

Dec. 15, 1931.

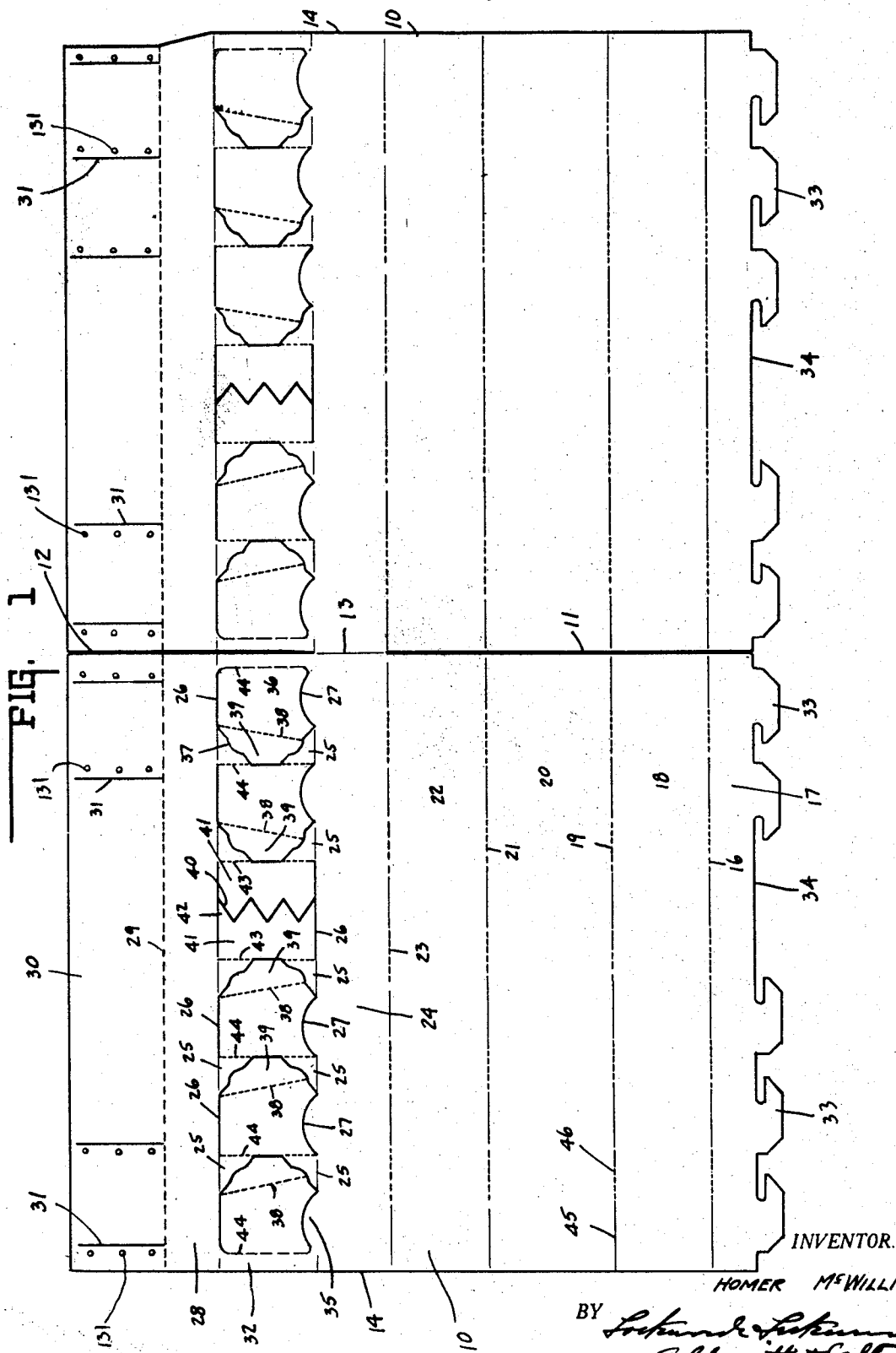
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1,836,100

SEVERABLE EGG CARTON

Filed May 9, 1928

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

FIG. 2

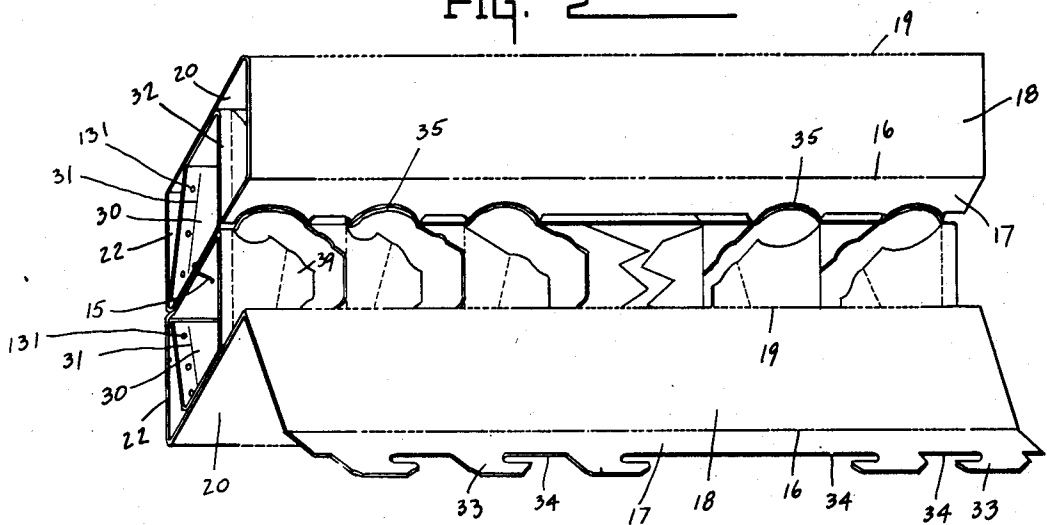
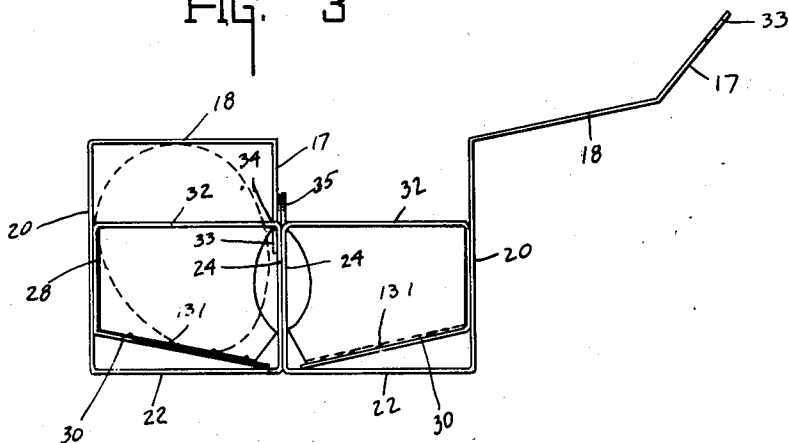


FIG. 3



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SEVERABLE EGG CARTON

Application filed May 9, 1928. Serial No. 278,292.

This invention relates to a paper or cardboard carton of the compartment type commonly called an egg carton and adaptable to the packaging of other fragile articles.

5 The chief object of the invention is to form an egg carton which has greater crushing strength by reason of the method of construction over similar cartons formed from the same type and weight of material and which
10 also is adapted to retain the eggs or the like without permitting end escapement thereof and also reduce the possibility of breaking or crushing by yieldingly mounting each egg or the like in the carton.

15 The chief feature of the invention consists in the accomplishment of the foregoing objects by the construction disclosed hereinafter, and another feature of the invention consists in the application of said features
20 to a carton which is adapted to be divided longitudinally so that each forms a semi-carton as to size but otherwise forms a complete carton when the parts are separated.

25 A further feature of the invention consists in the formation of the egg carton or the like from a substantially rectangular blank suitably cut, scored and perforated and scored, the length thereof being substantially
30 twice the width for a double and longitudinally divisible carton, the blank being substantially square for such a single unit carton.

35 A further feature of the invention consists in substantially severing the rectangular blank into two square portions but having a very small portion unsevered, said portion forming a hinge and integral connection between the two readily divisible parts of the
40 carton.

The full nature of the invention will be understood from the accompanying drawings and the following description and claims:

45 In the drawings Fig. 1 is a plan view of the substantially rectangular blank completely cut, scored and perforated and scored prior to the folding of the same into the multiple unit carton. Fig. 2 is a perspective view of the multiple unit carton, one unit
50 thereof being closed and the other being

opened. Fig. 3 is an end view of the carton with an egg therein.

In the drawings 10 indicates two substantially square halves of a blank which have the aligned slots 11 and 12 and are united by a scored portion 13 (see Fig. 1). Each square forms a complete demi-carton. The two are united together along an adjacent edge by the scored portion 13 and the opposite edges indicated at 14 may be united together by a sticker 15, see Fig. 2, or may be adhesively united together in carton formation. Since the demi-cartons are substantially identical, a description of one will suffice for both.

65 In the blank 16 indicates the longitudinally scored hinge connection between the cover extension or side wall cooperating portion 17 and the cover 18. 19 indicates the scoring between the cover 18 and the side wall 20. 21 indicates the scoring between the side wall 20 and the bottom 22. 23 indicates the scoring between the bottom 22 and the shorter side wall 24. 25 indicates the scoring between linear slots 26 or arcuate slots 27 and is the connection between the side wall and the sectionalized top. The intermediate flap or inner side wall 28 is similarly connected to the sectionalized top. The scored portion 29 connects the flaps or inner side to the false bottom 30, transversely slotted at 31 and terminating short of the edge thereof. A positive stop to limit the outward movement of the end flaps in the form of projections 131 may be provided.

75 By referring particularly to Fig. 3 it will be noted that the side wall 20 connects the cover 18 and the bottom 22 together. The sectionalized top 32 is connected to the upper end of the side wall 24, the lower end of which is connected to the bottom 22. The false or inner side wall 28 is connected at its upper end to the top and at its lower end to the false bottom 30 which rests upon the bottom 22 and is inclined upwardly and angularly relative thereto. As shown clearly in Fig. 3, the two false bottoms are directed upwardly and outwardly from the adjacent side walls 24 of the two parallel positioned demi-cartons. Projecting from the cover 18 is the flap 17 and
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the tongues 33 thereof are adapted to be receivable by the cut-outs formed at 27. The longitudinal edge 34 bears upon the top, as shown in Fig. 3 and inward collapse of the top is prevented. This forms a compartment above and below the sectionalized top and the article is adapted to project through the sectionalized top into the upper compartment. The tongues 33 have a locking engagement as indicated. To assist in preventing lateral collapse of the side wall lock or cover extension 17, the arcuate cut-outs 27 form the upwardly extending reinforcing members 35. When the side wall locking extension 17 is positioned outside of the arcuate extensions 27 of the side wall 24, said side walls prevent complete collapse of the cover 18 toward the top.

The sectionalized top has formed at each end a pair of flaps 36 by the arcuate cuttings 27 and the linear cuttings 26, the same being connected together by the tongue forming cuttings 37 and the flap is divided and herein by an inclined scoring as at 38 forming an angular extension 39 on said flap. As shown in Fig. 2, the end flaps 36 extend downwardly and inwardly toward the center of the demi-carton and thus provide ends for said carton and prevent end escapement of the articles. To insure substantially complete closure of the ends of the demi-carton the angularly positioned tongues 39 register with and lie parallel to the inclined and false bottom 30. The result is that the greater the tendency of the article to escape, the greater the resistance to such escapement. The slots 31 or the top portions 131 limit the escaping or outward movement of the end forming flaps.

To provide an intermediate compartment with a suitable side cushioning support in addition to the cushion support provided by the false bottom, the top is divided by a saw tooth slot 40 which form the two inwardly directed flaps 41 having tongue portions 42, the over-all length of each flap and tongue being greater than half of the distance of the compartment formed by two flaps and tongues. These are depressed downwardly (having the scored connection 43 with the remainder of the top) and thus form a cushion and prevent lateral escapement of the article in either direction. Each of the end flaps 36 also are folded upon the scored portions 44.

As shown clearly in Fig. 1, the scorings 16, 19, 21 and 23 consist of aligned scored portions 45 and perforated portions 46. This type of scoring is employed since the use thereof permits the carton blank to be formed from cardboard material independent of the grain of said material, that is, it is not necessary as heretofore has been the practice, to form the longitudinal scorings in parallel alignment with the grain of the board.

The broad idea of a pair of demi-cartons

secured in parallel arrangement and side by side so as to be readily detachable is not claimed herein but the features hereinbefore set forth are those which make practical commercial constructions and which are set forth by the claims.

The invention claimed is:

1. A single sheet cardboard carton for fragile articles, comprising connected side walls, a sectionalized top, a cover, a bottom and a flap, a bottom inclined to the latter and connected thereby to the top and included within the carton and forming brace means preventing collapse of the carton and a spring cushion for the carton contents.

2. A single sheet cardboard carton for fragile articles, as defined by claim 1, characterized by the false bottom of said carton unit extending upwardly and outwardly from one side wall and bottom connection and toward the other side wall.

3. A single sheet cardboard carton for fragile articles formed from a single blank having a plurality of parallel scorings forming respectively, a side wall lock, a cover, a side wall, a bottom, another side wall, a sectional top, an inner side wall, and an inner bottom, said last mentioned bottom being inclined to the first-mentioned bottom and terminating intermediate the ends of one of the side walls and resisting improper folding of the blank in the setting up of the same and the carton formation.

4. A single sheet cardboard carton for fragile articles, comprising two substantially identical but reversely positioned carton units secured in side by side relation and longitudinally separable, each being of the character defined by claim 3, the false bottoms of said carton unit extending upwardly and outwardly from the adjacent side wall and bottom connections and toward the outer side walls.

5. A single sheet carton of the character defined by claim 1, characterized by the false bottom including transverse slottings forming connected but relatively individual sections, said slottings being arranged to correspond with the top sections, whereby a compartment division formed in the and by said sectionalized top is provided with an individual false spring-like bottom portion for individually supporting the individually separated articles in the compartment.

6. A single sheet cardboard carton for fragile articles including in combination an inclined false bottom and a sectionalized top, flaps being cut from said top and extending downwardly toward the bottom of the carton, each flap terminating in a tongue adapted for angular positioning relative to said flap and for parallel positioning and engagement with the inclined false bottom.

7. A single sheet device as defined by claim 6, characterized by said flaps from end to end

of the carton being directed toward the middle thereof and one of the intermediate compartment sections including oppositely directed flap portions having a plurality of staggered tongues formed from the adjacent oppositely extending flap, whereby the over all length of each flap and tongue is greater than half the length of the compartment formed by the sectional top thereof, said intermediate flaps and tongues being adapted to terminate immediately adjacent the false bottom and forming a cushioned and substantially closed compartment for the article.

8. A single sheet cardboard carton for fragile articles including in combination a pair of side walls, a bottom connecting the same, a sectional top, a portion projecting from said top downwardly toward the bottom to lie adjacent the side wall and extending inwardly from said side wall toward the other side wall and the bottom for cushioning, a cover in spaced relation to said top and connected to the aforesaid adjacent side wall and having a cooperative connection with the other side wall, said sectional top comprising a plurality of end flaps cut therefrom and extending downwardly and inwardly toward the transverse center of the carton forming closed ends for the carton and an article support, one of the intermediate compartments between the oppositely directed flaps including a pair of oppositely directed flaps including tongue extensions, each flap and included tongue having a length greater than the length of the compartment, said tongued flaps extending downwardly and oppositely for forming an article cushion.

9. A single sheet cardboard carton for fragile articles including in combination a pair of side walls, a bottom connecting the same, a sectional top, a portion projecting from said top to lie adjacent the side wall, a cover in spaced relation to said top and connected to the aforesaid side wall and having cooperative connection with the other side wall, said sectional top comprising a plurality of end flaps cut therefrom and extending downwardly and inwardly toward the transverse center of the carton forming closed ends for the carton and an article support, each of the inwardly directed end flaps including an angular extension for bottom engagement, one of the intermediate compartments between the oppositely directed flaps including a pair of oppositely directed flaps including tongue extensions.

10. A cushioned carton including a cover and transverse partitions made from a single blank folded and glued to form inner and outer shells, the walls constituting the bottoms of said shells being spaced apart, the top wall of the inner shell being cut to produce flaps adapted to be folded down to serve as transverse partitions, and the top wall of the outer shell being spaced apart from the

corresponding wall of the inner shell and being free along three edges to form a cover that may be opened and closed.

11. A cushioned carton including a cover and transverse partitions made from a single blank folded and glued to form inner and outer shells, the walls constituting the bottoms of said shells being spaced apart, the top wall of the inner shell being cut to produce flaps adapted to be folded down to serve as transverse partitions, and the top wall of the outer shell being free along three edges to form a cover that may be opened and closed.

12. A cushioned carton including a cover and transverse partitions made from a single blank folded into united units and secured together and each including inner and outer shells, the walls constituting the bottoms of said shells being spaced apart, the top wall of the inner shell being cut to produce flaps adapted to be folded down to serve as transverse partitions, and the top wall of the outer shell being spaced apart from the corresponding wall of the inner shell and being free along three edges to form a cover that may be opened and closed.

13. A cushioned carton including a cover and transverse partitions made from a single blank folded into united units and secured together and each including inner and outer shells, the walls constituting the bottoms of said shells being spaced apart, the top wall of the inner shell being cut to produce flaps adapted to be folded down to serve as transverse partitions, and the top wall of the outer shell being free along three edges to form a cover that may be opened and closed.

14. A cushioned carton including a cover and transverse partitions made from a single blank folded and glued to form inner and outer shells, the inner bottom extending an appreciable distance above the outer bottom, the top wall of the inner shell being cut to produce flaps adapted to be folded down to serve as transverse partitions, and the top wall of the outer shell being spaced apart from the corresponding wall of the inner shell and being free along three edges to form a cover that may be opened and closed.

15. A cushioned carton including a cover and transverse partitions made from a single blank folded and glued to form inner and outer shells, the inner bottom extending an appreciable distance above the outer bottom, the top wall of the inner shell being cut to produce flaps adapted to be folded down to serve as transverse partitions, and the top wall of the outer shell being free along three edges to form a cover that may be opened and closed.

16. A cushioned carton including a cover and transverse partitions made from a single blank folded into united units and secured together and each including inner and outer shells, the inner bottom extending an ap-

preciable distance above the outer bottom, the top wall of the inner shell being cut to produce flaps adapted to be folded down to serve as transverse partitions, and the top wall of the outer shell being spaced apart from the corresponding wall of the inner shell and being free along three edges to form a cover that may be opened and closed.

17. A cushioned carton including a cover and transverse partitions made from a single blank folded into united units and secured together and each including inner and outer shells, the inner bottom extending an appreciable distance above the outer bottom, the top wall of the inner shell being cut to produce flaps adapted to be folded down to serve as transverse partitions, and the top wall of the outer shell being free along three edges to form a cover that may be opened and closed.

18. A cushioned carton including a cover and transverse partitions made from a single blank folded and glued to form inner and outer shells, the walls constituting the bottoms of said shells being spaced apart, the top wall of the inner shell being cut to produce reversely directed flaps adapted to be folded down to serve as transverse partitions at the end of each unit and closing same, and the top wall of the outer shell being spaced apart from the corresponding wall of the inner shell and being free along three edges to form a cover that may be opened and closed.

19. A cushioned carton including a cover and transverse partitions made from a single blank folded and glued to form inner and outer shells, the walls constituting the bottoms of said shells being spaced apart, the top wall of the inner shell being cut to produce reversely directed flaps adapted to be folded down to serve as transverse partitions at the end of each unit and closing same, and the top wall of the outer shell being free along three edges to form a cover that may be opened and closed.

20. A cushioned carton including a cover and transverse partitions made from a single blank folded into united units and secured together and each including inner and outer shells, the walls constituting the bottoms of said shells being spaced apart, the top wall of the inner shell being cut to produce reversely directed flaps adapted to be folded down to serve as transverse partitions at the end of each unit and closing same, and the top wall of the outer shell being spaced apart from the corresponding wall of the inner shell and being free along three edges to form a cover that may be opened and closed.

21. A cushioned carton including a cover and transverse partitions made from a single blank folded into united units and secured together and each including inner and outer shells, the walls constituting the bottoms of said shells being spaced apart, the top wall of the inner shell being cut to produce re-

versely directed flaps adapted to be folded down to serve as transverse partitions at the end of each unit and closing same, and the top wall of the outer shell being free along three edges to form a cover that may be opened and closed.

22. A cushioned carton including a cover and transverse partitions made from a single blank folded and glued to form inner and outer shells, the inner bottom extending an appreciable distance above the outer bottom, the top wall of the inner shell being cut to produce reversely directed flaps adapted to be folded down to serve as transverse partitions at the end of each unit and closing same and the top wall of the outer shell being spaced apart from the corresponding wall of the inner shell and being free along three edges to form a cover that may be opened and closed.

23. A cushioned carton including a cover and transverse partitions made from a single blank folded and glued to form inner and outer shells, the inner bottom extending an appreciable distance above the outer bottom, the top wall of the inner shell being cut to produce reversely directed flaps to be folded down to serve as transverse partitions at the end of each unit and closing same, and the top wall of the outer shell being free along three edges to form a cover that may be opened and closed.

24. A cushioned carton including a cover and transverse partitions made from a single blank folded into united units and secured together and each including inner and outer shells, the inner bottom extending an appreciable distance above the outer bottom, the top wall of the inner shell being cut to produce reversely directed flaps adapted to be folded down to serve as transverse partitions at the end of each unit and closing same, and the top wall of the outer shell being spaced apart from the corresponding wall of the inner shell and being free along three edges to form a cover that may be opened and closed.

25. A cushioned carton including a cover and transverse partitions made from a single blank folded into united units and secured together and each including inner and outer shells, the inner bottom extending an appreciable distance above the outer bottom, the top wall of the inner shell being cut to produce reversely directed flaps adapted to be folded down to serve as transverse partitions at the end of each unit and closing same, and the top wall of the outer shell being free along three edges to form a cover that may be opened and closed.

In witness whereof, I have hereunto affixed my signature.

HOMER McWILLIAMS.