Nov. 8, 1960 R. H. SIERK ET AL 2,959,339

FOOD CARTON

Original Filed June 18, 1954

Fig. 1.

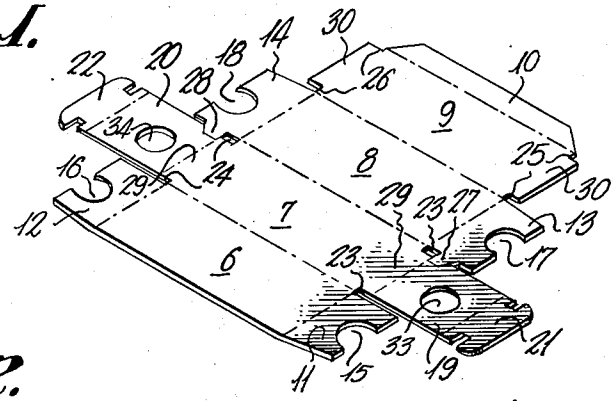


Fig. 2.

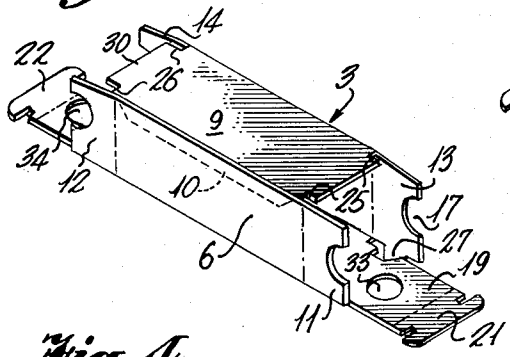


Fig. 3.

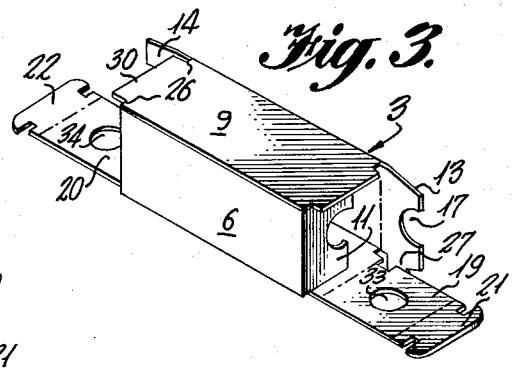


Fig. 4.

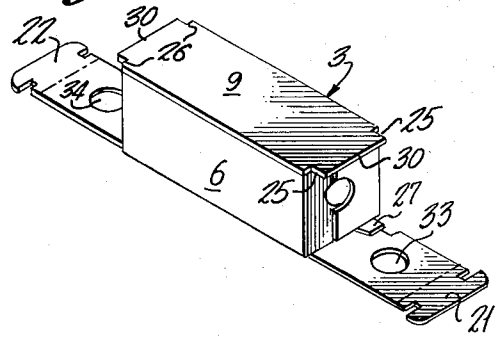


Fig. 5.

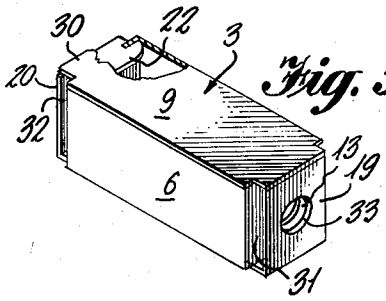
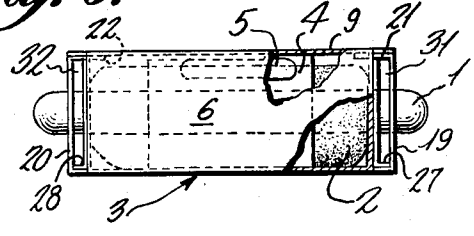


Fig. 6.



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2,959,339

FOOD CARTON

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Original application June 18, 1954, Ser. No. 437,742, now Patent No. 2,794,384, dated June 4, 1957 Divided and this application Apr. 23, 1957, Ser. No. 654,479

3 Claims. (Cl. 229—39)

This invention relates to a special food package and to a carton forming part of the package, the package being particularly adapted for use with automatic vending machinery of the type disclosed in my co-pending application Serial Number 437,742, filed June 18, 1954, now Patent No. 2,794,384, issued June 4, 1957, of which this application is a division, wherein the food product is cooked in the package before vending.

Machines for vending frankfurter sandwiches, such as the one mentioned above, include means for cooking the frankfurter by impaling it near opposite ends by electrical contact members and utilizing the resistance of the meat to the flow of electrical current to heat the frankfurter. In at least one prior instance, and in the patent mentioned, it was proposed to place the frankfurter in a split bun and pack it in a carton before placing it in the vending machine. For many reasons, none of the prior arrangements proved entirely satisfactory. In most instances, the portions of the meat contacted by the electrodes becomes discolored and, therefore, the package not present a pleasing appearance to the customer.

The machine disclosed in the above-mentioned patent has electrodes for contacting the frankfurter ends for cooking, or heating, and has knives adapted to sever the ends of the frankfurter contacted by the electrodes. As this mechanism is clearly disclosed in that patent, no further description of the machine will be given herein.

The object of the present invention is to provide a special package to contain a frankfurter sandwich having a paper napkin wrapped around it and a capsule of condiment, the package permitting the ends of the frankfurter to protrude beyond the ends of the package and having special provision to permit the free passage of knives to sever the protruding ends of the frankfurter, so that the package will have no portions of the sandwich extending beyond the ends of the package when dispensed.

Another object of the invention is the provision of a carton forming part of the package into which the other elements of the special package may be placed.

Still another object is the provision of a carton which will completely enclose the sandwich, while leaving the ends of the frankfurter exposed for contact by the electrodes of the vending machine.

A further object of the invention is to provide a carton of this type which can be folded up from a blank and which will contain passageways at either end to permit the entry of knives to sever the electrode-contacted ends of the frankfurter.

Other objects of the invention will become apparent from the following description of one practical embodiment thereof when taken in conjunction with the drawings which accompany, and form part of, this specification.

In the drawings:

Figure 1 is a perspective view of the blank used for constructing the carton for packaging the sandwich;

Figure 2 is a perspective view of the carton as set up preparatory to receiving the sandwich;

Figure 3 is a view similar to Figure 2 showing the end flaps of the carton partially folded in place;

Figure 4 is another perspective view showing the end closure flaps completely folded;

Figure 5 is a perspective view of the completely folded box; and,

Figure 6 is a side elevation of the package with the sandwich, napkin and condiment container in place.

In general, the special package includes a frankfurter in a split bun, wrapped in a paper napkin along with a capsule of condiment and packed in a special carton which allows the ends of the frankfurter to project, yet supports these ends for severance by the vending machine knives.

Referring to the drawings in detail, and first adverting to Figure 6, there is shown a frankfurter **1** within a split bun **2**, the frankfurter being longer than the bun and projecting beyond either end of the bun. A carton **3** is provided to house the bun and to support the projecting ends of the frankfurter. Before the sandwich is inserted in the carton it is wrapped with a paper napkin **4**, and a capsule **5** containing condiment is slipped into the carton with the napkin-wrapped sandwich.

The carton **3** is made from a blank, such as is shown in Figure 1, which is folded up to form the completed carton. The blank consists of four body panels **6**, **7**, **8** and **9**, each of which is substantially rectilinear and joined to its adjacent panel along a score line. The end panel **9** has a glue flap **10** which, when the four panels are folded into position, will be glued to the underside of the end panel **6**. Attached to opposite ends of the body panels **6** and **8** are the end closure flaps **11**, **12**, **13** and **14**. These closure flaps are slightly longer than half the width of the box when folded up, so that they will overlap one another. The flaps are provided with arcuate notches in their ends, as shown at **15**, **16**, **17** and **18**. The two flaps at each end of the blank when folded in position will overlap as mentioned, and the arcuate notches will form a circular opening to surround one end of the frankfurter. End flaps **19** and **20** are connected to the ends of the body panel **7** and these end panels carry locking flaps **21** and **22**.

It will be noted that body panels **7** and **9** are somewhat longer than the body panels **6** and **8** and that the longer panels are notched at each corner as at **23**, **24**, **25** and **26**, with the edges of the notches being in alignment with the ends of the shorter body panels. By reason of this construction the end flaps **19** and **20** will be spaced from the end closure flaps **11**, **12**, **13** and **14** when the box is completely folded up and the box will have notched corners for a purpose to be described.

Due to the spacing of the end closure flaps from the end flaps, it is necessary to provide means for holding the end closure flaps in closed position. For this purpose the end closure flaps **13** and **14** are provided with spacing tabs **27** and **28** extending from their side edges and adapted to be folded at right angles to the end closure flaps and lie upon the surface of the body panel **7**. This will cause their outer edges to contact the end flaps **19** and **20** and rigidly hold the end closure flaps in place. It will, of course, be evident that the end closure flaps **11** and **12** are folded in position first, and then the closure flaps **13** and **14** are folded upon them. In this way the spacing tabs will hold the end closure flaps **13** and **14** in place, and these end closure flaps, in turn, will hold the end closure flaps **11** and **12** in proper closed position. The extension **29** and **30** created by notching the body panel serve to rigidify the structure and prevent external pressure against the carton from forcing the end flaps **19** and **20** inwardly out of their normal parallel relation with the end closure flaps and properly maintain passageways **31** and **32** between the end closure flaps and the

end flaps. The end flaps are provided with circular openings 33 and 34 which will be in alignment with the circular openings formed by the notches of the overlapped end closure flaps. The projecting ends of the frankfurter will extend through these aligned openings, with portions projecting beyond the end flaps to be engaged by the gripping contact members of the machine, and the portions intermediate the aligned openings will be rigidly supported so that they can be easily cut by the knives of the machine when they pass through the passageways 31 and 32.

When the blank is to be set up for use, it will be folded along the score lines between the several panels and the glue flap 10 adhered to the edge of the panel 6 to form a rectangular tube. The frankfurter sandwich with the condiment capsule and wrapped in a paper napkin will then be inserted in the box with the bun occupying the space defined by the side panels and the ends of the frankfurter projecting from the tubular box. The end closure flaps 11, 12, 13 and 14 are then folded inwardly at right angles to the panels from which they emanate to lie in overlapping relation across the ends of the tube. The notches 15 and 16, 17 and 18 will embrace the protruding ends of the frankfurter in encircling relation to rigidly support the frankfurter at the ends of the box. When the panels 13 and 14 are folded into place, the spacing tabs 27 and 28 will be bent to lie along the upper surfaces of the end flaps 19 and 20. These flaps are then bent along their score lines which lie at the ends of the spacing tabs and the locking flaps 21 and 22 are properly bent for insertion between the edges of the closure flaps and the panel 9. The extensions 30 will form guards to protect the end flaps as mentioned above. When the flaps 19 and 20 are folded into place the openings 33 and 34 will receive the projecting ends of the frankfurter, as clearly shown in Figure 6, so that the frankfurter will be rigidly supported at both sides of the passageways 31 and 32. The package is now ready for insertion in the vending machine.

The notched corners of the carton will form guides to engage vertical guides of supply racks in the vending machine, so that the packages will slide vertically in the racks with rather close tolerance and there will be no pressure exerted against the ends of the carton. This construction permits an ease of operation not possible with a supply rack which contacts the ends of a box. When the end flaps of a box are folded they will invariably bow outward slightly and tend to frictionally engage guides with which they are in contact. With the present structure there is no end contact and the notches will be die cut so that extreme accuracy may be obtained.

It will be evident that through the use of this special package the ends of the frankfurter may project beyond the ends of the box for ease in gripping by the electrodes, and that the projecting ends may be cut off before delivery so that when the customer gets the package none of the product will be projecting beyond the confines of the carton.

While in the above one practical embodiment of the invention has been disclosed, it will be understood that the specific details of construction described and shown are merely by way of illustration and that the invention is to be limited only by the scope of the appended claims.

What is claimed is:

1. A carton to contain a frankfurter sandwich comprising, body walls defining a rectangular body, end closure flaps projecting from opposite ends of opposite body walls, said end closure flaps being longer than half the width of the body and having arcuate notches in their free ends which combine to form circular openings when the end closure flaps are folded over the end of the body, end flaps connected to opposite ends of another of said body walls along hinge lines spaced outwardly longitudinally of the carton from the connections of the end closure flaps to their respective body walls, whereby the end flaps will be spaced from the end closure flaps when the respective flaps are folded over the end of the body, said end flaps having openings therein to align with the openings formed by the end closure flaps, and locking tabs carried by the end flaps.

2. In a carton as claimed in claim 1, spacing tabs on at least one end closure flap at each end of the body to hold the end flaps spaced from and parallel to the end closure flaps.

3. In a carton as claimed in claim 2, extensions at the ends of the body wall opposite the wall carrying the end flaps to overlie the end flaps, said extensions being equal in length to said spacing tabs.

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