Dec. 29, 1953 M. BURGER 2,664,234

EGG CARTON

Filed Dec. 29, 1949

2 Sheets-Sheet 1

Fig. 1

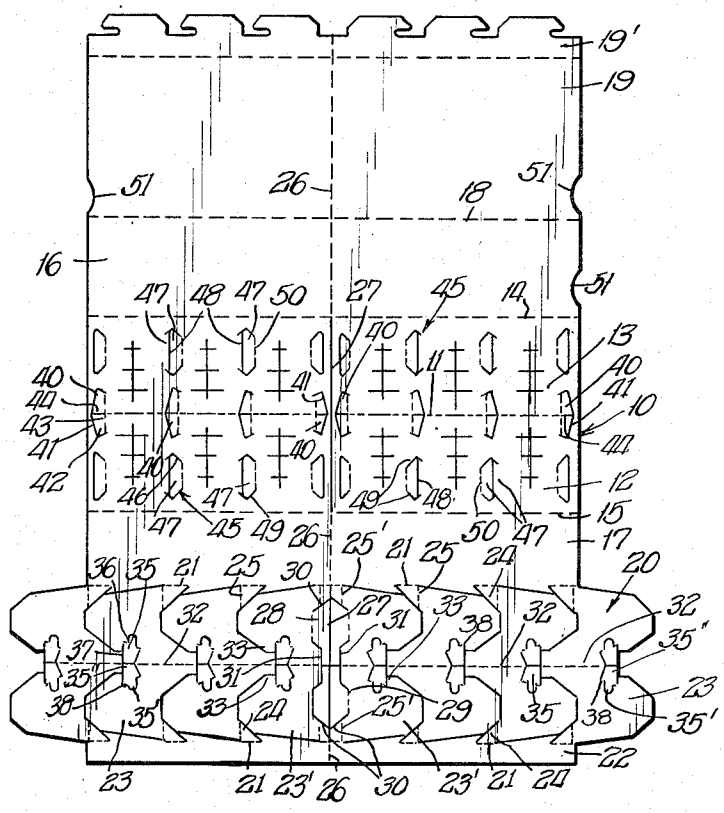
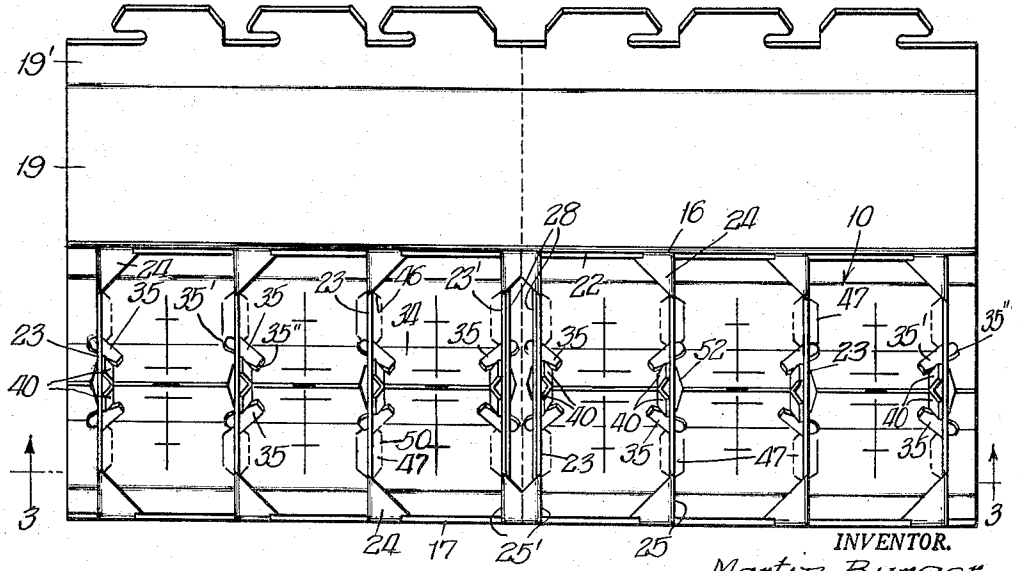


Fig. 2



INVENTOR.
Martin Burger,
BY
Cromwell, Greist & Warden
Attys.

Dec. 29, 1953 M. BURGER 2,664,234

EGG CARTON

Filed Dec. 29, 1949 2 Sheets-Sheet 2

Fig. 3

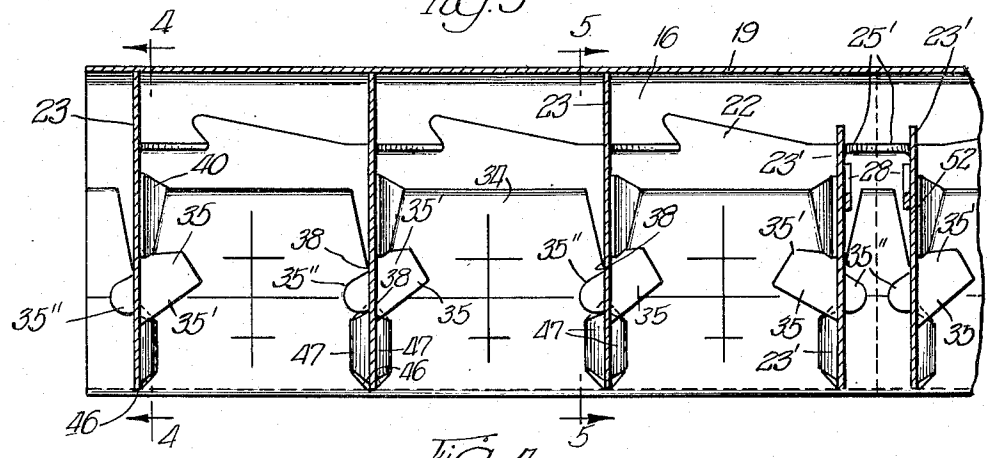


Fig. 4

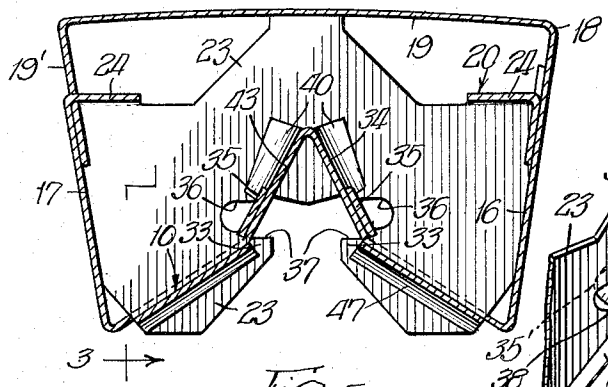


Fig. 6

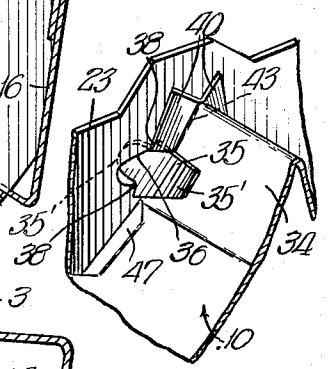
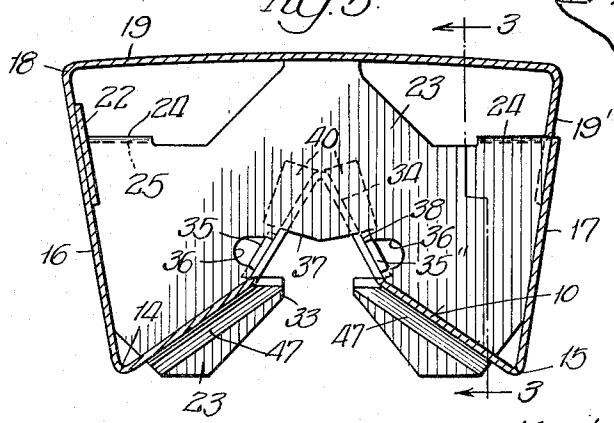


Fig. 5



INVENTOR.
Martin Burger,
BY
Cromwell, Greist & Warden
Attys

Patented Dec. 29, 1953

2,664,234

UNITED STATES PATENT OFFICE

2,664,234

EGG CARTON

Martin Burger, Morris, Ill., assignor to General Package Corporation, a corporation of Delaware

Application December 29, 1949, Serial No. 135,804

21 Claims. (Cl. 229—28)

1

The present invention deals with improvements in the bottom supporting structure of a collapsible cellular paperboard egg carton. A related structure is the subject matter of my copending application Serial No. 93,395, filed May 14, 1949.

Generally this type of carton is characterized by front and rear side walls, an inverted V-shaped bottom, a medial longitudinal partition integral with the bottom and a plurality of cross partitions, the longitudinal partition being provided with certain flaps which are bendable outwardly at an angle thereto and the cross partitions being provided with integral tabs which are bendable angularly to interengage with and beneath the longitudinal partition flaps. As a result, the carton bottom is effectively supported by the cross partitions, the latter are braced and supported in erected condition, and a vertical bracing of the longitudinal partition, together with a strengthening and stiffening of the carton generally, are produced.

It is a general object of the present invention to accomplish these same results in a carton which is particularly well suited to be erected to operative, egg receiving condition by automatic equipment of a type operated manually or otherwise.

Another and more specific object is to provide a paperboard egg carton of this type having opposed front and rear walls, a bottom and longitudinal partition forming section integrally connecting the walls, and transverse partitions hingedly connected to the walls and swingable to upright position therebetween, in which the transverse partitions are provided with an improved type of medially pivoted tab or flap cut from the material thereof, being swingable normal to the plane of the cross partition to extend on opposite sides thereof, and in that position being engaged beneath a portion of the longitudinal partition to sustain the bottom and longitudinal partition forming section of the carbon in an improved manner.

A still further object of the invention is to provide a carton as referred to in the preceding paragraph in which the portion of the longitudinal partition engaged by the medially pivoted cross partition tabs or flaps is constituted by certain integral bendable flaps of said longitudinal partition, and in which the medially pivoted tabs or flaps lie in side-by-side engagement with the longitudinal partition, in the sustaining position referred to.

The foregoing statements are indicative in a general way of the nature of the invention, but

2

other and more specific objects will be apparent to those skilled in the art upon a full understanding of the construction and operation of the carton.

A single embodiment of the invention is presented herein for the purpose of illustration, but it will be appreciated that the invention is susceptible of incorporation in other modified forms coming equally within the scope of the appended claims.

In the drawings:

Fig. 1 is a plan view of a flexible paperboard blank from which the present carton is constructed;

Fig. 2 is a top plan view of the carton in fully assembled, glued and erected condition, the integral cover of the carton being withdrawn to expose the carton interior;

Fig. 3 is a somewhat enlarged, fragmentary view in longitudinal, vertical cross section approximately along line 3—3 of Figs. 2, 4 and 5, illustrating the operative relationship of the improved partition locking and bracing flaps of the carton, with respect to one another and to the longitudinal partition and bottom section of the carton;

Figs. 4 and 5 are, respectively, views in transverse vertical section along section lines 4—4 and 5—5, respectively, of Fig. 3; and

Fig. 6 is an enlarged fragmentary view in perspective more clearly showing the operating relation of the tab or flap elements and partitions.

This invention aims at the substantial strengthening of a collapsible cellular paperboard carton of a well known type, similar to that illustrated and described in the patent to Troyk No. 1,783,397 of December 2, 1930, by the use of coacting, bendable, interlocked flap elements integral with the respective transverse and longitudinal partition members of the carton. In their operative, interengaged relation these flaps hold the carton cross partitions in proper upright position and enable the vertical load on the raised carton bottom to be partially distributed through the longitudinal partition member to the various cross partition members, which themselves rest on a supporting surface.

The drawings show the invention as embodied in a divisible type carton i. e., capable of being subdivided along a weakened transverse line into sections of equal six-egg capacity, but the principle is just as usefully applied to the non-divisible type. The carton is fabricated from a one-piece blank of a suitable flexible paperboard stock illustrated in Fig. 1 which is died out in a general-

ly rectangular outline. The blank is creased to define an intermediate bottom and longitudinal partition-forming section 10, medially subdivided by a central, longitudinally extending fold line 11 into two identical panels 12, 13. Parallel longitudinal crease lines 14, 15 connect section 10 at the respective opposite margins thereof to the rear and front wall panels 16, 17 of the carton. Rear wall panel 16 is in turn flexibly connected by a bendable crease line 18 to a rectangular cover panel 19 which carries a foldable locking flap 19' on its outer edge.

The rear wall 17 has a cross partition panel 20 flexibly connected to its outer or upper margin by a series of longitudinally spaced and aligned crease lines 21; similar creases connect it along its opposite margin to a terminal glue flap 22. Panel 20 is subdivided by slitting and creasing into a plurality of like cross partitions 23 which are connected to the front wall 17 and to the rear wall 16 (through the agency of glue flap 22) by means of the integral triangular webs or gussets 24. The latter are creased at 25 for vertical swinging movement to the operative, upright position illustrated in Fig. 2, and it will be noted that the sets of cross partitions on opposite sides of the center of the carton blank are adapted to swing in opposite directions about the respective creases 25. This is due to the divisible nature of the illustrated carton, the blank 10 being provided with a perforated transverse division line 26 extending across glue flap 22, front and rear walls 17, 16, cover panel 19 and locking flap 19', in alignment with slits 27 in cross partition section 20 and bottom and longitudinal partition forming section 10. Concerning the cross partitions immediately adjoining the transverse slit 27, which are specially designated 23', they are adapted to hinge downwardly about pairs of spaced creases 25' to their erected parallel, vertical position and they have individual transverse flaps 28 flexibly connected thereto by parallel creases or scores 29. These flaps 28 are separated at their ends and center from partitions 23' by the sets of inclined and shaped slits 30, 31, respectively, and are adapted to be flexed downwardly along scores 29 toward the respective adjacent, facing sides of partitions 23' when the latter are in operative position.

The cross partitions 23, 23' are folded upon themselves about the longitudinally extending, aligned creases 32 in panel 20, when the carton is in glued, flat, knock-down condition, as illustrated in the Troyk patent. They are of forked outline, being shaped at 33 on the marginal inner edge thereof to provide mutually inturned hook formations. These formations are adapted to be inserted in certain openings in the longitudinal partition and bottom forming section 10 formed when the latter is disposed in the angled, upwardly convergent position of its parts shown in Figs. 4 and 5, as hereinafter described. Thus inserted, the hooks 33 assist in vertically sustaining the medial, two-walled longitudinal partition of section 10, designated 34. See Figs. 2, 4 and 5.

Referring again to the blank shown in Fig. 1, cross partition panel 20 is provided immediately adjacent each of the hook formations 33 with special cuts and creases designed to free sets of locking and supporting flaps or tabs 35 from the material of the respective cross partitions 23 and 23'. These include the outer, opposed, bow-shaped slits 36 opening inwardly on either side of the medial panel creases 32, the opposed, U-shaped slits 37 opening outwardly and commonly based in longitudinal alignment with said creases, and the small intermediate hinge elements 38 which lie between and connect the adjacent feet or ends of the respective bow slits 36 and U-slits 37. Thus there are defined a plurality of tabs 35 which are swingable about their individual medial hinges 38 into position normal to their respective associated cross partitions 23 or 23' when the carton is in erected condition, as shown in Figs. 3–6 inclusive, and which then lie along the opposite sides of longitudinal partition 34, in position to sustainingly engage certain portions thereof. Each tab 35 has a generally rectangular portion 35' which performs the direct supporting function and a rounded ear portion 35'' which is disposed on the opposite side of the cross partition 23 or 23' from which the tab is struck.

The bottom and longitudinal partition forming section 10 is cut and creased in the manner shown in Fig. 1 to provide bendable flaps or tabs 40 which are adapted to interlock with the tabs 35, the longitudinal spacing of the respective sets of elements 35 and 40 relative to one another being the same. For this purpose, obtusely angled, C-shaped slits 41 are formed to intersect the longitudinal medial crease of the panel, these slits terminating at their opposite ends in rearward extensions 42. Transverse creases 43 connect the termini of the slit extensions 42 and a short slit 44 which is longitudinally coincident with medial crease 11 separates the respective flaps 40 from one another.

The bottom and longitudinal partition-forming section 10 is also provided with two parallel rows of slitted and creased cross partition-receiving bracing formations 45. These formations are disposed in pairs which are laterally aligned with the pairs of cross-partition hinge lines 25 or 25' being located at equal distances from medial crease 11. They are intended to provide bottom openings 46 for the reception of cross partitions 23, 23' together with a side flap or flaps 47 to brace the cross partitions when the latter are swung to upright position and inserted through the carton bottom. Flaps 47 hold the cross partitions against longitudinal swinging movement and assist the same in resisting vertical buckling under load, so that the carton as a whole is materially strengthened and rigidified.

In a preferred embodiment, the formations 45 each comprises a somewhat elongated slit 48 extending transversely of the bottom and partition-forming section 10, each slit being intersected at its opposite ends by the angular, longitudinally aligned V-slits 49. The slit 48 is preferably disposed to one side of a theoretical line through the apices of the V-slits, i. e., on the side from which the partitions 23, 23' are swung to upright position, so that the flap 47 on one side of slit 48 is somewhat larger than the other. Scoring 50 connecting the ends of slits 49 facilitates swinging of the larger flaps.

The above provisions furnish end-narrowed openings 46 (see Fig. 3), to receive the lower portion of the cross partitions 23 or 23' and the latter are interlockingly engaged with bottom section 10 by the mutually in-turned hooks 33 on their lower forked leg portions. Openings 46 are of course normally closed by the flaps 47.

In assembling the carton from the above described blank, the latter is successively folded on itself along crease lines 32 and 11 and the glue flap 22 is adhered to the rear wall 16 adjacent its

cover crease 18, in accordance with conventional procedure. This places the carton in its flat knocked-down condition for shipment or storage.

In erecting the carton to the condition shown in Figs. 2 through 6, it is placed with its cover side down and held in such position by restraining the cover section 19 and/or rear wall 16. The front wall 17 is then engaged adjacent a cut-out notch 51 in its margin and lifted upwardly to initiate spreading the walls apart at the end of the carton. The spreading action is carried out along the length of the carton until it is in a hollow, generally rectangular cross-sectional outline.

The cross partitions 23, 23' are next rotated into operative position parallel to one another and normal to the carton walls, during which operation the locking tabs 35 are preliminarily deflected about their individual medial hinge portions 38, ready to be engaged by their inherent resilience beneath the lower edges of the out-turned flaps 40 when the latter are in proper position.

After the cross partitions 23, 23' have been swung to operative parallel relation, the bottom section 10 is shaped to inverted V-outline and engaged with the partitions 23, 23' by causing the latter to enter the openings 46 adjoined by flaps 47. During an early phase of this operation the flaps 40 are swung about their respective creases 43 and flared upwardly and outwardly from the longitudinal partition 34. As the flaps 40 move with the shaping longitudinal partition they pass underneath the tabs 35, which yield slightly about their hinges 38 to allow the flaps clearance in their movement. After the partition 34 is properly shaped, tabs 35 snap into position beneath the flaps. Hence, the bottom and longitudinal partition forming section 10 is positively sustained by the cross partitions 23, 23' at a plurality of points along its length, due to the interlocked engagement of the tabs 35 and flaps 40. The base of the forked cross partitions is also received in the bottom opening 46, with the hooks 33 of the cross partitions engaging the ends of said openings, to further the support of the bottom by the cross partitions.

The above described operations of bending and engaging flaps 40 and 35 are preferably performed automatically by suitable apparatus, manually or automatically controlled, in timed relation to the swinging of the cross partitions 23, 23' to upright parallel positions, the shaping of longitudinal partition 34, the engaging of the latter with the cross partitions and also the reverse swinging of the center flaps 28 downwardly into the openings 52 from which flaps 40 are displaced. These operations need not be described in detail; however, it will be noted that the proportioning and locating of tabs and flaps 35, 40 are such that the former will readily snap beneath the latter into intersecting, substantially normal supporting engagement therewith.

It will also be noted that the medial pivoting of the tabs 35 at 38 enables the same to be readily engaged and swung by automatic machinery. It is merely necessary to cause a machine finger to press against the surface of the partition 23 or 23' to depress the same relative to the tab 35, after which the finger is readily insertable beneath the tab ear portion 35' to swing the remaining portion 35' about its hinge 38 to the desired partition supporting position.

Due to the interlocked relationship of the respective tabs and flaps 35, 40 a substantial share of the load on the bottom of the carton is distributed from the longitudinal partition 34 to the cross partitions, a function also performed in part by the cross partition hooks 33. Any tendency of the cross partitions to buckle is resisted to some extent by the rear bracing engagement of the flaps 40 on the cross partitions, but the main anti-buckle effect is exerted by the bottom formations 45 adjoining the partition receiving openings 46. The flaps 47 yield outwardly when the respective partitions 23, 23' are thrust thereagainst in erecting the carton and the two flaps thereafter have direct frictional engagement with said partition at two points to brace the same, so that partitions resist buckle under load and present maximum column strength. Since the lower edges thereof lie approximately in the horizontal plane of the bottom margins of carton walls 16, 17 on a supporting surface, and their upper extremity is abutted by the cover 19 the cross partitions further assist the walls in resisting crushing forces on the carton.

The present carton is strongly resistant to displacement of its parts from final erected condition, due to a considerable degree to the interlocking of tabs and flaps 35, 40 as described. This interlock serves to better distribute and withstand loads and stresses imposed on the carton and, in addition, the cross partitions 23, 23' are rearwardly braced by the elements referred to. The rigidity and column strength of the cross partitions are increased, since their tendency to bend or collapse, either about a horizontal axis or about their medial creases 32, is counteracted by the flaps bearing against this creased area. A like action is performed at a lower point by the force couple which is represented by the bottom section flaps 47. The several cross partitions are held by tabs and flaps 35, 40 and 47 against shifting longitudinally of the carton in either direction, again insuring maximum column strength to sustain vertical load. Moreover, in view of the fact that the grain of the material of partitions 23, 23' is disposed in the horizontal direction across said partitions, the tendency of the cross partitions to buckle around a horizontal axis under compressive stress is counteracted by the flaps 40 and 47 extending angularly across the grain of the partitions.

What I claim is:

1. A paperboard egg carton comprising a bottom, front and rear walls connected to said bottom, an upstanding longitudinal partition connected to said bottom and disposed between said walls, and a plurality of cross partitions adapted to be positioned in upright position between said walls, said longitudinal partition having supporting portions and said cross partitions having medially pivoted tabs extending thereacross substantially parallel to said longitudinal partition and in supporting engagement with said supporting portions.

2. A foldable egg carton comprising a bottom, front and rear walls connected to said bottom, an upstanding longitudinal partition connected to said bottom and disposed between said walls, and a plurality of cross partitions hingedly connected to and positionable in upright position between said walls, said longitudinal partition having longitudinally spaced supporting elements projecting laterally therefrom and said cross partitions having medially pivoted tabs extending thereacross substantially parallel to said longitudinal partition and in supporting engagement with said elements.

3. A foldable egg carton comprising a bottom, front and rear walls connected to said bottom,

an upstanding two-walled longitudinal partition of inverted V cross section connected to said bottom and disposed between said walls, and a plurality of cross partitions hingedly connected to and positionable in upright position between said walls, the respective walls of said longitudinal partition having longitudinally spaced supporting elements projecting laterally therefrom and said cross partitions having medially pivoted tabs extending thereacross substantially parallel to the respective walls of said longitudinal partition and in supporting engagement with said elements.

4. A foldable egg carton comprising a bottom, front and rear walls connected to said bottom, an upstanding longitudinal partition connected to said bottom and subdividing the interior of the carton between said walls, and a plurality of cross partitions hingedly connected to said walls for movement to upright position therebetween, said longitudinal partition having longitudinally spaced elements projecting laterally therefrom and said cross partitions each having a tab element medially pivoted thereto between opposed free tab ends, said tab elements being offset from the plane of the respective cross partitions and disposed substantially parallel to said longitudinal partition and in interlocked supporting engagement with said longitudinal partition elements.

5. A foldable egg carton comprising a bottom, front and rear walls connected to said bottom, a two-thickness upstanding longitudinal partition connected to said bottom and subdividing the interior of the carton between said walls, and a plurality of cross partitions hingedly connected to said walls for movement to upright position therebetween, each of the thicknesses of said longitudinal partition having longitudinally spaced elements projecting laterally therefrom and said cross partitions each having a pair of tab elements medially pivoted thereto between opposed free tab ends, said tab elements being offset from the plane of the respective cross partitions and disposed substantially parallel to said respective longitudinal partition thicknesses and in interlocked supporting engagement with said longitudinal partition elements.

6. A paperboard egg carton comprising spaced front and rear side walls, a bottom extending therebetween, an upstanding longitudinal partition connected to said bottom and paralleling said walls, a plurality of cross partitions positionable normal to said longitudinal partition and side walls in upright relation to said bottom, certain of said partitions having locking elements cut from the material thereof and pivoted thereto at points intermediate the ends of the elements, said locking elements being pivotally movable to extend on opposite sides of the partition to which they are pivoted, and means connecting said elements with said longitudinal partition in vertically sustaining relation, and in substantially face-to-face relation, thereto.

7. A paperboard egg carton comprising spaced front and rear side walls, a bottom extending therebetween, an upstanding longitudinal partition connected to said bottom and paralleling said walls, and a plurality of cross partitions positionable normal to said longitudinal partition and side walls in upright relation to said bottom, certain of said partitions having locking elements cut from the material thereof and pivoted thereto at points intermediate the ends of the elements, other of the partitions having cooperating elements cut from the material thereof and positionable at an angle thereto, said locking elements being pivotally movable to extend on opposite sides of the partition to which they are pivoted and to engage and sustain said cooperating elements in face-to-face contacting relation to the partition from which the latter are cut.

8. A paperboard egg carton comprising spaced front and rear side walls, a bottom extending therebetween, a two walled upstanding longitudinal partition connected to said bottom and paralleling said walls, and a plurality of cross partitions positionable normal to said longitudinal partition and side walls in upright relation to said bottom, said cross partitions having locking elements cut from the material thereof and pivoted thereto on opposite sides of said longitudinal partition at points intermediate the ends of the elements, said longitudinal partition having cooperating elements cut from the walls thereof and positionable at an angle thereto, said locking elements being pivotally movable to extend on opposite sides of the partition to which they are pivoted and to engage and sustain said cooperating elements in face-to-face contacting relation to the partition from which the latter are cut.

9. A paperboard egg carton comprising front and rear side walls, an integral, longitudinal partition and bottom section connected to and extending therebetween, and forked cross partitions integrally hinged to said walls for swinging movement to upstanding position normal to said walls and partition and bottom section, said cross partitions being provided with locking elements which are medially pivoted between their ends to the cross partitions on opposite sides of the fork formation of the latter for pivotal movement to operative position at an angle thereto and in general parallelism with said partition and bottom section, said partition and bottom section having formations above said locking elements, in said operative position of the latter, which are interlockingly engaged from beneath by said locking elements.

10. A paperboard egg carton comprising front and rear side walls, an integral, two walled, inverted V-shaped longitudinal partition and bottom section connected to and extending therebetween, and forked cross partitions integrally hinged to said walls for swinging movement to upstanding position normal to said walls and partition and bottom section, said cross partitions being provided with locking elements which are medially pivoted between their ends to the cross partitions on opposite sides of the fork formation of the latter for pivotal movement to operative position at an angle thereto and in general parallelism with said partition and bottom section, the walls of said partition and bottom section having integral flap formations pivoted thereon which swing at an angle thereto to position above said locking elements, in said operative position of the latter, and are interlockingly engaged from beneath by said locking elements.

11. A paperboard egg carton comprising front and rear side walls, a bottom and longitudinal partition section connecting said walls and providing a longitudinally extending partition of inverted V-shape subdividing the space between said walls, said partition being provided with a plurality of sustaining portions, and a plurality of forked cross partitions hinged to said front and

rear walls for disposition in parallel relation to one another in penetrating engagement with said carton bottom, said cross partitions being provided with integral flaps adjoining the fork thereof which are bendable about medial hinges out of the plane of said partitions, said cross partition flaps being disposed along the opposite sides of said longitudinal partition in angular relation to the cross partitions and in interlocked vertically sustaining engagement from beneath with said sustaining portions of said longitudinal partition.

12. A paperboard egg carton comprising front and rear side walls, a bottom and longitudinal partition section connecting said walls and providing a longitudinally extending partition of inverted V-shape subdividing the space between said walls, and a plurality of forked cross partitions hinged to said front and rear walls for disposition in parallel relation to one another in penetrating engagement with said carton bottom, said cross partition being provided with integral flaps adjoining the fork thereof which are pivoted thereto for bending about medial hinges out of the plane of said partitions and the longitudinal partition having flaps pivoted thereto for bending laterally at an angle thereto, said cross partition flaps being disposed along the opposite sides of said longitudinal partition in angular relation to the cross partitions and in interlocked vertically sustaining engagement from beneath with the laterally bent flaps of said longitudinal partition.

13. A paperboard egg carton comprising front and rear side walls, a bottom and longitudinal partition section connecting said walls and providing a longitudinally extending partition of inverted V-shape subdividing the space between said walls, said partition being provided with a plurality of sustaining portions, and a plurality of forked cross partitions hinged to said front and rear walls for disposition in parallel relation to one another in penetrating engagement with said carton bottom, said cross partitions being provided with integral flaps adjoining the fork thereof which are pivoted thereto for bending about medial hinges out of the plane of said partitions, said cross partition flaps being disposed along the opposite sides of said longitudinal partition in angular relation to the cross partitions and in interlocked vertically sustaining engagement with said longitudinal partition, said cross partitions having hooks adjacent said forks which are sustainingly engaged from beneath with said sustaining portions of said partition section.

14. A foldable carton comprising front and rear walls, a bottom connected to said walls including an upstanding longitudinal partition subdividing the space between said walls, said partition being provided with a plurality of sustaining portions, and a plurality of cross partitions hingedly connected to said walls for movement to operative, upright position normal to said longitudinal partition, said cross partitions having integral flaps medially pivoted thereto between the flap ends which are bent out of the plane of the cross partitions to extend lengthwise of the longitudinal partition, said cross partition flaps having interlocked engagement from beneath with said sustaining portions of said longitudinal partition to brace said carton, said bottom being provided with cuts receiving said cross partitions in the operative position of the latter and having tabs adjoining said cuts which are adapted to engage a side surface of said cross partitions.

15. A foldable carton comprising front and rear walls, a bottom connected to said walls including an upstanding longitudinal partition subdividing the space between said walls, integral flaps disposed along said partition and adapted to be bent at a substantial transverse angle from at least one side thereof, and a plurality of cross partitions hingedly connected to said walls for movement to operative, upright position normal to said longitudinal partition, said cross partitions having integral flaps medially pivoted thereto between the flap ends which are bent out of the plane of the cross partitions to extend lengthwise of the longitudinal partition, said cross partition flaps having interlocked, transversely intersecting engagement from beneath with said longitudinal partition flaps to brace said carton, said bottom being provided with cuts receiving said cross partitions in the operative position of the latter and having tabs adjoining said cuts which are adapted to engage a side surface of said cross partition.

16. A foldable egg carton comprising a bottom, front and rear walls connected to said bottom, an upstanding longitudinal partition connected to said bottom and subdividing the interior of the carton between said walls, and a plurality of cross partitions hingedly connected to said walls for movement to upright position therebetween, said longitudinal partition having longitudinally spaced elements projecting from a surface thereof and said cross partitions having elements cut from the material thereof and hinged thereto intermediate their ends, said last named elements being disposed substantially parallel to said longitudinal partition and in interlocked engagement with said first named elements, said carton being provided with a weakening line extending thereacross to facilitate subdivision thereof and a pair of said cross partitions being located closely adjacent and on opposite sides of said weakening line.

17. A foldable egg carton comprising a bottom, front and rear walls connected to said bottom, an upstanding longitudinal partition connected to said bottom and subdividing the interior of the carton between said walls, and a plurality of cross partitions hingedly connected to said walls for movement to upright position therebetween, said longitudinal partition having longitudinally spaced elements projecting from a surface thereof and said cross partitions having elements hinged thereto intermediate their ends and offset from the plane thereof to position substantially paralleling said longitudinal partition in interlocked engagement from beneath with said first named elements, said carton being provided with a weakening line extending thereacross to facilitate subdivision thereof and a pair of said cross partitions being located closely adjacent and on opposite sides of said weakening line, the respective offset elements of said pair of partitions extending in opposite directions with reference to said weakening line.

18. A foldable paperboard egg carton comprising a bottom, front and rear walls connected thereto, an upstanding longitudinal partition connected to said bottom and longitudinally subdividing the interior of the carton between said walls, and a plurality of cross partitions having flaps integrally hinged thereto by integral hinges located between opposite free swinging flap ends and deflected out of the respective planes thereof, said longitudinal partition also having flaps integrally hinged thereto and deflected out of the

plane of the surface to which they are hinged to expose openings in which portions of said cross partitions are received, the flaps of said cross partitions in deflected position engaging a flat surface of said longitudinal partition and said longitudinal flaps engaging flat surfaces of said cross partitions.

19. A carton in accordance with claim 18, in which said longitudinal partition flaps are deflected upwardly relative to that partition for engagement with said cross partitions, and in which said deflected cross partition flaps have surface contact with said longitudinal partition over substantial portions of their respective areas and on opposite sides of the planes of the respective cross partitions.

20. A foldable paperboard egg carton comprising a bottom, front and rear walls connected thereto, an upstanding longitudinal partition of inverted V-shaped cross section connected to said bottom and longitudinally sub-dividing the interior of the carton between said walls, and a plurality of cross partitions hinged to said walls and positioned in upright position therebetween, said cross partitions having flaps integrally hinged thereto by integral hinges located between opposite free swinging flap ends and deflected out of the respective planes thereof, the inverted V surfaces of said longitudinal partition also having flaps integrally hinged thereto and deflected

out of the plane of the surface to which they are hinged to expose openings in which portions of said cross partitions are received, the flaps of said cross partitions in deflected position engaging said surfaces of said longitudinal partition and said longitudinal partition flaps engaging flat surfaces of said cross partitions.

21. A carton in accordance with claim 20, in which said longitudinal partition flaps are deflected upwardly relative to that partition for engagement with said cross partitions, and in which said deflected cross partition flaps have surface contact with said longitudinal partition over substantial portions of their respective areas and on opposite sides of the planes of the respective cross partitions.

MARTIN BURGER.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
1,915,151	Burger	June 20, 1933
2,016,138	Dixon	Oct. 1, 1935
2,119,956	McDonnell	June 7, 1938
2,244,961	Nydegger	June 10, 1941
2,315,624	Kieckhefer	Apr. 6, 1943
2,321,209	Holwick	June 8, 1943
2,333,181	Inman	Nov. 2, 1943