

July 26, 1938.

B. S. HARRINGTON

2,124,699

DISPENSING CARTON

Filed Feb. 28, 1936

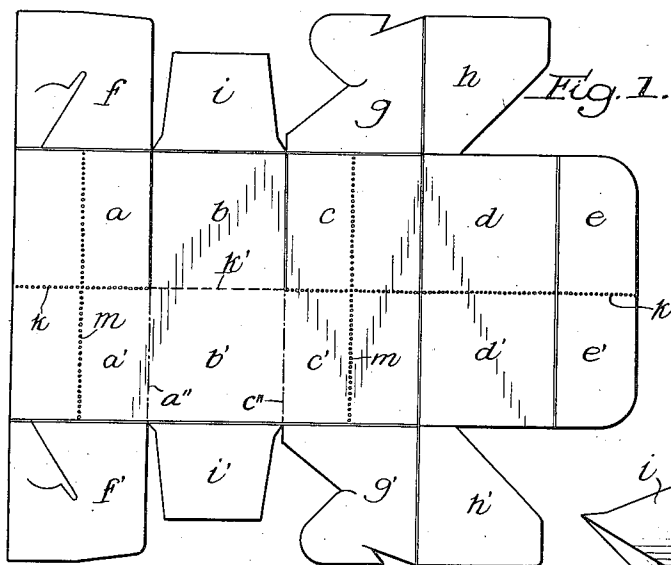
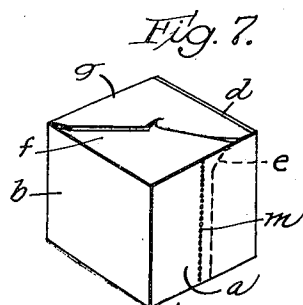


Fig. 5.

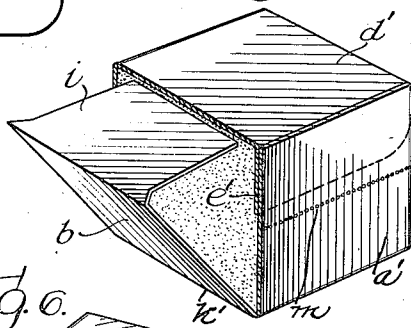


Fig. 6.

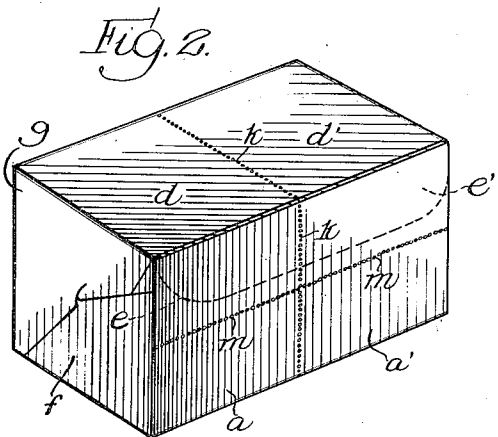


Fig. 2.

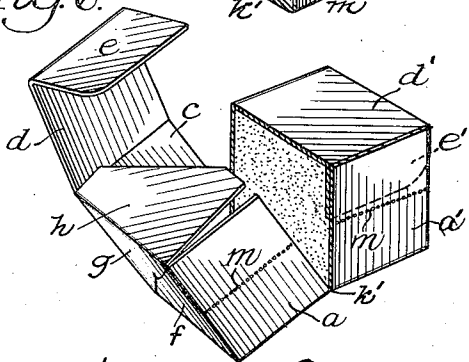


Fig. 3.

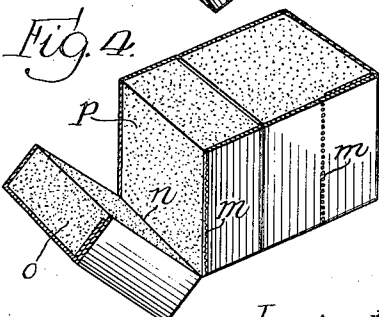
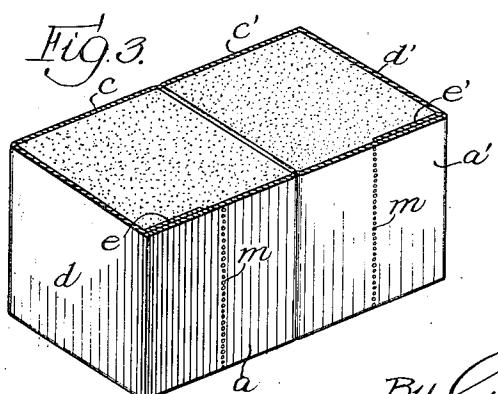


Fig. 4.



Inventor:
Bertie S. Harrington
By Comwell, Geist & Warden
Attys.

UNITED STATES PATENT OFFICE

2,124,699

DISPENSING CARTON

Bertie S. Harrington, Chicago, Ill., assignor to
Armour and Company, Chicago, Ill., a corpora-
tion of Illinois

Application February 28, 1936, Serial No. 66,167

6 Claims. (Cl. 229—51)

My invention pertains to sales cartons particularly for comestibles and has for its distinctive object the provision of a carton adapted to afford ready access to the contents in known aliquot parts for dispensing when open and for the preservation of the remaining part when closed.

Collateral features of the invention are cleanliness, decrease in size of the carton as the contents are progressively dispensed, avoidance of waste, and many other advantageous attributes which will be apparent.

To facilitate an understanding of the invention a preferred embodiment of the same is hereinafter described predicated upon illustrative drawing in which

Fig. 1 represents in plan a blank applicable to the forming of such a carton;

Fig. 2 is a perspective view of the closed carton;

Fig. 3 is a similar view of the carton severed along a median transverse line and in open dispensing condition;

Fig. 4 indicates the severed carton of Fig. 3 additionally severed to expose for use one quarter of the contents;

Fig. 5 indicates the emptied half carton having certain of the elements torn away and the remainder refolded to produce a closed package of one-half size for the remainder of the product;

Fig. 6 shows the carton, after one-half the contents are dispensed, indicating the manner of refolding to enclose the remaining one-half of the contents in a package of one-half the original size; and

Fig. 7 represents the closed carton resulting from the refolding indicated in Fig. 6.

Sales cartons containing one pound of lard, for example, are ordinarily opened by the housewife exposing the entire contents as an oblong mass within the unfolded waxed liner to which portions of the lard adhere. This makes a messy package and difficult to close after a portion of the lard is removed. Her recipe may, for instance, call for a cup (one-half pound) of lard. By means of a spoon she removes approximately one-half the contents of the carton, placing the same in a measuring cup and refolds the carton with the greasy liner and places it in the refrigerator or on a shelf. When lard again is required the carton is opened, the greasy liner unfolded and more spooned out, with resultant spreading of the lard to hands and table with considerable waste of lard and loss of mental poise.

By the present invention the closed full car-

ton shown in Fig. 2 is readily severed along a transverse weakened line across its sides and top into halves, quarters, or other fractions. The two halves of the carton are then easily separated along said line of severance by bending upon a hinge formed by a line on the bottom connecting the lower termini of the cut, thus leaving the two halves resting side by side with the ends of the original cartons forming the bases of the two halves and connected along the upper edges of their adjacent sides. This leaves the enclosed material exposed upwardly along the plane of cleavage.

While, as above stated, the carton may be provided with lines of severance into halves or quarters or other aliquot parts, yet it is found most advantageous that the weakened lines represent cleavage into two equal parts or halves and the invention is illustrated and so described.

Referring now to the drawing, Fig. 1 represents a blank carton of conventional type in the flat. This blank comprises a side a, a' , a bottom b, b' , an opposite side c, c' and top d, d' and an in-folding flap e, e' and interlocking end wings f, f' and g, g' , flaps h, h' and tongues i, i' . A perforated or otherwise weakened line k extends transversely of the sides, top and flap, but is interrupted or discontinuous at k' where otherwise it would cross the bottom. This line divides the sides into a, a' and c, c' , the top into d, d' and the flap into e, e' . The projection of the weakened line k across the bottom is indicated by the broken line k' dividing the bottom into portions b, b' and serving, as will hereafter be described, to located a hinge connection between the bottom portions.

The blank, transversely weakened by the line k , save as to the bottom b, b' , is folded with the usual waxed liner into the forming of an oblong rectangular carton shown in Fig. 2, having been filled with an appropriate commodity such as lard. The imperforate liner insures against any extrusion of the contents along the weakened line if the latter be of aligned perforations and the weakening at the line k is not such as to impair the stability of the filled carton.

When the contents are to be dispensed, as by the housewife, a knife will serve to cut the carton together with the liner and its contents into halves along the weakened line k , it being understood that the bottom will not be cut. Thereupon the two halves of the carton are bent through an angle of 180° upon the line k' as a hinge thus bringing about a relation between the two as indicated in Fig. 3 where the two halves

of the carton form cups resting upon the original ends of the carton, side by side, with the cut faces of the contents exposed upwardly, and connected along the upper edges of their contiguous sides which originally constituted the bottom of the carton.

All of the lard may be spooned or otherwise removed from one-half the carton if a cup of lard is required or one-half of it may be removed if a half cup of lard is required. The partially emptied half may now be bent upon the hinge k' , bringing the plane of cleavage of the two halves back to original position and placed in the refrigerator or other suitable place where cool enough to prevent liquefying of the contents.

The invention finds its full expression, however, when one of the cup-like halves is emptied, whereupon all the elements of the carton itself represented at a, c, d, e, f, g and h are removed by tearing along the weakened dot and dash lines a'', c'' , thus separating the sides a, c from the bottom b . This leaves only the bottom element b and the tongue i still hinged at k' . Thereupon the element b may be folded as indicated in Fig. 5 to cover the exposed face of the unused contents with the tongue i inserted beneath the top d' , thus forming a compact enclosed package of unused lard one-half the size of the original package. Access is gained, when desired, to the unused half carton of lard by withdrawing the tongue i and folding the bottom element b back upon its hinge k' as will readily be understood.

As an optional method of packaging the remaining half of the lard after the first cup is emptied is illustrated in Figs. 6 and 7 where none of the used carton elements are torn away but merely partially relaxed or released after removing the liner and then folded back so as to envelop the unused half of the carton, pushed into relative engagement with each other, forming in effect a carton of half size but with interlocked double walls.

As a further development of the invention the carton blank may be weakened by a line of perforations m extending medially of the side elements a and intersecting the weakened line k at right-angles.

After the carton is severed along the line k and turned through 180° upon the line k' as a hinge to form two cup portions as illustrated in Fig. 3, one of the cups may be severed along one of the weakened lines m and bent along the line n as shown in Fig. 4 thus presenting a quarter portion at o . If the half cup in o be used, it may be refolded into the shape shown in Fig. 3, then again folded into carton shape as in Fig. 2 and placed in the refrigerator until again required to be dispensed. The material p in the other half cup having been dispensed, the carton elements a', c', d', e', f', g' and h' may be torn away and the bottom element b' and tongue i' refolded into protective position as previously described and as illustrated in Fig. 5.

Obviously, where a two-pound or a four-pound carton is used, the aliquot portions presented for dispensing will be correspondingly increased.

It will be evident that in order to obtain the full advantages of the invention it is not necessary that the precise form of carton be employed, a salient feature of the invention being the provision for dividing the carton into two or more portions hingedly connected along one side with the further provision for refolding part or all of the emptied carton portion into engagement with

the unemptied portion of the carton to effect a closure therefor.

I claim:

1. A rectangular dispensing carton severable along weakened lines, one a medial transverse line including three sides and excluding the fourth side to serve as a hinge whereby when severed to enable the resultant portions to be swung to a position side by side bringing the exposed faces uppermost to afford access to the interior for dispensing the contents, and also weakened along a medial line extending longitudinally of opposite sides and intersecting the first line at right-angles whereby when severed to enable the outer part of one of the aforementioned portions in turn to be swung at an angle exposing the contents for dispensing.

2. A rectangular dispensing carton severable along weakened lines, one a median transverse line including three sides and excluding the fourth side to serve as a hinge whereby when severed to enable the resultant half portions to be swung to a position side by side bringing the exposed faces uppermost to afford access to the interior for dispensing the contents, and also weakened along a median line extending longitudinally of opposite sides and intersecting the first line at right-angles whereby when severed to enable the outer part of one of the aforementioned half portions in turn to be swung at an angle exposing a quarter of the contents for dispensing.

3. A dispensing container for plastic materials embodying a folded carton with top, bottom and side elements and with interlocked end elements forming longitudinal continuations of the top and side elements, said carton transversely severable with the contents along a weakened median line including the two sides and top, the bottom bent along a line connecting the ends of the weakened line to serve as a hinge whereby to enable the resultant severed portions of the carton to be swung through an angle of 180° to rest side by side upon the original interlocked carton ends and thus bring the severed faces uppermost to afford access to the exposed interior for dispensing the contents, one of the portions when emptied and its interlocking end elements released foldable over the exposed face and the top and sides of the filled portion to envelop the same.

4. A carton blank foldable to constitute an intact rectangular carton and including symmetrical halves on each side of a median weakened line extending transversely of the top and sides, each half including bottom b, b' , top d, d' and side elements with interlocking end wings forming longitudinal continuations of the top and side elements and an intermediate tongue forming a longitudinal continuation of the bottom, the weakened line discontinuous as to the bottom element, the formed carton with the contents when severed along the median weakened line and the bottom bent through an angle of 180° upon a line connecting the termini of the said weakened line constituting two connected open top contiguous cups thus giving access to the contents of either, the interlocking wings, sides and top of an emptied cup severable from the tongue and bottom element thereof leaving the bottom element foldable over the exposed face of the filled cup with the tongue insertable within said cup between the contents and that side opposite the hinge.

5. A carton blank foldable to form a rectangular

lar carton and including bottom, top and side elements, the blank divided into symmetrical halves by a median perforated line extending transversely of the side and top elements but discontinuous as to the bottom element, each half including interlocking end wings and tongue forming longitudinal continuations of the sides, top and bottom respectively, the formed carton and contents when severed as to the top and sides along the median weakened line and the bottom bent along the discontinuous portion of said line as a hinge forming a pair of open top cups having as bases the interlocked elements forming the ends of the carton and connected at their contiguous upper edges by said hinge, the interlocking elements of an emptied cup releasable and then foldable across the exposed face and about the sides of the full cup to effect a protective enclosure therefor.

6. A carton blank foldable to form a rectangular carton and including bottom, top and side

elements, the blank divided into symmetrical halves by a median weakened line extending transversely of the side and top elements but discontinuous as to the bottom element, each half including interlocking end wings and an intermediate tongue forming respectively longitudinal continuations of the sides and bottom, the formed carton when served as to the top and sides along the median perforated line and the bottom bent through an angle of 180° along the discontinuous portion of said line as a hinge forming a pair of open top cups having as bases the original ends of the carton and connected at their contiguous upper edges by said hinge, the interlocking wings, sides and top of the emptied cup severable from the tongue and bottom thereof to leave the bottom element to be folded across the exposed face of the full cup and the tongue for insertion within the cup between the contents and that side of the cup opposite the hinge.

BERTIE S. HARRINGTON.