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SELF-CLOSING BOX FOR SHIPPING AND DISPENSING ICE-CREAM CONES

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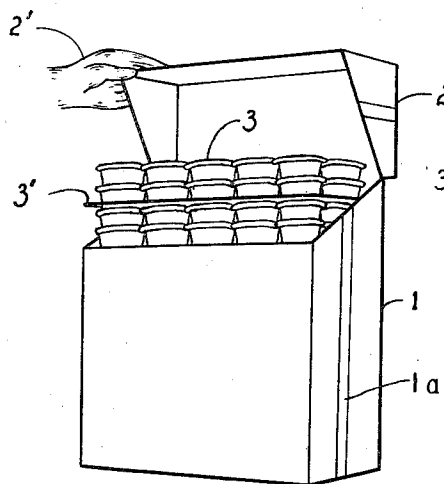


Fig. 1

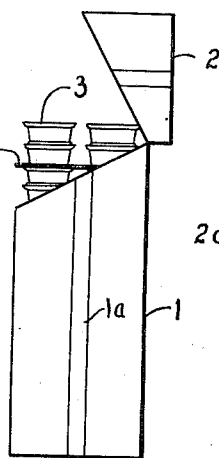


Fig. 2

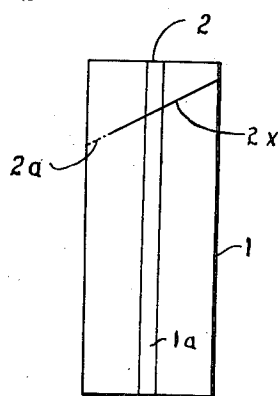


Fig. 3

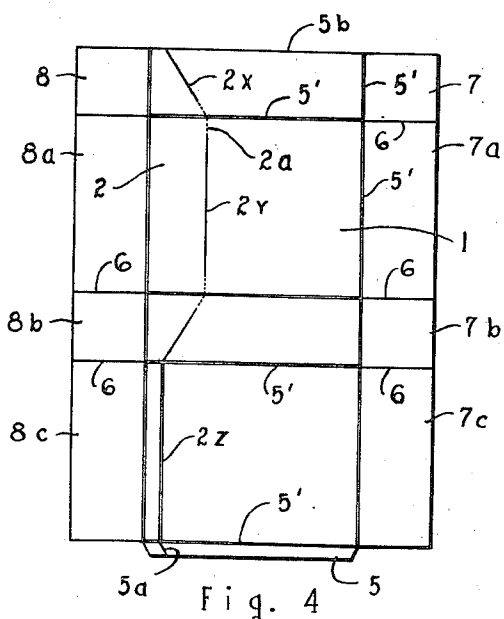


Fig. 4

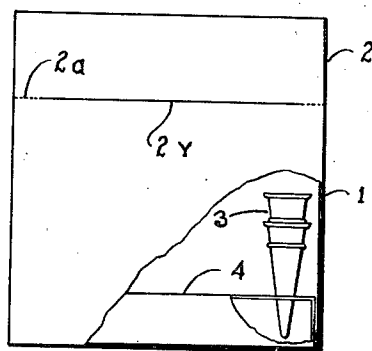


Fig. 5

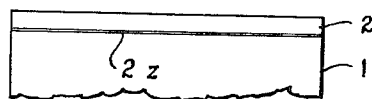


Fig. 6

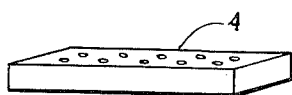


Fig. 7

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SELF-CLOSING BOX FOR SHIPPING AND DISPENSING ICE-CREAM CONES

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Application May 23, 1938, Serial No. 209,614

1 Claim. (Cl. 229—51)

My invention relates generally to devices for packing and shipping food products, and specifically, to boxes for shipping and dispensing ice-cream cones. And one of the objects of my invention has been to develop a novel, self-closing box of convenient size, adapted for use in keeping a limited quantity of ice-cream cones clean and sanitary while awaiting the process of dispensing in normal service. Another object of my work in designing this box for the sanitary protection of a predetermined quantity of ice-cream cones, while being intermittently dispensed in counter-service, has been centered in the provision of a box having a lid adapted to swing upward from the front of the box, when raised by the dispenser to remove some of the enclosed cones, and designed to swing downward again automatically and close completely, when released by the operator. This self-closing feature added to the fact that the whole box is adapted to be fully covered with sealed waxed paper or Cellophane assures us that the enclosed cones may be well-protected from the dust and moisture of the surrounding atmosphere.

One special object of my invention has been to produce a box for shipping and dispensing ice-cream cones, provided with a scored line running horizontally from side to side across the upper part of the back of the box and a short distance below the top edge thereof; and further, provided with a slit cut through each side of the box, running on a downward slant from either end of said scored line to a point below on either side of the box near the front edge thereof, and terminating in a short perforated line extending to the front edge of the box on either side; and further provided with a horizontal slit cut through the front of the box and terminating in a short line of perforations at either front edge of said box.

Another object of my invention has been to design the construction of my shipping and dispensing cone-box in such a way that the entire shell may, in one operation, be die-cut, scored, slitted and perforated from a single piece of card board, all parts thereof being connected together; and the long narrow attachment lapel along one side of the cut board may then be folded under the inner side of the opposite edge thereof and glued thereto, forming the connection of the integral sides of the box, which may then be tilted down flat for shipping or storage.

Another object of my invention has been to design the shape and the operation of the lid of the cone-box in such a manner that when the lid is opened over one-third of the cones in the box

are exposed for ready removal and the remaining cones are easily accessible; and when the lid is open in a vertical position, the center of gravity of the lid is in front of the hinge thereof, causing the lid to close down automatically, when released by the operator.

Another object of my invention is to place a perforated cone-stand in the bottom of the ice-cream cone-box, adapted to reenforce the rigidity of the box and to hold the bottom rows of cones high enough to protect the lower ends of the cones from breakage. Other objects of my invention will appear in the process of this specification.

The foregoing objects have been attained in my present invention; and my new and useful self-closing box for shipping and dispensing ice-cream cones, illustrated in the accompanying drawing forming a part of this specification, is a practical invention embodying the aforesaid novel means and other new and useful details of construction, arrangement and combination of parts, all of which, together with their functions, will be described in detail with reference to said drawing, and will be definitely pointed out in the claim that follows this description, so that any person skilled in the art, may be able to construct and use this invention.

In said drawing,

Fig. 1 is a perspective view, in elevation, of my self-closing box for shipping and dispensing ice-cream cones; the lid being held open by the operator's hand, showing the arrangement of the cones packed therein, and the lap-seam of the wax-paper wrapper.

Fig. 2 is a side view in elevation of the cone-box with its lid open, showing the arrangement of cones and the slanting cut in the wax-paper wrapper.

Fig. 3 is a side view, in elevation of the cone-box, showing the slit cut through the side and the perforated line near the front corner before it is cut for opening the lid, no cut being made in the transparent wrapper.

Fig. 4 is a plan view of the cardboard shell of the cone-box, spread out in full from the cutting table, showing the long, narrow attachment lapel along the lower side thereof.

Fig. 5 is a front elevational view of the cone-box, showing the horizontal slit cut across the front of the box outlining the lower edge of the lid; the lower corner of the shell being cut away to show the relative position of the cone-stand and two of the cones therein.

Fig. 6 is a fragmentary view of the upper part

of the back of the cone-box, showing the scoring line across the upper part thereof, which is the hinge of the lid.

Fig. 7 is a perspective view of the perforated cone-stand for the lower rows of cones in the cone-box.

This invention has been designed and experimentally developed in its details of fabrication for the purpose of producing, at a minimum cost, a durable, convenient and sanitary box for packing, shipping and storing, as well as for dispensing, ice-cream cones; for the box is practically strong and rigid and adapted for shipping and storing when packed full of cones arranged in their cone-stand and the other perforated holders and glued and covered with sealed wax-paper or Cellophane. And with said purpose and the special objects aforesaid in view, I will now describe my invention more fully in detail, pointing out the new and useful features of the construction and the assembling of the individual parts and the combination thereof, as illustrated in the drawing hereinabove described, in which similar letters and characters refer to similar parts throughout the several views.

In the invention and development of my self-closing box for shipping and dispensing ice-cream cones, I have, for the sake of economy in production, designed the cone-box 1 and the lid 2 to be cut at the same time from one piece of cardboard, as shown in Fig. 4, making at once the short, slanting slits, 2x, 2x, for the side edges of the lid 2 and the long, horizontal slit 2y for the lower front edge of the lid 2 and the scoring line 2z for the hinge of the lid 2, across the upper back part of the cone-box 1. And the short, perforated lines, 2a, 2a, appearing at the front corners of the cone-box and the open slits, 6, 6, in the end-flaps of the box-shell and the long, narrow attachment-lapel 5, and the open slit 5a, as well as the scoring lines, 5', 5', represented in the drawing with two fine adjacent parallel lines, are all made at the same time that the cone-box shell is cut out.

The rectangular cone-stand 4, shown in Fig. 7, with its plane face perforated to hold the small ends of the lower rows of cones in the box from touching the bottom thereof, I place in the bottom of the cone-box 1, as shown in the broken part of Fig. 5. And this rectangular cone-stand is adapted to fit against the inner sides of the box-shell as an additional brace therefor. And the sides of the loaded cone-box are further braced by means of the horizontally-disposed rectangular cardboard holders, 3', 3', just large enough to bear against the inner sides of the cone-box, not only bracing the shell of the loaded cone-box, but adapted with two rows of large perforations to hold the individual columns of cones, 3, 3, in their respective places in the loaded cone-box.

Assembling and loading the cone-box

In assembling the cone-box, after the shell thereof has been cut, I first glue the long, narrow attachment-lapel 5 to the inner side of the opposite edge 5b of the cut shell. After this attachment is made, I may tilt the box-shell down flat, in a smaller area convenient for storing until the shell is needed in assembling for service. When lapel 5 is glued to part 5b, slit 5a should coincide with slit 2x. And when I assemble the box-shell for service, I glue together securely the lower-end flaps, 7, 7a, 7b and 7c, of the box-shell to serve as the bottom-end of the cone-box 1. I then fit

the cone-stand 4 into the bottom of the cone-box; and start loading the cone-box 1 with the cones, 3, 3. These I conveniently handle in pairs telescoped together, as shown in Fig. 5; and when I have filled all the perforations of the cone-stand 4 with the pairs of telescoped cones, I place on top of these incipient cone-columns one of the perforated cone-holders, 3', 3'; and into the large perforations thereof I place other pairs of cones, 3, 3, telescoped together, filling all the perforations of the cone-holder and increasing the height of the cone-columns in the box. Then, upon the tops of these cone-columns I place another perforated cone-holder, and proceed to fill all the perforations in this second cone-holder with the pairs of cones, 3, 3, telescoped together. In this way the cone-columns in the cone-box are systematically built up to the top of the cone-box. And I now glue and fold together the upper end-flaps, 8, 8a, 8b and 8c to form the sealed top-end of the cone-box, which I now cover with sealed wax-paper 1a or Cellophane, so that the enclosed cones may be well protected from dust and atmospheric moisture, which would soon impair their quality as ice-cream cones, and the box of ice-cream cones is ready for shipping, storing or dispensing.

Now, in opening this cone-box for the purpose of dispensing the cones in ordinary counter service, I do not remove the wax-paper or Cellophane from the box, as is now done in opening other types of cone-boxes; but I merely run a sharp knife along the open cut slits, 2x, 2y and 2z, which mark the outlines of the lid 2, cutting smoothly through the wax-paper wrapper and the short, perforated lines, 2a, 2a, at the box-corners. And, leaving the wax-paper wrapper undisturbed, the operator, with his hand 2' on the lid-corner lifts the lid 2 up to a vertical position, as shown in Fig. 1 and with his other hand removes one or more cones, as many as he needs for the instant dispensing, and as he releases the lid 2, it falls by force of gravity and closes instantly, protecting the remaining enclosed cones in the box from the surrounding dust and atmospheric moisture, awaiting the next opportunity for dispensing cones from my self-closing box for shipping and dispensing ice-cream cones.

However, it should be fully understood that the specific detail of the various parts of the present embodiment of my invention, as I have illustrated in the drawing thereof and fully described, are not to be considered as limitations in the construction of my self-closing box for shipping and dispensing ice-cream cones; and that, while keeping within the scope of my instant invention and claim, I may make desirable modifications in these details to facilitate production or to economize in the fabrication thereof, provided I keep within the spirit of the invention and claim.

Now, having thus described the various features of my invention, the detail construction, arrangement and combination of its parts, as well as its functions and the ways and means of its operation and application; those features and operations of my self-closing box for shipping and dispensing ice-cream cones, that I consider new and useful, for which I desire Letters Patent granted to me, I have hereinbelow set forth and specifically described in the following claim. I claim:

In a self-closing paper-board box, of the character described, for packing, shipping and dispensing ice-cream cones, front, back and side walls therefor; a long, narrow attachment-lapel

provided with an open, transverse slit and connected with the outer, vertical edge of the back-wall of the box and adapted to be glued to the inner side of the back vertical edge of the opposite side-wall; a lid low-cut along its front outline, by means of a long slit and short perforated lines continuous therewith, at either end thereof reaching across the front-wall of the box; a straight scoring line running across the back-

wall of the box, a short distance below the top thereof and designed as the hinge of the lid; slanting slits and short perforated lines continuous therewith, in the side-walls of the box, running from the opposite ends of said scoring line to the adjacent ends of said low-cut outline of the lid; and means for safely packing ice-cream cones in said box.

GARRY G. BUTTERMANN.