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FOLDING PAPERBOARD BOX CONSTRUCTION

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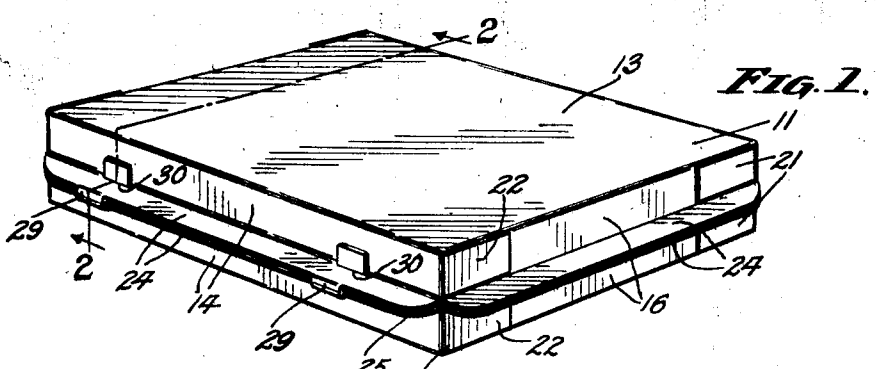


FIG. 1.

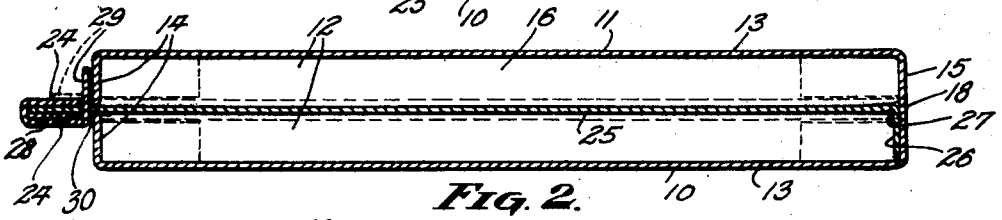


FIG. 2.

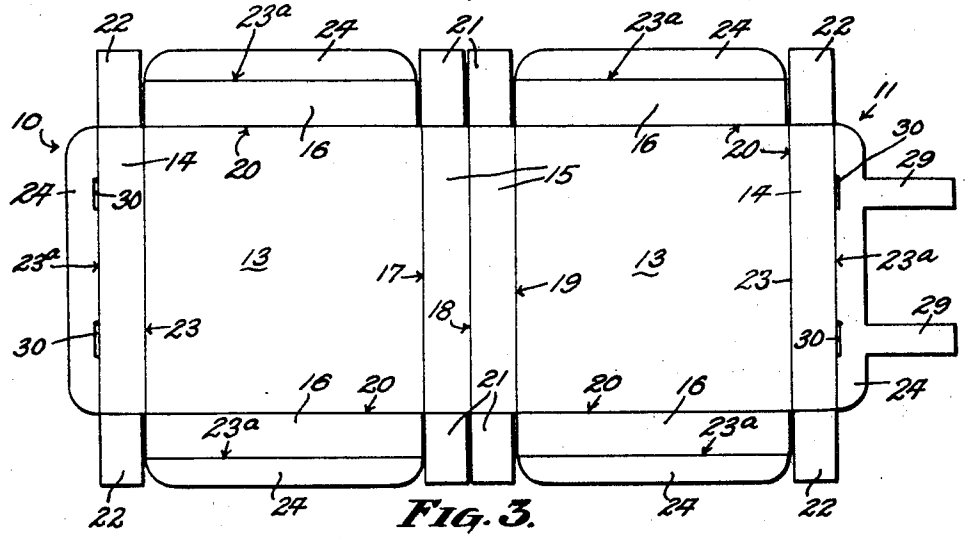


FIG. 3.

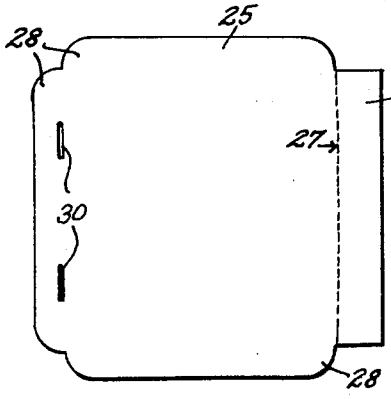


FIG. 4.

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FOLDING PAPERBOARD BOX CONSTRUCTION

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1 Claim. (Cl. 229—15)

This invention relates to box construction and has specific reference to folding boxes formed from a single blank of paperboard or the like.

The object of the invention is to provide a double compartmented folding box composed of two duplicative commodity-receiving sections having back walls joined along a fold line to provide for relative swinging movement of the sections between positions of box opening and closure, and wherein a separating panel is employed between said sections to separate the commodity-receiving compartments and to confine commodities in said compartments when the sections are moved relatively between positions of box opening and closure.

Another object is to provide a folding box of the character indicated wherein the side walls of the duplicative box sections have their meeting edges formed with coextensive, outturned, flat-surfaced flanges providing for extended surface contact between the sections and the outer margins of the separating panel when the sections and panel are disposed in box-closing order.

A further object is to provide a box of the type set forth which is simple in construction, may be manufactured at a low cost and one which constitutes an improved composite package for the reception of two or more different kinds of commodities.

For a further understanding of the invention, including additional objects and advantages thereof, reference is to be had to the following description and the accompanying drawing.

In said drawing:

Fig. 1 is a perspective view of the folding box comprising the present invention when the same is closed;

Fig. 2 is a vertical transverse sectional view taken through the box on the plane indicated by the line 2—2 of Fig. 1;

Fig. 3 is a plan view of the blank from which the duplicative sections of the box are formed;

Fig. 4 is a similar view of the blank from which the separating panel is formed.

In accordance with the present invention, my improved folding box is composed of two hingedly connected, duplicative, commodity-holding sections **10** and **11**. Each of these sections is formed with a commodity-receiving compartment **12** which is defined by a horizontal bottom-forming wall **13** and vertical front, rear and side walls **14**, **15** and **16**, respectively. In the formation of these sections there is employed, as shown in Fig. 3, a single blank of paperboard or the like which, midway of the length thereof, is creased or scored to present spaced, parallel, fold lines indicated at **17**, **18** and **19** in the back wall **15** of the sections, the centrally placed line **18** constituting the line of fold or hinging line for flexibly joining the sections **10** and **11** in providing for relative swinging movement on the part thereof between positions of box opening and closure. Similar crease or fold lines **20**, extending perpendicularly to the lines **17**, **18** and **19**, are formed in the blank to define the side walls **16** and a plurality of glue flaps, shown at **21** and **22**, the latter constituting separately foldable continuations of the back wall **15** and the front walls **14**. Also, score lines **23**, extending parallel to the lines **17**, **18** and **19**, are provided in the blank in defining the front walls **14**.

The front walls **14** and the side walls **16**, are provided with score lines **23***a* defining wide seating flanges **24**. When the box is folded and set up for use, these flanges project horizontally and outwardly from the marginal edge regions of the walls **14** and **16** with which the flanges are coextensive. After the front and side walls **14** and **16** have been folded about the score lines **23** and **20** and the back wall folded about the score lines **17** and **19**, so that said walls extend perpendicularly to the bottom-forming walls **13**, the flaps **21** and **22** are folded, as shown in Fig. 1, to engage flatly the side walls **16** and to which the flaps are adhesively united. Also, the flanges **24** are bent outwardly about the lines **23***a*. Strong, rigid box sections are thus produced for the reception of various commodities in the compartments **12** of the box sections.

In order to permit of separate use of these compartments, use is made of a separating or divider panel **25**. In Figs. 1 and 2 this panel is shown as being provided with a securing flap **26** which is adhesively secured to the back wall **15** within the box section **10**, the panel proper being free to swing relative to the flap **26** about a score line **27**. The side and front margins **28** of the divider panel are extended to project between and to conform to the configuration of the flanges **24**, the same having a flush edge relationship.

In holding the sections in their positions of box closure, the flanges **24**, joined with the front wall **14** of the section **11**, may be provided with spaced locking tongues or tabs **29** which, as shown in Figs. 1 and 2, may be bent to pass through alignable slots **30** formed along the crease lines **23***a* at the region of joinder of the walls **14** and the flanges **24** and in the front margins of the panel **25**. When the tongues are positioned in the slots **30** their free ends may be bent downwardly, as indicated in broken lines in Fig. 2, into engagement with the upper flanges **24**.

In the use of the box when so formed the sections **10** and **11** may be opened or separated and disposed in substantially the same horizontal plane, thereby rendering the compartments **12** conveniently accessible for the placement of various commodities or products therein. The two compartments adapt the box for the reception of different products, such as two different kinds of vegetables, fruits, candies or nuts. After the compartments are suitably packed, the panel **25** is turned to close the open top of one of the compartments, for example, the compartment in the top section **11** as shown in Fig. 1. Thus, if the compartment in the section **11** is so closed by the panel, the operator may hold the marginal edges of the panel in contact with one of the flanges **24** of the section **11** by gripping the same with his fingers. This enables the top section to be turned from the horizontal open position to the closed position of Fig. 1 in which the section **11** is disposed above the section **10**. During this inversion of the top section **11** the products contained in the compartment **12** thereof are retained in their packed positions by the separating panel which functions as a bottom for the upper compartment. Similarly in opening the box the extended margins **28** of the panel **25** and the adjoining flange **24** are gripped with the fingers and thereby held together while the top section **11** moved to its open position at one side of the bottom section **10**. If desired, the margins of the panel may be adhesively united with one or more of the flanges to hold the panel in a compartment-

closing position, avoiding the gripping of the same by the fingers during opening and closing of the box.

When so adhesively sealed to one of the sections **10** or **11**, the divider panel may be formed, at least in part, from a transparent material so that the contents of the compartment closed thereby may be viewed when the box is opened.

From the foregoing it will be evident that the present invention provides a foldable paperboard box in which the dual compartments of the swinging sections thereof are adapted for selective closure by the turnable separating panel whereby to hold products packed in the compartments against displacement when the sections are moved between positions of box opening and closure. In conveniently using the box in this operation, the broad seating flanges **24** of the sections **10** and **11** and the intervening margins **28** of the panel **25** are of importance in that they permit the panel to be held in a position of compartment closure when one of the sections is inverted. Further, the flanges contribute to the strength and sturdiness of the box generally.

I claim:

A dual compartment folding box comprising a paperboard blank formed with a pair of duplicative sections, each of said sections having a bottom wall, upstanding front and side walls, and an open top and being hingedly united by a common back wall, said walls defining in each section a product-receiving compartment, the edge portions of said front and side walls terminating in integral outwardly directed seating flanges, the common back wall of said sections being provided with an intermediate fold line about which said sections may be swung to open and close the box; and a substantially flat divider panel coextensive in area with the open tops of each of said sections and the seating flanges of said front and side walls for separating said sections and for closing the open top of either of said sections when the latter are swung relatively to open the box, said divider panel having a glue flap adhesively connected with said back wall to one side of the fold line thereof and being formed with a crease line adjacent the fold line of said back wall to permit independent swinging movement of said divider panel between positions closing the open top of either of said sections when the latter are swung relatively to a box-opening position, said panel being formed with marginal edge portions arranged to be clamped between the seating flanges of the front and side walls of said sections when said sections are swung to a box-closing position; the seating flange of the front wall of one of said sections being formed with a foldable, outwardly extending locking tab and the seating flange of the front wall of the other of said sections and the marginal edge portion of said divider panel being formed with registering slots through which said tab may be passed to lock said sections in box-closing position.

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