FRAZIER
CONTAINER CONSTRUCTION

3,000,548

Filed Nov. 18, 1959

2 Sheets-Sheet 1



INVENTOR
HOWARD L. FRAZIER
BY *Howdon & Howdon*
ATTYS.

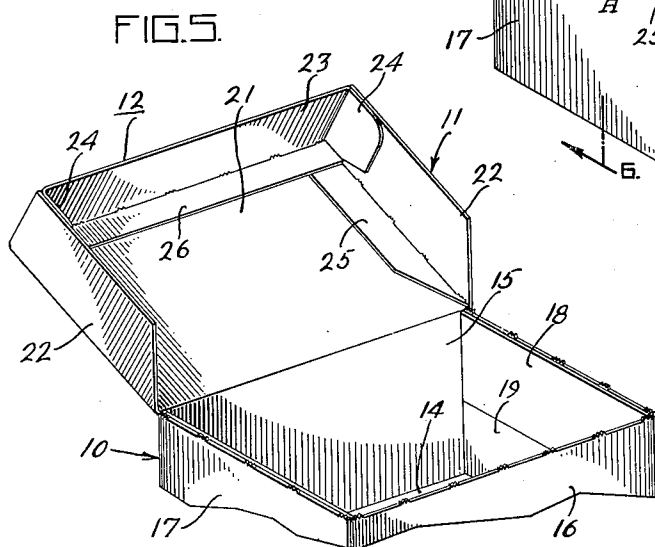
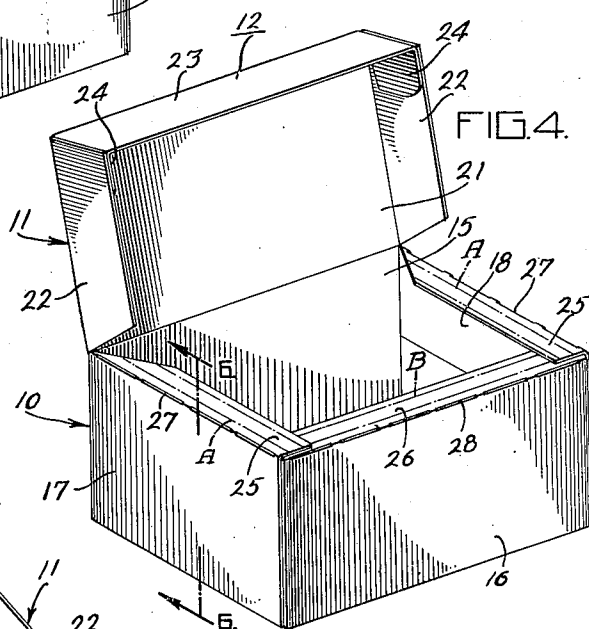
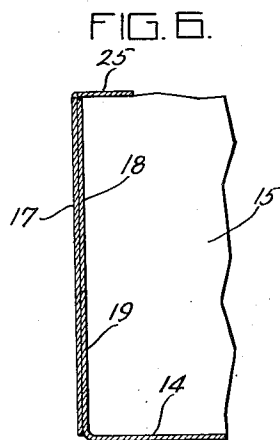
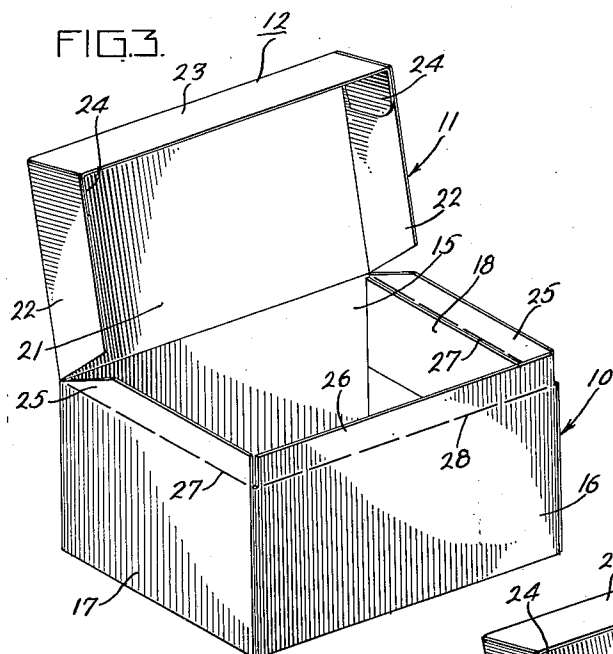
Sept. 19, 1961

H. L. FRAZIER
CONTAINER CONSTRUCTION

3,000,548

Filed Nov. 18, 1959

2 Sheets-Sheet 2



INVENTOR:
HOWARD L. FRAZIER
BY *Howard & Howard*
ATTYS.

1

3,000,548

CONTAINER CONSTRUCTION

Howard L. Frazier, King of Prussia, Pa., assignor to Edwin J. Schoettle Company, Inc., North Wales, Pa., a corporation of Pennsylvania

Filed Nov. 18, 1959, Ser. No. 853,801
1 Claim. (Cl. 229—51)

The present invention relates to new and useful improvements in containers including and more particularly is directed to new and useful improvements in containers for use in packaging of ice cream and similar items.

A primary object of the present invention is to provide a new and useful container which will maintain the contents effectively sealed both against leakage and external contamination, while permitting the container to be readily opened and reclosed.

A further object of the present invention is to provide a novel container wherein the lid may be initially sealed in a closed position by the use of presently existing packaging machines so that during normal handling of the container the lid of the container may not be inadvertently opened.

A further object of the present invention is to provide a novel container wherein the lid is initially sealed in a closed position after the container is filled but which may be readily opened by the purchaser without tearing or ruining the container and which may be easily reclosed so that it will remain in the closed position.

Still a further object of the present invention is to provide a novel container of the type described having the features and characteristics set forth above which is of relatively simple construction, is sturdy and durable in use, may be made of lighter weight board than conventional cartons designed for the same purpose, is neat and attractive in appearance, and which is adapted to be manufactured and sold at a reasonable cost.

These and other objects of the present invention and the various features and details of the construction thereof are hereinafter more fully set forth and described with reference to the accompanying drawings, in which:

FIG. 1 is a plan view of the blank from which the container of the present invention is adapted to be formed;

FIG. 2 is a perspective view of a container made in accordance with the present invention in the partially assembled condition;

FIG. 3 is a perspective view of an assembled container of the present invention prepared for the reception of the material to be inserted into the container;

FIG. 4 is a perspective view of a container made in accordance with the present invention in the condition subsequent to filling and immediately prior to the lid being closed and sealed;

FIG. 5 is a fragmentary perspective view of the container of the present invention with the lid opened after it has been sealed; and

FIG. 6 is an enlarged fragmentary sectional view taken along line 6—6 of FIG. 4.

Referring more specifically to the drawings, FIGS. 3 and 4 illustrate a container made in accordance with the present invention comprising a generally rectangular body portion 10 open at its upper end and having a lid portion 11 hingely connected to the rear of the body portion and adapted to be folded downwardly to a position overlying the open upper end of the container. A downwardly depending flange 12 is secured to the side and front edges of the container lid portion 11 and is adapted to closely embrace and overlie the upper ends of the front and side walls of the container body portion when the container is in the closed position. The con-

2

tainer of the present invention preferably is formed from a blank such as illustrated in FIG. 1 of the drawings which is so constructed and arranged that it may be cut out of a continuous sheet of paper board and nested with adjacent blanks on the sheet of paper board to provide a minimum amount of waste board. With reference to FIG. 1, the blank from which the container of the present invention is formed is designated generally by reference numeral 13 and comprises a base portion 14 of generally rectangular configuration having integrally secured thereto along fold lines at opposite edges thereof a front wall 16 and a rear wall 15. Additionally, a pair of side walls 17, 17 are integrally connected to the rear wall 15 and along fold lines. The front, rear and side walls of the container are adapted to be folded upperwardly relative to the base portion to form the generally rectangular body portion 10 of the container.

In accordance with the present invention the front, rear and side walls are maintained in the folded or formed position by means of glue flaps which are so constructed that in addition to maintaining the side walls 17, 17 in place they also provide a double thickness at the side walls to further strengthen the carton and prevent the carton from breaking during the filling operation. To accomplish this, a pair of side wall glue flaps 18, 18 are provided integrally connected along fold lines to the opposite side edges of the front wall panel 16 of the container. The side wall glue flaps 18, 18 are formed as illustrated in FIG. 1 of the drawings having a portion thereof adjacent the front wall 16 extending for substantially the full height of the front wall and a portion thereof spaced from the front wall extending for substantially less than the full height of the front wall. The upper end of the side wall glue flap 18 is substantially in alignment with the upper end of the front wall 16. This construction, when the glue flap is folded inwardly to a position inwardly overlying the side wall panel 17 the bottom portion of the side wall glue flap 18 is spaced upwardly along at least a part of its length from the edge of the base 14.

In order to form a complete double wall thickness at the side walls of the carton a pair of base glue flaps 19, 19 are provided integrally connected along fold lines to opposite side edges of the base 14 with the base glue flaps 19, 19 corresponding to the cut out area of the side wall glue flaps 18, 18. With this, during formation of the container, the side wall glue flaps and base glue flaps together form a panel which is co-extensive with the side wall panel and thereby provide a complete double panel thickness at the side walls of the container to strengthen the container.

The container lid portion 11 is formed integrally with the body portion of the container and comprises a lid panel 21 connected to the upper end of the rear wall panel 15 along a fold line. Additionally, side flange panels 22, 22 are provided connected to opposite side edges of the lid panel 21 along fold lines while a front flange panel 23 is integrally connected to the forward edge of the lid panel along a fold line. The side and front flange panels, when folded downwardly relative to the lid panel, form the flange 12 of the lid which overlies and embraces the upper end of the body portion of the container. In order to maintain the side and front flange panels 22 and 23, respectively, in their folded position, a pair of glue flaps 24, 24 are provided which, in the present instance, are illustrated as being formed integrally along opposite side edges of the front flange panel 23 and connected thereto along fold lines with the glue flaps being adapted to be secured to the forward portions of the side flange panels 22, 22 to thereby form the complete flange 12.

As illustrated in FIG. 1, the blank 13 is so designed that it may be nested with the next adjacent blank 13 to provide a minimum amount of waste during the formation of the blanks. As shown, each adjacent blank is rotated 180° from the previous adjacent blank so the side wall panels 17 and glue flap 18 of the adjacent blanks are nested relative to one another thereby providing a minimum of waste board.

In accordance with the present invention the container is formed or set up by initially folding the front and rear panels 16 and 15, respectively, upward relative to the base panel 14. Thereafter, the side wall glue flap and base glue flaps 18 and 19 respectively, are folded inwardly and upwardly to the position as illustrated in FIG. 2 forming the one thickness of the side wall of the container. After the glue flaps 18 and 19 are folded to their desired position the side wall panels 17, 17 are folded forwardly with respect to the rear wall panel 15 to a position outwardly overlying the glue flaps 18 and 19 and are secured to the glue flaps 18 and 19 in any conventional manner. The side wall panels may be secured to the glue flaps by a conventional gluing operation or if a coated board is used, the side walls may be secured to the glue flaps by the application of heat and pressure.

After the body portion of the carton is completely formed, the lid portion 11 is formed by folding the side and front flange panels downwardly relative to the lid panel, for example, as illustrated in FIG. 3 and the flanges are secured in this position by means of the glue flaps 24, 24, the glue flaps being secured to the flange panels in any conventional manner.

An important feature of the present invention is a provision of means to maintain the lid in the locked or closed position after the container is filled. To accomplish this, side sealing flaps 25, 25 are secured to the upper ends of the side wall panels 17, 17 while a front sealing flap 26 is secured to the upper end of the front wall panel 16. These sealing flaps 25 and 26 extend for substantially the full length of the side and front walls of the container and are adapted to be folded downwardly over the contents of the container to the position shown in FIG. 4. Additionally, the sealing flaps 25 and 26 are connected to the side and front walls 17 and 16, respectively, of the container along perforated or partially cut lines 27 and 28, respectively, or these lines may be cut-score lines in which the die knife cuts approximately half-way through the board so that they may be easily torn away from their respective side and front wall panels of the container.

After the container is sealed and the sealing flaps folded downwardly to the position illustrated in FIG. 4, the lid of the container is closed so that the edge portion of the inner surface of the lid panel 21 engage the sealing flaps 25 and 26. The sealing flaps 25 and 26 are then secured to the lid panel 21, for example, by providing glue along the area indicated at A, A on the sealing flap 25 and along the area indicated at B on the sealing flap 26. Alternatively, if a coated board is used in the manufacture of the container, the sealing flaps 25 and 26 may be secured to the lid panel 21 by conventional heat sealing.

With this construction, after the container is sealed and closed, the lid portion of the container is glued in place

to thereby prevent the lid from being inadvertently opened during handling or shipping of the container. However, the lid may be opened by the ultimate user of the product by merely grasping the lid flange portion 12 and forcing the lid open. Upon opening the lid the sealing flaps 25 and 26 will be torn away from their respective side and front panels 17 and 16 along the perforated or partially cut lines 27 and 28, respectively, leaving the sealing flaps secured to the lid panel 21, as illustrated in FIG. 5 of the drawing. This permits the user of the container to have free and easy access to the product in the container with no locking flaps or sealing means left on the side or front walls of the container to get in the way of the user when the container is used. After a portion of the contents have been removed from the container the user may again reclose the container by forcing the lid downwardly so that the lid flange portion 12 overlies and embraces the upper edges of the front and side panels of the container body portion. The lid, will not be locked in this closed position, but, nevertheless, will remain closed due to friction between the lid flange portion and the body of the container providing a container which may be opened and reclosed readily.

While a particular embodiment of the present invention has been illustrated and described herein, it is not intended to limit the invention to such a disclosure and changes and modifications may be incorporated and embodied therein within the scope of the following claim.

I claim:

1. A container formed of a unitary paper board blank having a base and front, rear and side walls forming an open body portion, a lid adapted to overlie the opening to said body portion and close the same, said lid being hingedly connected to the container rear wall and having a downwardly extending skirt portion thereon adapted in the closed position of the lid to overlie and embrace the upper portion of the side and front walls of the container body portion, said side walls each comprising a first unitary panel formed integrally with said paper board blank and a second panel consisting of a pair of intermeshing glue flaps folded over said first panel with each glue flap covering a portion of said first panel and the pair of glue flaps together being substantially co-extensive with and adhesively secured to said first panel to thereby provide the side wall with a double thickness throughout the paper board of the blank, and flaps secured to the upper portions of the front and side wall panels along fold lines with the flaps being partially cut away from the front and side wall panels providing weakened areas on said fold lines to permit the flaps to be readily torn away from the front and side wall panels, said flaps partially overlie said container opening and adhesively secured to said lid in the closed position of the lid to maintain said lid in the closed position.

References Cited in the file of this patent

UNITED STATES PATENTS

1,080,190	Bauer	Dec. 2, 1913
1,961,375	McAleer	June 5, 1934
2,007,520	Daller	July 9, 1935
2,014,335	Kilmer et al.	Sept. 10, 1935
2,078,446	Grigg	Apr. 27, 1937
2,789,751	Feldman	Apr. 23, 1957