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CARTON

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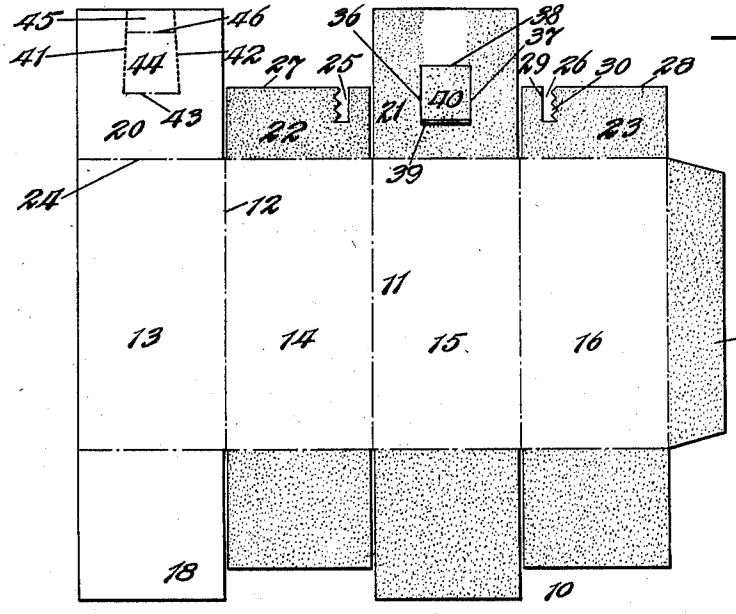


Fig. 1.

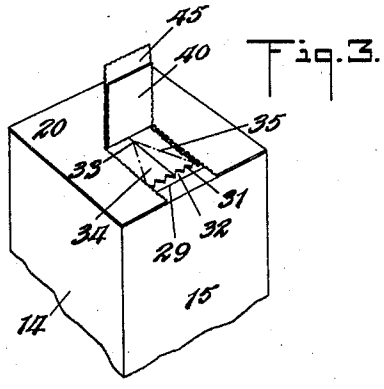


Fig. 3.

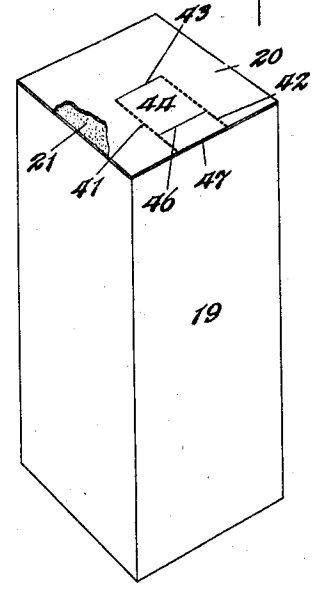


Fig. 2.

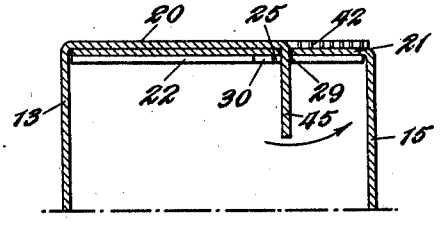


Fig. 4.

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CARTON

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9 Claims. (Cl. 229—17)

The invention relates in general to an initially sealed package of siftable merchandise and particularly relates to a cardboard carton designed to be opened at one end and used subsequently from time to time to sift therefrom its originally packaged contents.

The primary object of the invention is to provide a simple form of cardboard container of the type outlined which will provide an easily constructed package for shipping and storing vendable merchandise initially in a sealed condition and which container will maintain its contents substantially sealed during the time period while it is in use after its initially sealed condition has been broken.

Still another object of the invention is to provide in a cardboard carton a discharge opening for the contents, which opening is formed in effect of small openings to form a sifter top and to provide such form of opening as will permit of an easily tearing of the parts containing the original small openings to form a discharge opening of larger or different form when desired.

Still another object of the invention is to provide in such form of carton a simple form of closure of the tuck-in tongue type to provide for an easily reclosing of the carton.

Various other objects and advantages of the invention will be in part obvious from an inspection of the accompanying drawing and in part will be more fully set forth in the following particular description of one form of package embodying the invention, and the invention also consists in certain new and novel features of construction and combination of parts hereinafter set forth and claimed.

In the accompanying drawing:

Fig. 1 is a plan view of a blank scored for folding into a carton constituting a preferred embodiment of the invention and showing in stippled effects the flap surfaces on which the adhesive is to be applied in securing the flaps;

Fig. 2 is a perspective view of the sealed package formed from the blank of Fig. 1, with a part of the uppermost layer broken away to show the intermediate layer;

Fig. 3 is a view similar to the upper portion of Fig. 2 with the closure torn open to expose the sifter top; and

Fig. 4 is a vertical sectional view taken on the line 4—4 of Fig. 2 and showing the top of the package reclosed after it had been initially torn open as shown in Fig. 3.

In the drawing and referring first to the blank 10 of Fig. 1, there are disclosed a rectangular body portion 11 formed of five panels separated by parallel score lines 12 and forming a rear wall 13, a left side wall 14, front wall 15, right side wall 16, and securing strip 17. Each of the panels 13 to 16 is provided at its lower edge with an extension 18 and these four extensions are designed to be lapped one on the other in any conventional manner to form the bottom closure of the completed box 19 shown in Fig. 2.

At the upper edge of the blank, the several wall forming panels are provided with extensions of which the flaps projecting respectively from the rear and front walls are relatively long, and the flaps 22 and 23 projecting respectively from the side walls 14 and 16 are relatively short, being approximately one-half of the length of the flaps 20 and 21. These several flap forming extensions are adapted to be bent in overlapping relation as hereinafter described along the folding score line 24.

The short flaps 22 and 23 are provided respectively with long narrow slots 25 and 26 extending from the outer edges 27 and 28 towards the associated score line 24 for about one-half the width of the associated flap. These slots are disposed adjacent the flap 21 and have their adjacent edges 29 straight and their opposite edges 30 tooth shaped to provide approximately small size openings 31 between the teeth. These slots are so arranged that when the associated flaps 22 and 23 are folded towards each other in forming the carton, the slots will be disposed in alignment to form a long narrow sifter opening 32, as particularly shown in Fig. 3.

The short flaps 22 and 23 when moved into the same plane to form the lowermost layer at the top form a slitted joint 33 opening into the discharge opening 32 and thus form two corners 34 and 35 either of which may be turned easily by lifting the same from its original plane.

The flap 21 which forms the intermediate layer at the top of the carton is provided with three slits arranged to form a tongue approximately centered in the flap. These slits include two substantially parallel slits 36 and 37 and a connecting third slit 38 disposed in alignment with the outer edges 27 and 28 of the flaps 22 and 23. The flap 21 is scored to provide a hinge line 39 connecting the outer ends of the slits 36 and 37. This construction provides an inner tongue 40 which overlaps the discharge opening 32 and the adjacent part of the joint 33.

The flap 20 is provided with two parallel lines 41 and 42 of small punchings or closely positioned small holes hereinafter referred to as

lines of weakened portions, connected at their inner ends by a score line 43 in line with and adapted to be superposed over the slit 38. This construction provides for an outer tongue 44 so located when the parts are folded to overlap the inner tongue 40. The outer edge portion of this tongue 44 forms a re-tuck closure lip 45 hinged to the inner portion of the tongue by a score line 46. It is noted from the showing of the stippled surfaces in Fig. 1 that the portion of the tongue 44 which forms the re-tuck lip is preferably not secured in place so as to permit the insertion of the thumb of the operator under the exposed edge at the point 47 in Fig. 2 and thus facilitate the tearing of the closure formed by the two tongues 40 and 44 from the sealed package.

In operation it is understood that the blank of Fig. 1 is folded along the several lines, the bottom fastened by the interengagement of the flaps 18 leaving the upper portion of the package open for filling. It is then conventionally filled with whatever merchandise the package is intended to contain. It is herein suggested that the package is quite suitable for vending certain forms of edible products such as salt, pepper, sugar, spices, and like relatively fine particles of materials which are intended for only occasional use. In closing the top, the two side flaps 22 and 23 are folded towards each other with the edges 27 and 28 meeting in edge to edge engagement, or substantially so to form the slitted joint 33 and to form the long sifting opening 32. Then flap 21 is folded over on top of the inner layer formed by the flaps 22 and 23 to form the intermediate layer which is connected to the two flaps forming the lowermost layer. Then flap 20 is bent over on top of the intermediate flap 21 and cemented in place, thus forming the completely sealed package 19 shown in Fig. 2. In such form, the package is stored, shipped and eventually sold to the ultimate consumer with the assurance that the contents are sealed from the external air. When ready to be used, the thumb or a flat bladed instrument is inserted under the edge 47 of the lip 45 and the top flap torn along the two lines of weakened portion. As the two tongues 40 and 44 are secured together, elevating the outer tongue 44 will carry with it the inner tongue 40 and the parts will then be in the position shown in Fig. 3. In this position, the contents may be shaken therefrom through the small sifter-like openings thus exposed. When the desired amount of material has been sifted from the container, the lip 45 is bent downwardly along the score line 46 and the down-turned lip tucked into the container through the opening 32 as shown in Fig. 4. To all practical purposes, the carton has been restored to its closed and substantially sealed condition and may be put away. At any time where it is desired to again sift some of the contents from the carton, the closure formed by the tongues 40—44 is again elevated, thus exposing the opening 32 for subsequent sifting operation and in this way the closure can be repeatedly opened and closed until the contents of the carton have been exhausted.

While the present disclosure features the utilization of the carton as a sifter box, it is within the scope of the disclosure to design the slots 25—26 otherwise than as shown in order to better accommodate the discharging of the particular merchandise used in the package. It is also suggested that in order to meet those conditions where the character of the contents may not permit of a fine sifting, that the operator can simply enlarge the opening 32 and which operation is facilitated by the presence of the free edges 27 and 28 forming the joint. In Fig. 3, the exposed portion of the innermost layer has been torn back as indicated by the broken line to form a larger size opening than was originally disclosed and in this particular case to form a more or less V-shaped form of pouring opening. In any case the straight edge 29 is retained intact to form a guiding edge to facilitate the insertion of the tongue 45 into the carton. The width of the discharge opening permits of an easy, quick insertion of the lip in place and the tendency of the lip to move outwardly as indicated by the arrows in Fig. 4 assists in fully closing, if not sealing, the discharge opening.

I claim:

1. A blank for forming a carton scored along parallel lines to form a rear wall, a front wall, two side walls and a securing strip, and said blank adapted to be folded into a rectangular form of carton with closed top and bottom ends, each wall provided with flaps projecting from opposite ends, the flaps at one end adapted to form the closed bottom and the flaps at the other end adapted to form an initially closed top end, the flaps forming the top end, alternating two equal length long and two equal length short flaps with the long flaps approximately twice the length of the short flaps, each short flap provided with a slot at its outer edge having one of its edges serrated and said slots adapted when the blank is folded to be in alignment to form a long narrow discharge opening, one of the adjacent long flaps provided with a pair of parallel slits and a connecting slit to form therebetween a bendable tongue and the other adjacent long flap provided with two parallel lines of weakened portions adapted when torn along said lines to form a second bendable tongue and said parallel slits and weakened portions located in their respective flaps so that when the blank is folded to form the carton the two tongues will be in superposed relation and both overlapping the discharge opening.

2. A carton for use initially as a sealed vendable package and subsequently as a shaker, said carton including a body having an upper end composed of flaps folded into overlapping relation to form a three-layered top end to the carton, with the intermediate layer permanently secured to both the upper and the lower layers, the lower layer provided therein with a long, narrow serrated slot spaced from one edge to form a sifting opening for the carton, the intermediate flap provided with two parallel slits and a third slit connecting the outer ends of the parallel slits to form therebetween a rectangular bendable inner tongue with its free edge registering with the serrated slot and with the edge opposite its free edge scored to form a hinge connection, the upper layer provided with a score line overlapping the hinge forming score line of the bendable tongue and provided initially with two parallel lines of weakened portions in overlapping relation to said slits and extending from said hinge forming score line to the adjacent edge of the uppermost layer and the portion between said weakened lines adapted when the flap is torn along said weakened lines to form an outer tongue, said outer tongue being scored along a line overlapping the free edge of the inner tongue to form an inner portion secured

in overlapping relation to the inner tongue and movable therewith to and from their carton closing position and the free edge portion forming a re-tuck closure lip adapted to be bent downwardly out of the plane of the inner portion and inserted into the carton past the free edge of the inner tongue and into the serrated slot temporarily to close the sifting opening after the carton has been initially opened.

3. A carton for use as a sifter comprising a body portion having a top end formed of three superposed layers, the lower layer provided with a narrow serrated slot for sifting the contents from the carton and means for temporarily closing the slot, said means comprising two superposed tongues permanently secured together to form a single hinged closure adapted to be bent upwardly to expose the serrated slot, one of the tongues being integral with the intermediate layer and the other being integral with the upper layer, the upper tongue provided with an extension forming a re-tuck closure lip projecting beyond the inner tongue, scored along a line parallel to the outer free edge of the inner tongue and adapted to be bent along said score line out of the plane of the upper layer and inserted past the inner tongue and into the carton through the serrated slot to close the same.

4. A carton top comprising two inner flaps in edge to edge relation to form a single lower layer, each flap provided with a slot in alignment with the other and coacting to form a discharge opening, an intermediate flap secured on top of the two flaps forming the lower layer, said intermediate flap provided within its outlines with a hinged tongue having its free edge registering with the discharge opening, a top flap secured on top of the intermediate flap and provided with a hinged tongue overlying the first named tongue, said tongues being secured together to form a single hinged closure for the discharge opening and said last named tongue provided with an extension adapted to be bent out of the plane of the top flap and inserted past said free edge and into the discharge opening to hold the hinged closure in position closing the discharge opening.

5. An initially sealed cardboard carton for vending merchandise, said carton including a plurality of superposed flaps secured together and coacting to form the top of the carton, the innermost flap provided in spaced relation to its outlining edges with means forming a line of small openings and constituting a sifter top and the outer flaps forming a closure initially sealing the openings in the sifter top and thus sealing the carton, the outermost of said closure forming flaps provided with weakened portions adapted to be torn to form a tongue adapted to be lifted from the balance of said uppermost flap to expose the small openings and thus permit a sifting of the contents from the carton and said tongue provided with an extension constituting a tuck-in-lip adapted to be inserted into the carton to secure the closure temporarily in position closing the small openings whereby the initially sealed carton may be subsequently closed and opened from time to time to sift its contents from the carton.

6. A carton including a body provided with flaps extending integrally from one end of the body and folded to form a multi-layered top end, the innermost layer including two flaps forming a joint therebetween, each of said two flaps provided with a slot extending from said joint and with one slot in alignment with the other to form a single long narrow discharge opening, one long edge of said opening being serrated and coacting with the opposite long edge to form a slot having a serrated side edge, and the corners of both flaps formed respectively by the joint and the associated slot adapted to be torn to enlarge either or both ends of the discharge opening at will and another flap provided with means constituting a closure for the discharge opening.

7. A cardboard carton provided with a plurality of flaps forming a normally closed top, certain of the flaps being in superposed relation and secured to each other, the innermost flap provided with a discharge opening of relatively small discharging capacity, said opening presenting edges adapted to be engaged for easy tearing to enlarge the opening at will and another flap provided with a closure for the discharge opening, said closure initially forming an integral part of the associated flap and sealing the opening and said closure provided with an extension forming a tongue adapted to be inserted into the carton through the opening and one edge of the discharge opening being straight to form a guiding edge for the insertion of the tongue irrespective as to how the other edges forming the discharge opening may be torn in reforming the discharge opening.

8. A carton provided with a pair of flaps disposed in a plane in edge to edge relation to form a joint and said flaps provided with slots forming a long narrow discharge opening extending across the joint and forming therewith two corners adapted to be torn to enlarge the discharge opening, the edge outlining the opening opposite the corners being straight and the edge opposite the straight edge being of saw-tooth form to form in effect a plurality of small sifter openings between the straight and saw tooth edges.

9. An initially sealed cardboard carton provided with means forming a sifter top having a plurality of relatively small sifter forming openings, means forming a closure for said sifter top initially cemented in its closed position, said closure including weakened portions adapted to be torn apart to provide a hinged closure for subsequently closing the sifter top and means intruded through the first named means for temporarily holding said hinged closure in its closing position.

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