

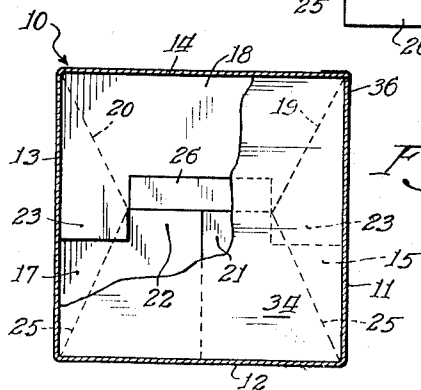
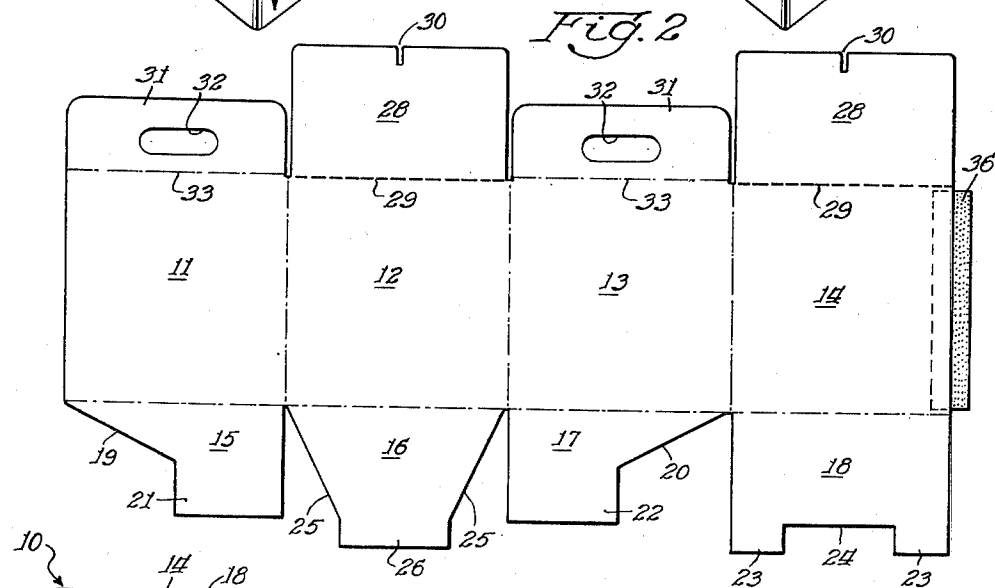
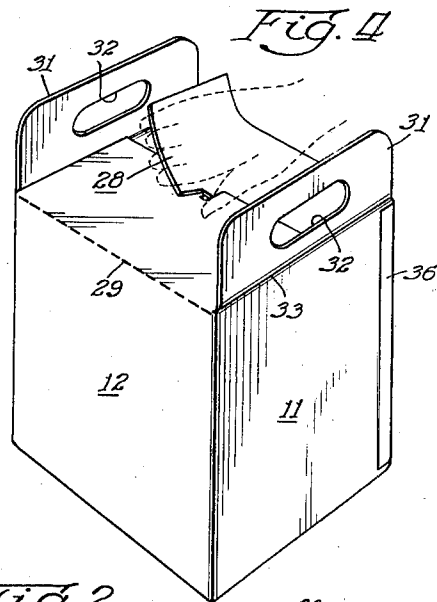
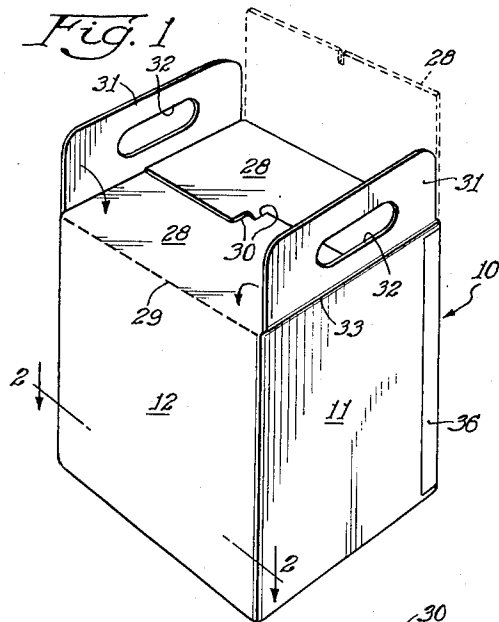
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EDIBLE MATERIAL CONTAINER

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EDIBLE MATERIAL CONTAINER

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2 Claims. (Cl. 229—39)

1

The present invention relates to containers of paperboard or similar sheet material and more particularly to containers of the type which are adapted for carrying and retention of edible materials such as ice cream.

Objects of the invention are to provide a container which may be economically manufactured in collapsed form and easily set up without the use of special securing means or devices; to retain the contents in a clean and sanitary condition; which may be deposited easily within a close fitting refrigerator compartment and thereafter opened in a simple, easy manner by tearing off certain closure flaps from the tops of the side walls; and generally to improve containers of this type.

In the drawings:

Fig. 1 is a perspective view illustrating the container in set-up condition after it has been filled and closed;

Fig. 2 is a view of the blank for the container;

Fig. 3 is a cross sectional view, taken generally along the line 2—2 of Fig. 1, with a portion of the bottom pad broken away to illustrate the manner of assembling the bottom closure flaps of the container; and

Fig. 4 is a perspective view illustrating the method of removing the closure flaps from the container.

In general the container of the present invention comprises four comparably dimensioned side walls, having bottom flaps constructed so as to be engaged readily in bottom forming relation, and top flaps or extensions certain of which serve as top closures and others serving as lifting or carrying members, enabling the container when filled with ice cream or similar material to be deposited readily in a retail refrigerator cabinet from which the contents may be dispensed.

Referring more particularly to the drawings, the container, indicated as a whole at 10, is preferably formed of relatively thin corrugated board having the inside liner formed of a sheet of white sulphite or parchment paper or similar aseptic sheet material to provide for sanitary retention of the contents. The container 10 is preferably formed from a blank such as illustrated in Fig. 2. The blank is cut and creased to provide four side walls 11, 12, 13 and 14 which are preferably comparable in size to provide a construction substantially square in cross section.

For the purpose of forming a bottom closure for the container there is preferably provided a set of bottom flaps 15, 16, 17 and 18 formed integrally with the respective side walls 11, 12, 13

2

and 14. Flaps 15 and 17 are similarly formed with diagonal edge portions 19 and 20 and reduced end portions 21 and 22. The flap 18 is provided with two projecting portions 23, 23 defining therebetween a recessed portion 24. The flap 16 has two inclined side edges 25, 25 symmetrically formed and terminating in a reduced end portion 26. As illustrated in Fig. 3 the bottom flaps may be secured in closed position by first folding the flap 18 at right angles to the side walls, next folding flaps 15 and 17 to lie against flap 18 and afterward folding the flap 16 against the other three flaps and pressing inwardly on the end portion 26 until it has cleared the edge of the recessed portion 24 of the flap 18 whereupon the end 26 of the flap will snap in behind the edge of the recessed portion 24 and will maintain the flap assembly from disengagement except by upward pressure against the flaps. In other words the downward pressure produced by the contents within the container will retain the flaps in closed condition.

In order to close the top of the container one or more detachable top flaps are provided. In the present instance a top flap 28 is provided on each of the side walls 12 and 14. These flaps 28 may be made of differing lengths but they are preferably substantially formed of similar size and each is preferably formed so as to be readily detached or torn away from the side walls by providing weakened lines 29, 29 between the flaps and their side walls.

For the dual purpose of securing the flaps in closure forming position and to facilitate the tearing away of the flaps the edges of the flaps are preferably interlocked. In the present instance the interlocking of the flaps is effected by forming cooperating notches in the central portion of the edges of the flaps as indicated at 30, 30. These notches as illustrated are preferably somewhat wider than the thickness of the paperboard so that interlocking can be easily effected by bringing the flaps down toward each other and at the same time slightly deflecting or twisting the extended edge portions on each side of the notches so that the planes of the flaps will intersect and one-half the free edge portion of one flap will be below and the other half will be above the corresponding edge portions of the opposite flap, as illustrated in Fig. 1.

In the preferred arrangement the weakened lines 29, 29 are formed so that the flaps may not only readily be torn away but they will become detached after only a very few swinging movements relatively to the side walls. In practice,

3

the flaps 28, 29 are bent over to lie over the contents of the container and this first bending disrupts some of the connecting structure, making the hinge connection sufficiently weak that the lifting of one free edge portion, that is, the overlying edge portion of one of the two interlocked or interengaged flaps will cause the severance of both flaps along their hinge lines to become started and further raising of the two interengaged flaps will cause their complete severance from the side walls.

Additional flaps are provided, as indicated at 31, 31, preferably formed as integrally extended portions of the side walls 11 and 13. These flaps may be formed with finger openings 32, 32 enabling a person to pick up the container and deposit it at a desired place which, in the case of the use of the container for ice cream, will be a compartment in a retail refrigerator cabinet from which the ice cream is intended to be scooped in retail trade service.

The flaps 31, 31 are each defined from their attached side walls by crease lines 33, 33 which facilitate the folding over of these flaps upon the interlocked flaps 28, 29, thereby serving to protect the flaps 28, 29 from accidentally becoming severed or displaced from the top of the container during handling. After the container has been filled with contents, such as ice cream, up to a level with the hinge lines 29, and brought substantially to a solid condition by chilling, the flaps 28, 29 will be folded over and interlocked as they are moved to final closure forming position. In such position the flaps 28, 29 will be disposed horizontally over the top of the container and their under surfaces will be in contact with the upper surface of the ice cream. Flaps 31, 31 will then be folded over so as to rest upon the flaps 28, 29. For the purpose of providing for a smooth fit of the flaps 31, 31 upon flaps 28, 29 the crease lines 33, 33 are offset outwardly of the weakened hinge lines 29, 29 by a distance approximately equal to the thickness of the paperboard material. This will cause the flaps 31, 31 to lie relatively smoothly upon the upper surfaces of flaps 28, 29, and afford protection for such underlying flaps.

In practice when the flaps 31, 31 are folded over after the container has been filled and the flaps 28, 29 brought to closing position, the flaps 31, 31 will be held down by suitable means such as by piling the containers one upon the other. Retention of these flaps in downturned condition for an interval will cause them to tend to remain substantially in such position after the retention force is removed and until such time that it is desired to utilize the flaps 31, 31 as carrying or lifting elements.

In order to provide for a smooth bottom closure a separate panel or liner 34 is provided which is of such size as to fit snugly against the side walls when the liner has been inserted into the set-up container and pushed down to rest flat against the bottom closure flaps.

In the use of the container it will be delivered to the producer of ice cream or other food product in a flat tubular condition, the edges of walls 11 and 14 having been hingedly joined by a strip of gummed tape 38. The container may be conditioned to receive the food product by simply expanding the walls 11, 12, 13 and 14 to open tubular form and by folding upward the bottom flaps as previously indicated so as to cause them to be interlocked. The liner 34 is then inserted and pushed down to lie flat against the bottom

4

closure flaps. The container is then ready to receive its contents. After it is filled the flaps 28, 29 are folded down and interlocked during the downfolding movement and finally the flaps 31, 31 are folded down against the flaps 28, 29. If desired, a liner of waxed or other sanitary paper may be placed on top of the contents so as to lie beneath flaps 28, 29 and keep such flaps from sticking to the contents.

In the case of the use of the container for ice cream or other chilled food it will be delivered from the producer to a retail store. The container may be retained closed until after it has been lifted by the handle elements and deposited within a compartment in a refrigerator cabinet. The handle elements enable the attendant to deposit the container into its receiving compartment with ease as it is under his control at all times due to such handle elements. If two or more containers are to be received within the same compartment one on top of the other the closure flaps of the underlying container or containers will be left intact. Otherwise, the closure flaps will be removed. This can be done in a very expeditious manner by simply grasping the exposed edge of a flap near its lateral edge and lifting upward whereupon the flap will break away progressively along its hinge line from one edge to the other. Unless adhesion of the contents upon the opposite flap is too great this flap also will be lifted up due to the interlocked edges of the flaps and will become detached at the same time as the flap that has been grasped by the attendant. The flaps may thus be torn away either as a group or individually depending upon the condition of the contents and the flaps will then be discarded, leaving the handle flaps intact but out of the way of the attendant who will proceed to dispense the contents of the container.

When the container has been emptied it may easily be removed from the refrigerator compartment by means of the handle elements. If an overlying container has been previously emptied and removed from the compartment a lower container in the compartment may then be opened by removal of its detachable flaps. The contents of the lower container are thus maintained out of contact with the bottom of the overlying container until the latter has been removed and the convenient feature of enabling the closure flaps to be removed and discarded at the time that the container is in position within its compartment greatly simplifies the problem of maintaining the container's contents in a clean and sanitary condition and, at the same time, assures that the closure elements will not in any way hamper the attendant in scooping out the contents of the container.

While the present description sets forth a preferred embodiment of the invention, certain changes may be made in the construction without departing from the spirit of the invention, and it is therefore desired that the present embodiment be considered in all respects as illustrative and not restrictive, reference being had to the appended claims rather than to the foregoing description to indicate the scope of the invention.

I claim:

1. A container for edible material, such as ice cream and the like, formed of relatively stiff corrugated paperboard material and comprising four interconnected side walls, a bottom closure member connected to the side walls, severable interlocking top closure flaps on the upper edges of two opposite side walls integrally hinged with

5

respect to the side walls along weakened lines, whereby such flaps may be readily torn from the side walls, the top flaps being of such length that their free portions overlap one another when the flaps are in closed position, the free edge portion of each top closure flap being formed with a centrally located straight slot somewhat wider than the thickness of the flap and extending substantially at right angles to the hinge line of the flap, each slot defining rigidly extended portions on each side thereof, and adapting the free edge portions of the flaps to be interlocked by the interfitting of the slots so that the rigid extended portion on one side of the closure flap will be above the adjacent extended portion of the other flap, and at the other side the rigid extended portion on the first mentioned closure flap will be below the adjacent extended portion of the other flap, the lines of weakness along the hinges of the flaps with their side walls being sufficiently strong to permit the two flaps to be bent over at right angles to the side wall and interlocked and sufficiently weak so that the two interlocked flaps may be easily disengaged or torn away from the top edges of the side wall by pulling upward upon one overlying extended edge portion.

2. A container for edible material, such as ice cream and the like, formed of relatively stiff corrugated paperboard material and comprising four interconnected side walls, a bottom closure member connected to the side walls, severable interlocking top closure flaps on the upper edges of two opposite side walls integrally hinged with respect to the side walls along weakened lines, whereby such flaps may be readily torn from the side walls, the top flaps being of such length that their free portions overlap one another when the

6

flaps are in closed position, the free edge portion of each top closure flap being formed with a centrally located straight slot and extending substantially at right angles to the hinge line of the flap, each slot defining rigidly extended portions on each side thereof, and adapting the free edge portions of the flaps to be interlocked by the interfitting of the slots so that the rigid extended portion on one side of the closure flap will be above the adjacent extended portion of the other flap, and at the other side the rigid extended portion on the first mentioned closure flap will be below the adjacent extended portion of the other flap, the lines of weakness along the hinges of the flaps with their side walls being sufficiently strong to permit the two flaps to be bent over at right angles to the side wall and interlocked and sufficiently weak so that the two interlocked flaps may be easily disengaged or torn away from the top edges of the side wall by pulling upward upon one overlying extended edge portion.

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