Sept. 23, 1941. I. NUTT 2,256,723

CARTON

Filed June 19, 1939

Fig. 2.



Fig. 1.

Fig. 3.

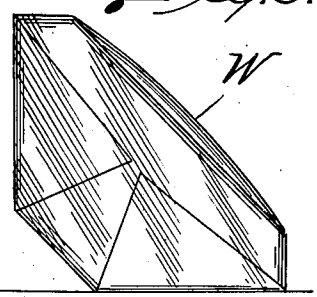


Fig. 4.

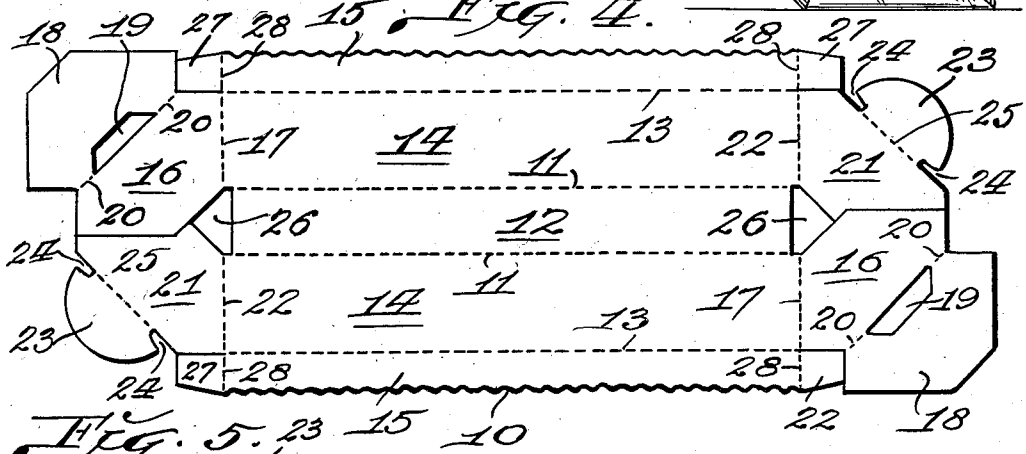


Fig. 5.

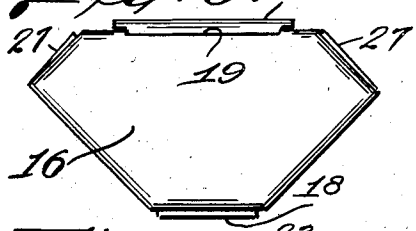


Fig. 6.

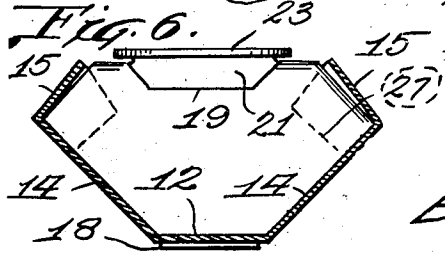
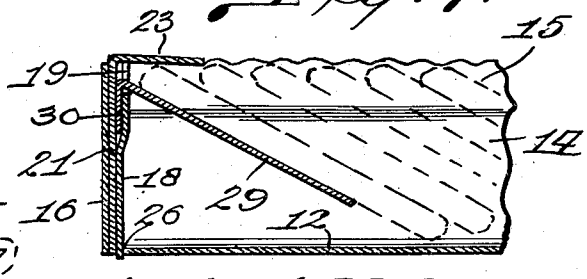


Fig. 7.



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CARTON

Irwin Nutt, Los Angeles, Calif.

Application June 19, 1939, Serial No. 279,809

8 Claims. (Cl. 206—44)

My invention relates to cartons of the type formed from light weight cardboard or the like and generally used for packaging more or less fragile foodstuffs, for instance, bakery products such as cookies, small cakes, macaroons, fig bars, crackers, and the like, and the principal object of my invention is, to provide a carton wherein the main body is formed in a single piece from light weight cardboard and which, when folded into proper shape, affords a maximum degree of protection for the contents of the carton to protect the same against breakage during transit and while being handled by salesmen and purchasers.

Further objects of my invention are, to generally improve upon and simplify the construction of the existing forms of cartons utilized for packaging small bakery products, such as cookies, small cakes, crackers, and the like, further, to provide a carton that presents a neat and pleasing appearance and which will attractively display its contents and further, to construct the carton so that a large number thereof may be conveniently packed in a large packing case or carton that is utilized in shipping the packaged goods from the factory to the stores or establishments where the individual cartons are sold.

A further object of my invention is, to construct a carton so that the individual articles, such as cookies or small cakes, that are packed therein will occupy inclined positions, one lying immediately upon the other, and which arrangement together with the particular shape of the walls of the carton afford a maximum degree of protection for the packed goods and thereby minimizing losses due to breakage of the packed articles while in transit or while being handled by tradesmen and purchasers.

A further object of my invention is, to provide a carton of the character referred to that may be conveniently wrapped with Cellophane or other thin, transparent material, so as to render the carton and its contents both moisture and dust proof and at the same time adding to the attractive appearance of the packaged goods.

With the foregoing and other objects in view, my invention consists in certain novel features of construction and arrangement of parts that will be hereinafter more fully described and claimed and illustrated in the accompanying drawing in which:

Fig. 1 is a perspective view of a carton constructed in accordance with my invention and showing the same packed with cookies or the like and wrapped with thin, transparent material, such as Cellophane.

Fig. 2 is a cross section taken on the line 2—2 of Fig. 1.

Fig. 3 is an end elevational view of one of the cartons and showing the same occupying an inclined position upon a flat supporting surface.

Fig. 4 is a view of the cut and scored blank that forms the body of the carton.

Fig. 5 is an end elevational view of the carton without the dust and waterproof wrapper.

Fig. 6 is a cross section of the carton and showing the same as it appears before the cookies or other articles have been packed therein.

Fig. 7 is a vertical section taken lengthwise through one end of the carton with dotted lines showing the positions of the cookies or other articles that are packed in the carton.

As illustrated in Fig. 4, the main body of the carton designated generally by the numeral 10 is formed in a single piece from suitable cardboard, said body being generally rectangular in shape and the cardboard or other material utilized in the production of the carton is treated with wax or other suitable material so as to render the cardboard impervious to moisture.

The intermediate portion of the body 10 is scored along parallel lines 11 so as to provide a centrally arranged narrow strip 12 that forms the bottom of the carton and adjacent and parallel with the side edges of the body 10 are scored lines 13 parallel with lines 11, thus providing elongated strips or panels 14 to the sides of the central strip 12 and which panels 14 function as the lower inclined side walls of the carton.

The narrow strip portions 15 between the scored lines 13 and the side edges of the body 10 constitute the upper inclined side walls of the carton.

Formed integral with one end of each panel 14 is a polygonal panel 16 that forms the outer wall of the carton when the same is folded for use and, this panel is adapted to fold into position at right angles relative to the panel 14 along the scored line 17 between said panels and which scored line is disposed at right angles to the scored lines 11 and 13.

The outer edge of the panel 16 is disposed at an angle of approximately forty-five degrees with respect to the scored lines 13 and, formed integral with the outer edge of each panel is a panel 18 polygonal in shape and which, when the carton is folded, functions as the inner member of the end wall of said carton.

Formed between the outer edge of panel 16 and panel 18 is an inclined opening 19 and, disposed between the ends of said opening and the corners between the ends of the panels 16 and 18 are scored lines 20 which define the lines on which the panels 18 are bent when the carton is folded or set up for use.

Formed integral with one end of each panel 14 is a substantially triangular panel 21 that occupies an inclined position of approximately forty-five degrees relative to the scored lines 11 and 13 and each panel lies between one end of the strip 14 and the adjacent side edge of the corresponding panel 16. This panel 21 serves as the intermediate one of the end panels of the folded carton, inasmuch as when the carton is set up for use it occupies a position between the panels 16 and 18.

A scored line 22 disposed between the ends of the scored lines 11 and 13 defines the line on which panel 21 is bent when the carton is set up for use.

Formed integral with the outer inclined edge of panel 21 is a tab 23, preferably semi-circular in shape, and formed between the ends of this tab and the outer edge of panel 21 are inwardly projecting notches 24. A scored line 25 disposed between the inner ends of the notches 24 defines the line on which the tab 23 is folded.

A portion of the material forming the body of the carton at each end of the narrow intermediate strip 12 is cut out to form a substantially triangular opening 26 between the ends of said strip 12 and the inner inclined edges of the end panels 16 and 21.

Portions of the material forming the carton body at both ends of the narrow side strips 15 are extended along those portions of the ends of the panels 16 and 21 that are in alignment with the scored lines 13 to form short tabs 27 and, short scored lines 28 that are continuations of the scored lines 17 and 22 extend between the ends of the strips 15 and said tabs 27 to define the lines on which said tabs are bent.

In bending the blank to form the carton so that the same may be packed with cookies or other foodstuffs, the lower side wall panels 14 are bent upwardly along the scored lines 11 so as to occupy inclined positions approximately forty-five degrees relative to the plane occupied by the bottom member or panel 12. Each panel 21 that forms the intermediate member of the end wall is now bent along the scored line 22 so that it occupies a position substantially at right angles to the panels 14 and when so positioned, the inner inclined edge of each panel 21 projects into the corresponding opening 26 immediately adjacent the end of the central strip or panel 12, thus holding the panel 21 against further movement into the chamber or space within the carton.

At the same time the panel 21 is folded inwardly as just described, panel 16 is folded along the scored line 17 so as to occupy a position directly against the outer face of the panel 21 and, during this folding operation tab 23 is inserted through the adjacent opening 19, which operation may be accomplished by bending said tab along the scored line 25 and bending the ends of said tab inwardly a sufficient distance to enable the said tab to pass through said opening 19. When so positioned, the notches 24 between the ends of the tab and panel 21 receive those portions of the tab 18 immediately adjacent the scored lines 20 so as to provide an interlock that effectually maintains the end forming panels 16 and 21 in proper position. After the tabs 23 have been inserted through the openings 19 as just described, the panels 18 are folded on the scored lines 20 inwardly and downwardly against the inner faces of the panels 21, thus forming the inner members of the end walls of the folded carton. As the members 18 are folded into position against the panels 21, the lower narrow ends of said panels 18 are inserted in the openings 26 immediately adjacent the ends of the central strips or panel 12, thus providing an interlock that maintains the panels 16, 18, and 21 in proper folded position so as to function as carton end walls, each composed of three layers of material.

The carton is now ready to receive its contents, but before the latter is placed in the carton a narrow strip or tongue 29, of cardboard or the like, has a short portion 30 at one end bent downward and this bent end portion is inserted downwardly through the opening 19 between the inner end wall panel 18 and the intermediate panel 21.

From the lower edge of the opening 19, the main body of this strip extends downwardly at an angle of approximately thirty or thirty-five degrees relative to the horizontal plane occupied by the bottom strip or panel 12 and, this strip determines the inclined position of the cookies or other articles that are packed in the carton. In Fig. 7, dotted lines illustrate the inclined position of the cookies or other articles that are packed in the carton.

In most instances and particularly where bakery products such as cookies, small cakes, fig bars, crackers, macaroons, and the like, are being packed, I prefer to insert in the carton prior to the packing of the goods therein, a thin, flexible sheet of wax treated paper that functions as a soft, flexible lining, with which the edges of the packed product make direct contact. This lining sheet is designated by the letter L, Fig. 2.

After the carton has been packed, the narrow side strips 15 are folded inwardly from the upper edges of the inclined side panels 14 so that said strips occupy inclined planes of approximately ninety degrees relative to the planes occupied by the side wall panels 14 and, when so positioned said narrow strips overlie the adjacent edges of the packed articles and affords a substantial degree of protection therefor.

To retain the strips 15 in their inwardly folded position, the tabs 27 that project from the ends of said strips are folded inwardly on the scored lines 28 and said tabs are inserted between the adjacent edges of the folded end wall panel members 16 and 18.

After the carton has been packed, the semi-circular tabs 23 are folded inwardly and downwardly so as to overlie the edges of the cookies or other articles occupying the ends of the carton and, the upper face of one of these tabs may bear the price mark of the carton and the other tab may have attached thereto a sticker bearing printed data, for instance, the particular name of the goods contained in the carton, together with the name of the manufacturer or producer.

To render the carton and its contents both dust and moisture proof and at the same time impart to the packed carton an attractive appearance, a wrapper W of thin, transparent material, such as Cellophane, may be applied to the carton, with the folded ends of said wrapper

sealed on the outer faces of the end walls of the carton.

The shape of my improved carton enables the same to be positioned on counters, shelves, or showcases, so as to attractively display the packed goods and, due to the provision of the inclined side walls and the packing of the individual cookies or other articles so that the same occupy inclined positions within the carton, one resting directly upon the other, the breakage of the articles while the cartons are being transported and handled is minimized.

The inclined side walls of the carton provide firm and substantial supports for oppositely disposed portions of the cookies or other articles packed in the carton and, as said articles occupy inclined positions when properly packed within the carton, a substantial portion of each individual article is exposed to view through the opening in the top of the carton and the transparent cover therefor, thus enabling prospective purchasers to observe the condition of each packed article and, in addition, such arrangement adds materially to the attractiveness of the goods when the cartons are displayed on shelves or in showcases.

Thus it will be seen that I have provided a carton that is relatively simple in construction, inexpensive of manufacture and very effective in performing the functions for which it is intended.

It will be understood that minor changes in the size, form and construction of the various parts of my improved carton, may be made and substituted for those herein shown and described, without departing from the spirit of my invention, the scope of which is set forth in the appended claims.

I claim as my invention:

1. A carton formed from a single piece of thin material and comprising a flat bottom section, lower side walls projecting upwardly and outwardly from the sides of the bottom section, relatively narrow strips of material projecting upwardly and inwardly from the upper edges of the lower side wall members, the top of the carton between the upper edges of said narrow strips being open so as to expose the entire upper portion of the contents of said carton, polygonal panels formed integral with the ends of said lower side wall sections and occupying vertical positions immediately adjacent each other to combine and provide end walls for the carton, a sheet of thin, transparent material enclosing said carton and overlying the opening between the narrow strips that project inwardly and upwardly from the lower side walls to form a window through which the entire upper portion of the contents of the carton are visible and tabs projecting from the ends of the narrow strips of material that project inwardly and upwardly from the upper edges of the lower side wall members of the carton body for engaging between the end wall forming panels to retain said narrow strips in their normal inclined positions.

2. A carton as set forth in claim 1 and with a separately formed inclined supporting strip extending from the upper portion of one of the end walls downwardly toward the lower portions of the lower side wall members and the bottom member of the carton.

3. A carton formed from a single piece of thin sheet material and comprising a flat centrally arranged bottom section, lower side wall sections projecting upwardly and outwardly from the sides of said bottom section, relatively narrow strips of the sheet material formed integral with and projecting upwardly and inwardly from the upper edges of said lower side wall sections, the entire space between the upper inner edges of said narrow strips being open so as to expose the entire upper portion of the contents of the carton, a polygonal panel projecting from one end of each lower side wall section, a pair of connected polygonal panels projecting from the other end of each lower side wall section, which polygonal panels are adapted to be folded into position immediately adjacent and against each other to combine and constitute a three-ply end wall for each end of the carton and a sheet of thin transparent material enclosing said carton, with that portion of said transparent material that bridges the space between the upper inner edges of said narrow strips of material providing a window whereby the entire upper portion of the contents of the carton are readily visible.

4. A carton as set forth in claim 3 and with co-operating means on said end wall panels for maintaining the same in assembled relation.

5. A carton as set forth in claim 3, with a tab projecting from the outer edge of each first mentioned polygonal panel and there being an opening formed in each pair of connected panels for the reception of said tab when said panels are folded to form carton end walls.

6. A carton as set forth in claim 3 and with a separately formed inclined supporting member arranged within one end of the carton and projecting from the upper portion of the end wall thereof downwardly toward the lower portions of the lower side wall members and the bottom member.

7. A carton as set forth in claim 3 and with separately formed means removably arranged within one end of said carton for supporting the individual pieces that are packed in said carton in inclined over-lapping positions.

8. A carton formed from a single piece of thin sheet material and comprising a flat centrally arranged bottom section, side wall sections projecting upwardly and outwardly from the sides of said bottom sections, interlocking foldable end walls for the carton, relatively narrow strips of thin flexible material projecting inwardly and upwardly from the upper edges of the side wall sections, the space between the inner edges of said narrow strips and between the end walls being open so as to expose the entire upper portion of the contents of the carton and a wrapper of thin flexible transparent material for said carton and its contents, that portion of said wrapper between the upper edges of the inwardly and upwardly projecting narrow strips and between said end walls constituting a window through which the upper portion of the contents of the carton are readily visible.

IRWIN NUTT.