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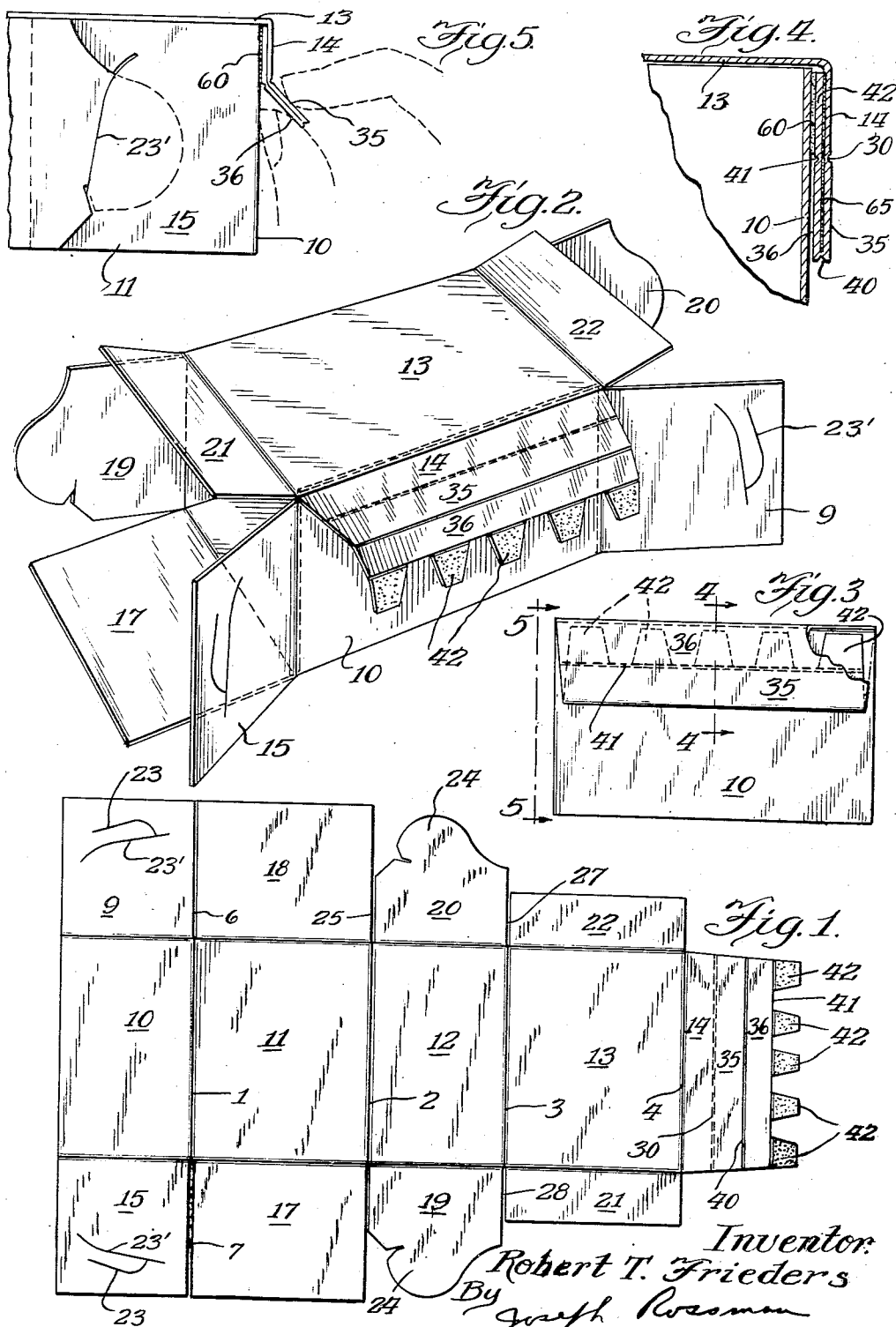
R. T. FRIEDERS

2,246,484

CARTON

Filed March 11, 1940

2 Sheets-Sheet 1



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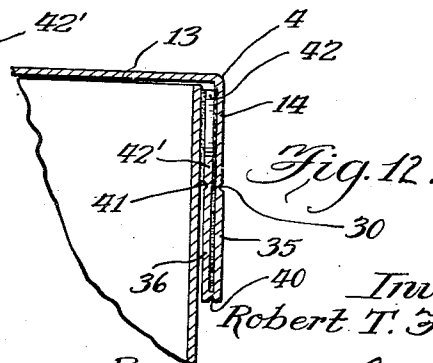
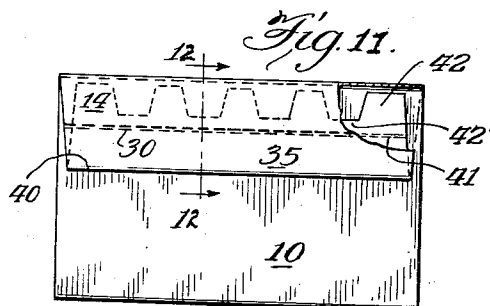
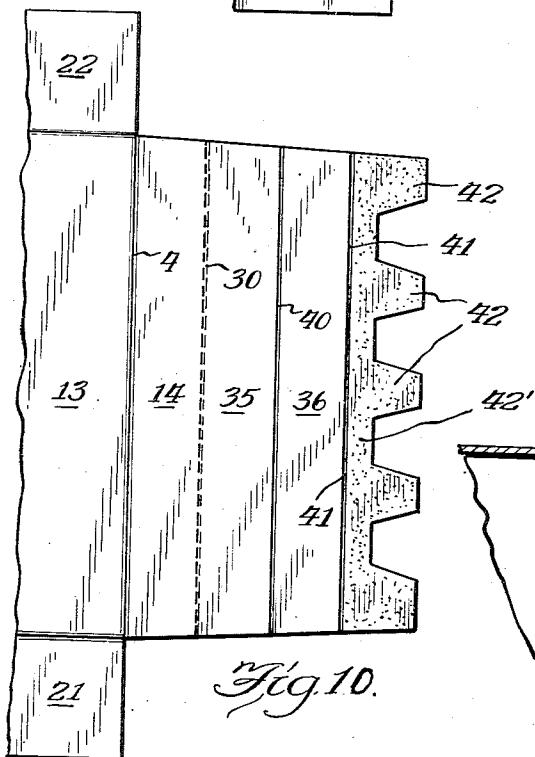
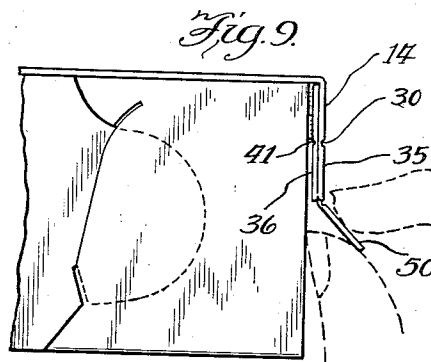
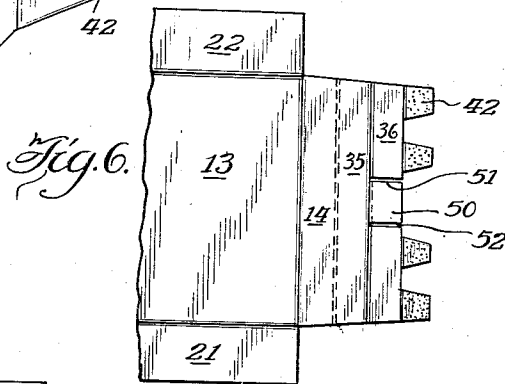
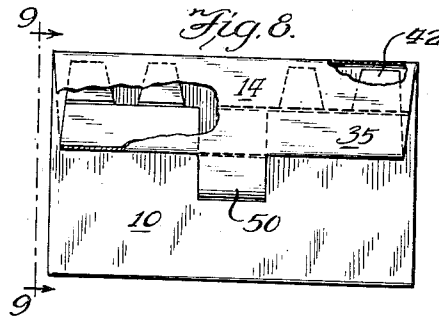
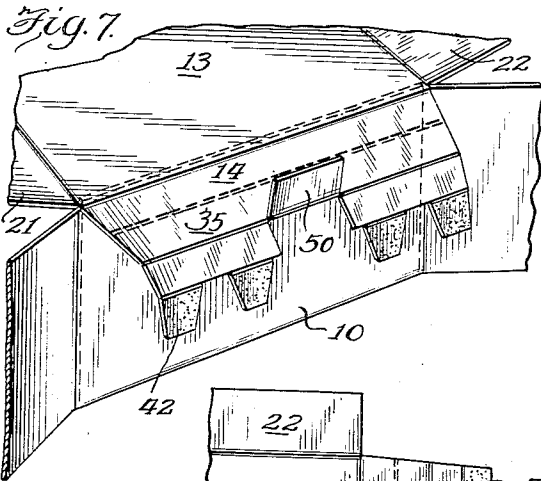
R. T. FRIEDERS

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CARTON

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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

2,246,484

CARTON

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2 Claims. (Cl. 229—51)

This invention relates to a carton, and particularly to a carton made of fibrous material for packaging ice cream and other comestibles.

The present invention contemplates a carton construction provided with means for readily opening the same so as to make the contents accessible without any attendant peeling or tearing of the fibrous material from which the carton is made.

An object of the invention is to provide a carton for ice cream and the like which when opened may be spread out flat so as to completely expose the frozen contents of the package for slicing or removal as a whole.

A further object of the invention is to provide a carton for ice cream packaging which is formed from a single blank of board scored and folded to provide a carton with interlocking ends so arranged and associated with respect to the cover that when the cover is opened the whole carton will open exposing the contents for slicing or removal as a unit.

A still further object of the invention is to provide a carton formed from a single blank of thin board material scored and folded in a box form and provided with a flap which is glued to close the carton and which can be readily grasped and torn open to expose the carton for removal of its contents.

Further advantages and details will be apparent from the accompanying drawings in which:

Figure 1 is a plan view of the blank from which the carton is made,

Figure 2 is a perspective view of the blank in folded and unsealed condition,

Figure 3 is a front view of the sealed carton,

Figure 4 is a sectional view taken on lines 4—4 of Figure 3,

Figure 5 is a side view of the sealed carton illustrating the grasping tab in bent position,

Figure 6 is a fragmental plan view of a modified construction of the blank for forming the carton,

Figure 7 is a fragmental perspective view of the same blank in folded and unsealed condition,

Figure 8 is a front view of the sealed carton illustrating the modified grasping tab,

Figure 9 is an end view of the closed carton taken on lines 9—9 of Figure 8,

Figure 10 is a fragmental plan view of still another modified construction of the blank for forming the carton,

Figure 11 is a front view of the sealed carton made from the blank illustrated in Figure 10,

Figure 12 is a sectional view taken on lines 12—12 of Figure 11.

Referring to the drawings, the carton is made from a single blank of paper board which is preferably impregnated or coated with paraffin wax. The blank is scored along lines 1, 2, 3, and 4 to provide a front wall 10, a cover 13, rear wall 12 and bottom wall 11.

The front wall 10 is provided with free end flaps 9 and 15 separated from the adjacent flaps by slit lines 6 and 7. Flaps 9 and 16 are slit along lines 23 and 23'. Rear wall 12 is provided with end flaps 19 and 20 separated from adjacent flaps by slits 26 and 28, and 25 and 27, respectively. Flaps 19 and 20 are provided with tongues 24.

The cover 13 is provided with inner end flaps 21 and 22. The bottom 11 is provided with inner end flaps 17 and 18. One end of the carton is adapted to be closed by overlapping inner end flaps 18 and 22, and interlocking thereover outer flaps 9 and 20 by inserting tongue 24 through slit 23'. The other end of the carton is adapted to be closed similarly by folding inner flaps 17 and 21 in overlapping relation and then locking outer overlapped flaps 15 and 19 by means of tongue 24 extending through slit 23'.

The cover 13 has a flap extension for providing a composite sealing flap consisting of adjacent panels 14, 35 and 36 formed by score lines 30 and 40. Panel 14, designated as extension panel, is hinged to the cover 13 along score line 4. Panel 35, designated as outer grasping panel and panel 36 as inner grasping panel, are of substantially the same width. A series of spaced glue tongues 42 are provided along the free edge of panel 36 and integral therewith along score line 41. Score lines 30 and 41 are partially cut through the blank as shown in Figure 4, for a purpose to be explained later.

In making the carton for use, the flap extension is folded back on itself so that panels 36 and tongues 42 are folded over on panels 14 and 35 along score line 40. The folded-over abutting faces of grasping panels 35 and 36 are preferably glued together by adhesive 65. The inner faces of tongues 42 are also preferably glued to the overlapped portions of extension panel 14. The glue tongues 42 are then glued by adhesive 60 to the upper edge of the front wall 10 as shown in Figures 3 and 4.

The free edges of the panels 14, 35, and 36 constituting the extension on cover 13 are preferably sloped toward each other as shown in Figure 1 so that the grasping panels will be

spaced away slightly from the ends of the carton as shown in Figure 3.

The cartons are shipped by the carton manufacturer to the carton user in knocked-down flat condition with the extension on cover 13 folded and glued to the front wall 10 as previously described.

In use the carton is folded up into its rectangular condition as shown in Figure 5. One end of the carton is closed by means of the end flaps previously described and ice cream or other comestible to be frozen therein is introduced at the other open end. After being filled this end is closed and the carton transferred to the hardening room. The front of the carton will have the appearance shown in Figure 3.

When the consumer is ready to use the contents within the carton both ends of the carton are first opened by disengaging the interlocked outer flaps 9 and 20, and 15 and 19 at each end. The grasping panels 35 and 36 are then seized by the fingers as shown in Figure 5 and pulled back so as to tear the glued tongues 42 free from the front wall 10. The cut score line 41 permits ready peeling or separation of the glued tongue portions from the front wall 10. The contents of the carton will then be left freely exposed resting upon the bottom 11 of the carton.

The construction of the extension panels and score lines as previously described facilitates the ready grasping of the grasping panels and tearing open of the carton without peeling the fibrous stock material. Score lines 30 and 41 facilitate bending up of the grasping panels as shown in Figure 5. By virtue of the glued tongue portions 42, the grasping panels are readily separated and torn away from the front wall 10. There will be no peeling of the carton blank on the inside of the carton because the fibers cannot peel beyond the upper outer edge of the front wall 10 when the carton is opened as the fibers on the inner face of the tongues are discontinuous with the fibers of the overlapped portion of the front wall. The partially cut score line 40 also permits panels 35 and 36 to be folded compactly without bulging at the fold thereby giving a compact and neat appearance to the grasping panels.

The carton construction thus provides a carton made from a single blank of paper board having a cover provided with an integral extending sealing flap which serves to seal the carton. This flap consists of panels 14, 35, 36, tongues 42 integral with panel 36, and is folded and secured to itself as previously explained so as to provide inner and outer grasping panel portions. The inner faces of the tongues 42 are adhered to an overlapped portion of the adjacent wall by means of glue applied to the inner faces of the tongues. The score lines 30 and 41 on the sealing flap provide hinged grasping portions for tearing open the sealing flap.

Many modifications may be made in the carton construction. For example, as illustrated in Fig-

ures 6 to 9, an auxiliary tab portion 50 may be provided integrally hinged to outer grasping panel 35 by slitting panel 36 in its medial region along slits 51 and 52 as shown in Figure 6. The panels 14, 35, 36 are folded and glued together as previously described in connection with the carton construction shown in Figure 1. The tongues 42 are then glued to the front wall and the auxiliary tab 50 is positioned in extended relation as illustrated in Figure 8. When it is desired to open the carton, the auxiliary tab 50 is grasped by the fingers as shown in Figure 9 and the carton is opened by pulling the glued tongues 42 free from the front wall. In this modification, if desired, the tongues may be replaced by a continuous glue panel.

Another modified construction is illustrated in Figures 10 to 12, wherein in addition to panels 14, 35 and 36 previously described, there is provided an additional glue panel 42' cut at its free edge to provide tongues 42. These tongues 42 are glued to the front wall of the carton. This construction serves to ensure a leak-proof joint at the region where the tongues are glued to the front wall.

It is to be understood that other variations and modifications of the specific embodiment disclosed are intended to be included within the scope of the appended claims.

I claim:

1. A carton formed from a single blank, said carton having a cover provided with a composite sealing flap extending therefrom and hinged thereto along a score line, said composite sealing flap overlapping an adjacent wall portion; said composite sealing flap comprising parallel spaced score lines defining in succession an extension panel, an outer grasping panel, an inner grasping panel and spaced tongue portions extending from the free edge of said inner grasping panel and integral therewith, said inner and outer grasping panels being inwardly folded in face contact; and the exposed faces only of said tongue portions being glued to the corresponding overlapped portions of the adjacent wall.
2. A carton formed from a single blank, said carton having a cover provided with a composite sealing flap extending therefrom and hinged thereto along a score line, said composite sealing flap overlapping an adjacent wall portion; said composite sealing flap comprising parallel spaced score lines defining in succession an extension panel, an outer grasping panel, an inner grasping panel and spaced tongue portions extending from the free edge of said inner grasping panel and integral therewith, said inner and outer grasping panels being inwardly folded in face contact; an auxiliary grasping tab integral with said outer grasping panel and extending therefrom; and the exposed faces only of said tongue portions being glued to the corresponding overlapped portions of the adjacent wall.

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