June 12, 1956 D. LEVKOFF 2,750,098

BOXES OR CARTONS

Filed Aug. 12, 1953 2 Sheets-Sheet 1

Fig. 1.

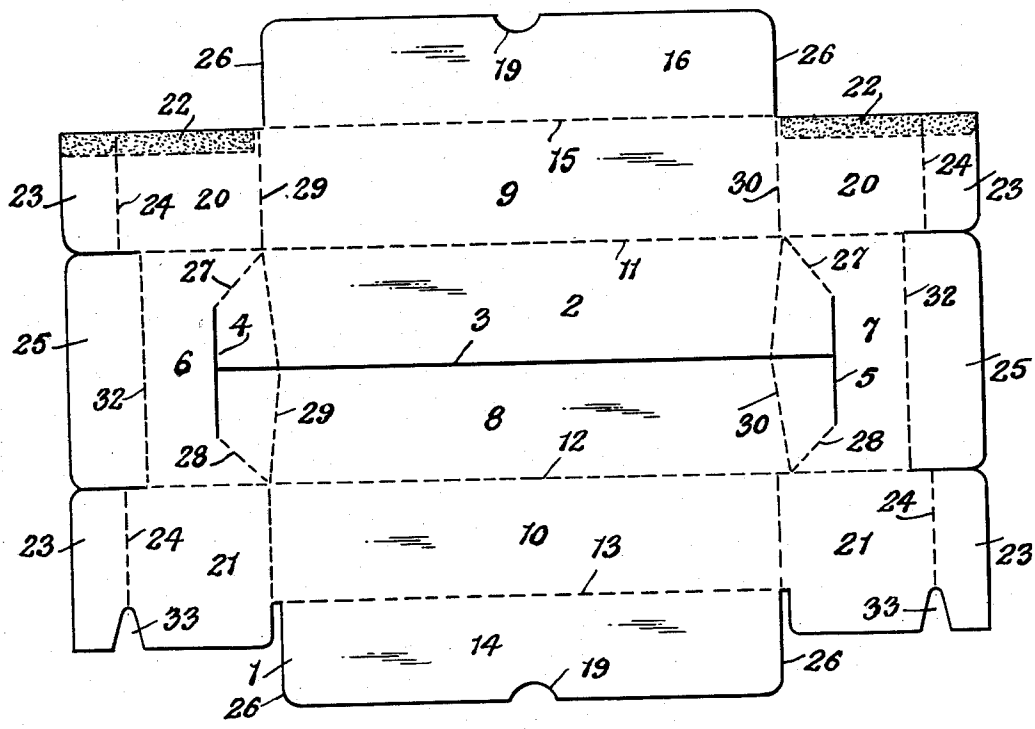


Fig. 2.

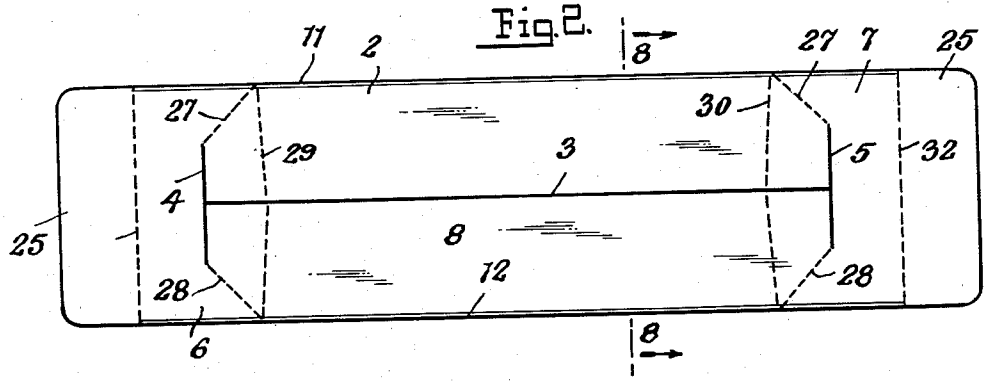
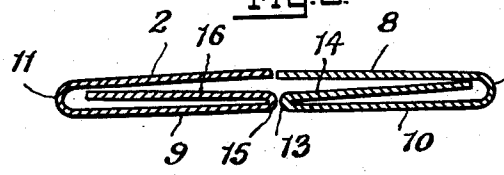


Fig. 8.



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June 12, 1956 D. LEVKOFF 2,750,098

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Filed Aug. 12, 1953 2 Sheets-Sheet 2

Fig. 3.

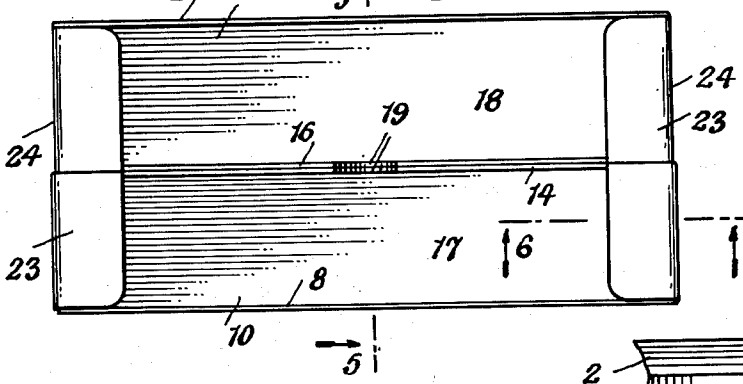


Fig. 6.

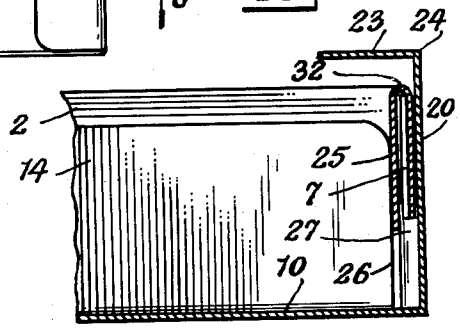


Fig. 4.

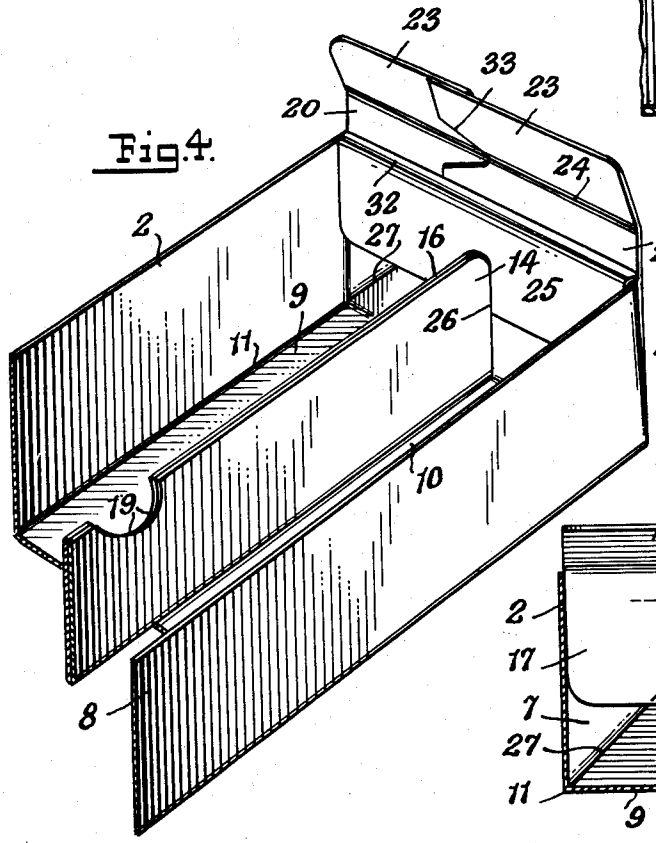


Fig. 7.

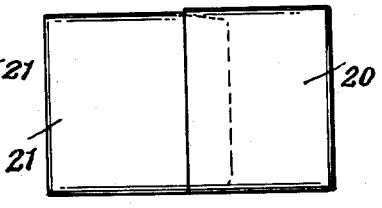
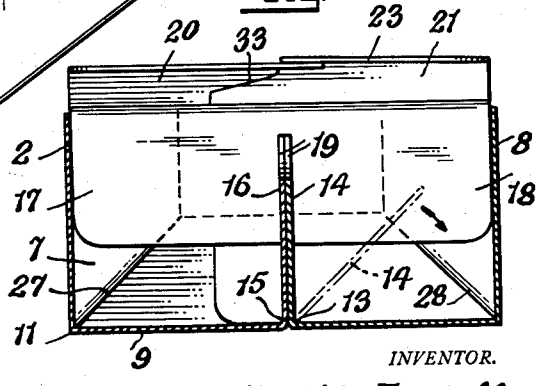


Fig. 5.



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BOXES OR CARTONS

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2 Claims. (Cl. 229—27)

This invention relates to boxes or cartons, and particularly to those of the relatively shallow, tray-like type, generally employed for containing food products, fruits, vegetables, baked goods, candies and the like, and covered at the top with transparent sheet material through which the contents of the carton are visible.

It is an object of the present invention to provide, in a carton of this character, separating or partitioning means by which the contents of the carton may be held in grouped relation; which partitioning means will aid in preventing shifting of the box contents, as well as adding stiffness and rigidity to the carton and also serving as a means for holding locking flaps in retentive positions.

It is another object of the invention to provide a partitioned tray of such nature that the partitions therein will fold flatly when the tray is in its flattened or collapsed position so that the ability of the tray to be completely flattened or collapsed for storage or shipment will not be impaired because of the employment of a partition in the tray.

It is still another object of the invention to provide, in a tray of this kind, a pair of centrally located partition members which lie in facial contact when erected and which partitions are integral, upstanding portions of parts of the bottom of the box, and which partitions are capable of being folded to lie flatwisely against the bottom of the tray when the tray is in its collapsed condition.

It is still another object of the invention to provide a carton or tray with a central partition so arranged and disposed that locking flaps, located at the opposite ends of the carton, can be tucked behind the ends of the upstanding partition whereby said flaps will be held in their locking positions.

With these and other objects to be hereinafter set forth in view, I have devised the arrangement of parts to be disclosed and more particularly set forth in the claims appended hereto.

In the accompanying drawings, wherein an illustrative embodiment of the invention is disclosed,

Fig. 1 is a face view of the blank from which the improved carton or tray is produced;

Fig. 2 shows the tray or carton in its assembled but collapsed position;

Fig. 3 is a top plan view of the erected carton;

Fig. 4 is a perspective view, in section, of one end portion of the erected carton;

Fig. 5 is a sectional view, taken substantially on the line 5—5 of Fig. 3, looking in the direction of the arrows;

Fig. 6 is a sectional view, taken substantially on the line 6—6 of Fig. 3, looking in the direction of the arrows;

Fig. 7 is an end view of the carton or tray, and

Fig. 8 is a sectional view, taken substantially on the line 8—8 of Fig. 2, looking in the direction of the arrows.

Referring to the drawings, and more particularly to

Fig. 1 thereof, 1 indicates generally the blank from which the improved carton or tray is produced. The same is preferably made from relatively thin, coated cardboard, the thickness of the board and the coating therefor being primarily dependent upon the nature of the goods to be contained in the carton.

The side walls of the carton or tray are indicated at 2 and 8 and the same are produced by the centrally-located, longitudinally-extending slit 3 which connects at its opposite ends with transverse slits indicated respectively at 4 and 5, the latter slits being located respectively in the inner end walls 6 and 7 of the carton. The bottom of the box or carton is produced by the two panels 9 and 10 which are folded on the score lines 11 and 12. Located beyond the score line 13 is one of the partition members 14, while located beyond the score line 15 is a second partition member 16. The positions which these two partition members assume in the erected carton will be clearly seen in Figs. 3 to 6 inclusive, wherein it will be noted that the two partition members 14 and 16 when in their erected or upstanding positions, extend down the longitudinal center line of the carton or tray, thus dividing it into the two chambers or compartments indicated respectively at 17 and 18 (Figs. 3 and 5). Each of the partition members 14 and 16 is formed with a notch 19 in its free edge to enable it to be elevated to an erect position by finger engagement, when necessary.

The outer end walls of the carton are each formed by the parts 20 and 21 which are brought into partly overlapped relationship and adhesively secured together, as by the glue areas indicated at 22. Notches 33 in the parts 21 facilitate the folding of these parts. Extending from the parts 20 and 21 are the flaps 23, which normally lie horizontally at the top of the outer end walls, as clearly seen in Fig. 6, these flaps 23 being infolded on the score lines shown at 24.

The inner wall locking flaps are shown at 25 and the same are integral extensions of the inner walls 6 and 7 and are folded down into the interior of the carton on the fold or score lines 32, to the locking positions shown in Figs. 4, 5 and 6. When the locking flaps 25 are folded downwardly and into the carton as above described, it will be observed that the same are disposed behind the ends 26 of the partitions 14 and 16, and the tendency of these locking flaps 25 to rise or swing upwardly to vertical position, causes them to frictionally engage against the ends 26 of the partition members 14 and 16 and tends to hold the partitions in their desired vertical or upstanding position as shown in Fig. 4. At the same time, the partitions engaging the locking flaps as above described, prevent the locking flaps 25 from rising and thus hold the same in their locked or retentive positions.

It will be noted that there is provided in the inner end walls 6 and 7, diagonal score lines 27 and 28, which connect at one end to the extremities of the slits 4 and connect at the other end to the junctions of the score lines 11 and 12 with transverse score lines designated at 29 and 30.

From the foregoing, the manner in which the blank is glued and erected will be readily understood. The partition 16 is first folded on the score line 15 in a manner to cause it to overlie the face of the bottom panel 9. Similarly, the partition 14 is folded inwardly on the score line 13 to cause it to overlie the face of the bottom panel 10. The blank is then folded on the longitudinal score lines 11 and 12 and this will bring the glued areas 22 into contact with the portions of the elements 21 which these glued areas 22 overlap, and the overlapped parts of the elements 20 and 21 will thus be adhesively joined togeth-

er. The folded and glued blank is shown, face upwardly, in Fig. 2. It will be noted from Fig. 8 that the two partition members **14** and **16** are now disposed within the folded blank and lie between the bottom panels **9** and **10** and the flattened side walls **2** and **8**.

The inner end walls **6** and **7** and the outer end walls, composed of the parts **20** and **21**, are now raised to vertical position by folding upwardly on the score lines **29** and **30**, and through the angular fold lines **27** and **28**, the side walls **2** and **8** will be raised to vertical position. As these side walls raise to vertical position in the manner described, the partitions **14** and **16**, which have been confined under the side walls **2** and **8**, will also tend to swing upwardly to erect position. The locking flaps **25** are now folded downwardly on the score lines **32** and tucked behind the ends **26** of the partition members **14** and **16**, and the erection of the carton or tray is then complete. Since the width of each of the partition members **14** and **16** is less than the width of each of the bottom panels **9** and **10**, the two partition members do not interfere with the closing down or collapse of the carton, which merely requires the folding down of the partition members so that the locking flaps **25** can be raised.

It will be noted by means of the structure described, a carton or tray is provided in which a partition of double thickness, or two-ply, extends centrally down the longitudinal center of the carton, thus dividing the carton into two separate containing chambers which are completely separated from one another and are thus capable of isolating the contents of one of the chambers from the contents of the other. The dual thickness of the partition tends to lend stiffness and rigidity to the carton structure. The partition also acts as a locking means for the locking flaps **25**, and thus these flaps **25** can, if desired, be made relatively short and need not extend down to the bottom of the box as is usually the case with locking flaps in cartons of this general nature.

The setting up of the carton is easily performed; the coated or laminated surface of the stock of which the carton is made will face the interior of the carton, and this includes the interior surfaces of the partitions, so that seepage of material carried by the contents of the carton through the carton and to the interior face of the same is effectively prevented. Other advantages following from the described construction will be apparent to those skilled in this art.

Having described a single embodiment of the invention, it is obvious that the same is not to be restricted thereto, but is broad enough to cover all structures coming within the scope of the annexed claims.

What I claim is:

1. A carton of the character described comprising, a box body having a bottom, side walls, and inner and outer end walls, the bottom being composed of two separate sections each having a flap portion folded to cause it to be directed within the interior of the box body, said flap portions cooperating in the formation of a two-ply central, longitudinally-extending partition disposed within the box body, the outer end walls each consisting of lateral panel extensions of the sections of the bottom, said panel extensions for each outer end wall being overlapped and adhesively secured together, the inner end walls consisting of lateral extensions of the side walls, each inner wall having a downturned locking flap directed into the interior of the box body, the ends of the partition engaging respectively against the locking flaps to thereby hold said flaps in their downwardly-directed locking positions, the carton being collapsible to flattened condition by removal of the locking flaps from behind the ends of the partition, the flap portions forming said partition being foldable downwardly to thereby be flatly against the sections of the bottom when the carton is in a collapsed condition.

2. A carton as provided for in claim 1, wherein each of the flap portions of the partition is of a width no greater than the width of each of the bottom sections to thereby permit collapsing of the carton in a manner to bring each partition flap flatly down within the carton upon the section of the bottom to which it is attached.

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