Jan. 27, 1942. C. DOERING 2,270,935

FOOD PACKAGE

Filed Dec. 23, 1938

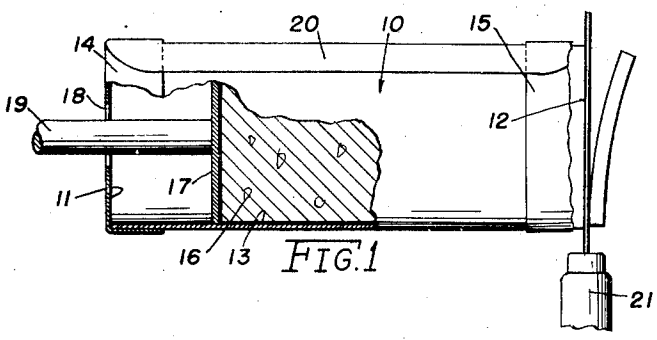


FIG. 1

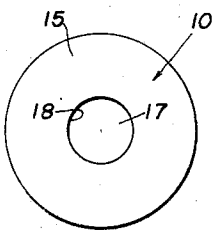


FIG. 2.

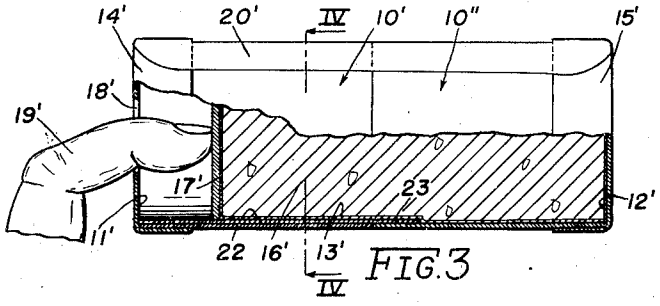


FIG. 3

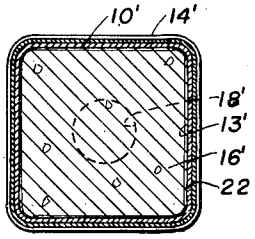


FIG. 4

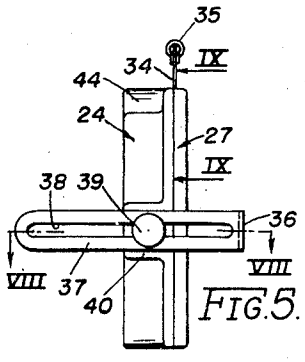


FIG. 5.

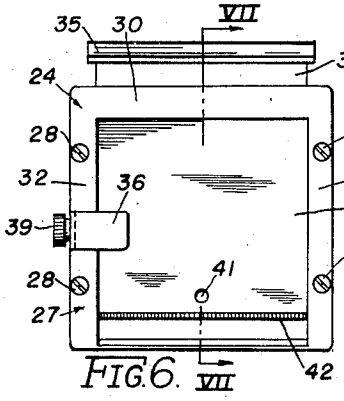


FIG. 6.

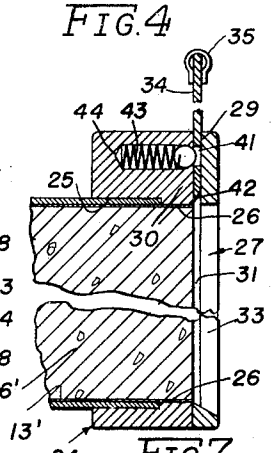


FIG. 7.

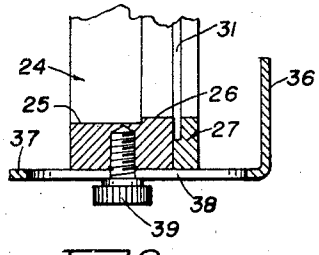


FIG. 8.

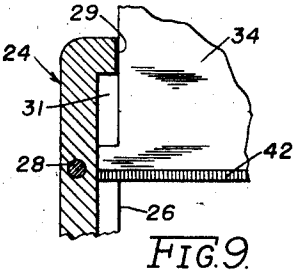


FIG. 9.

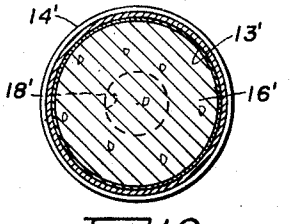


FIG. 10

INVENTOR.
CHARLES DOERING.

BY Harry C. Lemke
ATTORNEY.

Patented Jan. 27, 1942 2,270,935

UNITED STATES PATENT OFFICE

2,270,935

FOOD PACKAGE

Charles Doering, Chicago, Ill.

Application December 23, 1938, Serial No. 247,434

3 Claims. (Cl. 99—171)

This invention relates to packages and more particularly to edible food confining cartons prepared from heavy sheet material, although certain features thereof may be employed with equal advantage for other purposes.

It contemplates more especially the provision of a comparatively inexpensive and improved package for edible substances such as cheese that is poured therein preparatory to inserting a liner serving as a hermetic seal therefor.

It is customary to package cheese in five and two and one-half pound loaves by pouring cheese as the final step of its pasteurizing into a wooden box lined with tinfoil that serves as a hermetic seal therefor. These wooden boxes are expensive, present substantial bulk, and render it difficult to remove the contents which is dispensed over the counter in small sliced quantities. The wooden box serves as a mold for the cheese which is filled therewith and the tinfoil liner is overlapped to preclude contamination with the walls of the box as well as to serve as a hermitic seal therefor.

One object of the present invention is to provide an edible improved food confining paper carton that is comparatively inexpensive in construction and more satisfactory for its purpose.

Another object is to provide a heavy paper carton having features of construction enabling the fractional ejection of the contents without requiring the complete removal thereof to dispense such to the purchasing public.

Still another object is to provide an improved and less expensive paper carton for comparatively large quantities of cheese and similar edible substances for fractional dispensing without removal of the entire contents except as ordered.

A further object is to provide an improved paper carton having content ejecting expedients to render the contents readily available without requiring the entire mass to be removed therefrom preparatory to serving each order.

A still further object is to provide an improved edible substance container or carton with a detachably associated slicing device to enable the fractional dispensing of sliced units thereof without requiring the entire mass to be removed for each order.

Still a further object is to provide an improved container that renders the contents readily accessible for dispensing in sliced units without requiring the entire mass to be removed therefrom.

Other objects and advantages will appear from the following description of an illustrative embodiment of the present invention.

In the drawing:

Figure 1 is a side view in elevation of a paper carton for edible substances embodying features of the present invention, parts thereof being broken away and shown in section to clarify the illustration.

Figure 2 is an end view of the carton shown in Figure 1, there being shown a country roll shaped carton serving as a mold for the contents.

Figure 3 is a side view in elevation of a somewhat modified carton embodying features of the present invention, parts thereof being broken away and shown in section to clarify the illustration.

Figure 4 is a sectional view taken substantially along line IV—IV of Figure 3 of a Holland roll shaped carton.

Figure 5 is a side view in elevation of the slicing attachment for cartons of the type shown in Figures 1 to 4 inclusive.

Figure 6 is a front view in elevation of the slicing attachment shown in Figure 5.

Figure 7 is a fragmentary sectional view taken substantially along line VII—VII of Figure 6.

Figure 8 is a fragmentary sectional view taken substantially along line VIII—VIII of Figure 5.

Figure 9 is a fragmentary sectional view taken substantially along line IX—IX of Figure 5.

Figure 10 is a sectional view in elevation of a country roll shaped carton of the type shown in Figure 3, it being similar to the sectional view shown in Figure 4 except that the latter is of Holland roll rather than country roll shape.

The structure selected for illustration comprises an elongated and substantially cylindrical body enclosure 10 prepared from sheet material such as cardboard to represent a Holland, country roll, or rectangular cross-section depending upon the dictates of commercial practice and the choice of the purchasers. The body 10 is, in this instance, open at both ends 11 and 12 to permit a liner such as tinfoil or other suitable material 13 to cover the interior walls thereof preparatory to covering end enclosures 14 and 15 thereof. The end enclosures 14 and 15 are stamped or otherwise shaped from heavy cardboard or other paper sheet material to telescopically engage the open ends 11 and 12 of the carton body 10 to define an enclosed carton after the contents 16 has been poured or otherwise incorporated therein.

In order to render the contents 16 available for

slicing portions from the open end 12 thereof, a disc 17 corresponding in cross-section with the interior of the carton body 10 is inserted adjacent the end 11 in parallel relation with the end enclosure 14. To this end, the end enclosure 14 is provided with an axial aperture 18 therein to enable the introduction of the attendant's finger or a suitable rod 19 to engage the disc 17 and serve to eject the contents 16 from the end 12 after the closure 15 has been removed therefrom. This affords access to the end portion of the contents 16 for sliced removal per order without requiring the entire mass 16 to be removed each time.

The contents such as cheese or other edible substances 16 is preferably incorporated in the interior of the lined carton 10 while it is still hot or warm. Thereupon, the tinfoil is overlapped at the end 12 to hermetically seal it from the atmosphere. After the enclosure 15 has been attached to the body 10, a rectangular sheet of material 20 suitably imprinted to serve as a label may be pasted over the carton 10 with its enclosures 14 and 15 to retain them in assembled position against accidental removal. This completes the packaging of the edible contents 16 to allow it to "breathe" through the aperture 18 in the enclosure 14 during the cooling thereof after being incorporated into the container 10. The "breathing" function constitutes the ejection of air and gases and moisture from the edible substances such as cheese 16 during its cooling operation which conforms with the interior of the container 10 and its liner 13 to adapt itself to the reformed contents 16.

The usual knife 21 can be utilized to slice the mass 16 (Figure 1) in the customary manner as it is ejected by means of applying force through the rod 19 or projecting the finger of the attendant through the aperture 18 in the end enclosure 14. In the modified embodiment shown in Figure 3, the container body is divided into two equisized segments 10' and 10'', rather than a single open end body with an additional thickness of material 22 adhesively or otherwise attached to the interior of the portion 10' as at 23. An overlap whose exterior size conforms with the interior of the container body portion 10'' is telescopically displaced thereover in frictional engagement therewith.

With the section bodies 10' and 10'', there is the equivalent of a single body portion such as shown in Figure 1. This can be lined in the usual manner with tinfoil 13' preparatory to pouring the contents such as cheese 16' therein. Corresponding end enclosures 14' and 15' telescopically engage the open ends 11' and 12' of the container body sections 10'—10''. The end enclosure 14' is provided with an axial aperture 18' to enable the incorporation of the attendant's finger or a rod 19' to eject the contents 16' from the body section 10'' and then from the body section 10' after its size is diminished to a point that enables the removal of the body section 10'' so that the enclosure 15' can be directly applied to the body section 10'.

This arrangement precludes the necessity of utilizing another rod 19' in that access to the cheese contents 16' is effected without any appreciable displacement of the ejecting disc 17'. This is possible owing to the fact that the body section 10'' may be totally dispensed with after one-half of the cheese contents 16' has been sliced therefrom. A label 20' can be adhesively applied over the container sections 10'—10'' together with the end enclosures 14'—15' to preclude accidental separation of the component elements of the carton. It will be apparent, therefore, that a very inexpensive and more effective carton can be provided for large loaves of cheese and other edible substances usually dispensed in fractional units by slicing portions from the mass 16 or 16'. The vendor need not remove the entire contents 16 or 16' from the carton 10 or 10' and as a result less time is entailed in the dispensing of the contents 16 or 16' and such is not exposed to the atmosphere to the extent otherwise necessary.

In order to render the contents 16 or 16' readily dispensable in uniform slices of predetermined thickness, a slicing attachment consisting of a metallic body 24 may be placed over the container end 12—12' in place of the end enclosure 15 or 15'. This end, the slicing attachment body 24 is shaped to correspond with the end enclosure 15 or 15' depending upon whether such are to be country roll (Figure 2), Holland roll (Figure 4) in shape. The attaching frame or body 24 is shaped to correspond therewith, and it is preferably though not essentially molded or otherwise shaped from aluminum or other metallic substances to present an interior opening 25 that corresponds with the exterior diameter of the container body 10, 10' or 10''.

To this end, the interior of the slicing frame 24 is stopped as at 26 so that the latter opening will conform in size with and receive the overlap 23 should it be desired to apply a slicing attachment body 24 to the container section 10'. In order to effect the sliced removal of the contents 16 or 16', a blade knife frame 27 corresponding in size and shape with the body 24 is attached thereto by means of threaded studs 28, in this instance four, which are properly placed along the side edges thereof to present an elongated slit 29 in the top wall 30 that communicates with a corresponding groove 31 in the side walls 32 and 33 of the frame 27. The top slit 29 of the side groove 31 serves to accommodate a slicing blade 34 which is vertically displaceable between the attachment body 24 and its confronting frame 27.

Any suitable manipulating means such as an enlarged rounded flange 35 may be attached to the top edge of the blade 34 to enable its vertical manipulation in severing the mass 16 or 16' in uniform slices. The thickness of the slices may be varied depending upon the dictates of each purchaser and such may be pre-measured by the stop 36 constituting an offset flange formed on a blade member 37. The blade member 37 has an elongated slot 38 provided therein to receive a threaded stud 39 which engages a lug 40 provided on the side wall of the slicing attaching body 24. The blade member with its offset flange 36 will, therefore, be adjustable to determine the desired thickness of the unit to be sliced from the mass 16 as it is ejected to confront and engage the stop 36.

It will be apparent, therefore, that a simple, inexpensive and effective slicing attachment has been provided for a container of the type described herein. In order to hold the blade 34 in its initial position preparatory to slicing, an aperture 41 is provided along a longitudinal median line of the blade 34 proximate to the lower severing edge 42 thereof. The aperture 41 cooperates with a spring impelled detent that is urged in the path thereof by means of a spring 43 confined in the portion 44. The portion 44 is positioned horizontally in the slicing attachment

body 24 along the upper edge thereof in the path of the aperture 41 that maintains the blade 34 in its desired initial position preparatory to slicing. The spring impelled detent will also serve to effect the maximum extent to which the blade 34 shall be elevated without removing it from the slot 29. Otherwise re-entry of the blade 34 in the slot 29 would entail some time and care which would not be very desirable from the vendor's standpoint.

It should be noted that the inside wall of the container 10 or 10' is coated or impregnated with a paraffin wax film or other suitable wax filler to fill up the minute voids therein and render the container more effective as a hermetic seal of the contents 16 or 16'. Further, this paraffin or other filler film serves to preclude sticking of the tinfoil 13 to the wall of the container 10 or 10' Then, too, the inside surface of the tinfoil 13 or other suitable liner is preferably provided with a resinous film or other suitable coating so that the overlapping portions of the liner 13 will be self-adhering as the hot cheese 16 or 16' is poured in the container 10 or 10'. The elevated temperature of the contents 16 or 16' as it is poured into the container will cause the coating on the liner 13 to fill the minute voids therein so as to further reinforce the hermetic seal of the contents 16 or 16'. The coating will soften upon the contact of the hot cheese 16 or 16' thereon and furnish a desirable seal therefor.

With the teachings of the invention described herein, it will be apparent that a more sanitary and less expensive package has been provided whereon suitable inexpensive labels can be adhered so that the distributors thereof may resort to private labels without any appreciable expense. A container of this kind is less expensive and much lighter than the usual wood containers heretofore employed for a similar purpose and, in consequence thereof, the handling and transportation expense is much less. Paper containers are usually devoid of undesirable odors usually found in containers of wood construction and in every respect the teachings of the present structure possess substantial advantages over known containers for the same purpose.

Various changes may be made in the embodiment of the invention herein specifically described without departing from or sacrificing any of the features of the invention or any advantages thereof, and nothing herein shall be construed as limitations upon the invention, its structural concept or embodiment as to the whole or any part thereof except as defined in the appended claims.

I claim:

1. In a food package, the combination with a tubular thick paper body member open at one end, of a thin liner in said body member, an edible mass filling the lined interior of said body member, a content ejecting member wholly within said body member adjacent a closed end thereof for displacement therein, and a slicing attachment detachably engaging the open end of said body member to sever slices from the contents displaced in the path thereof by said ejecting member.

2. In a food package, the combination with a tubular thick paper body member open at both ends, of a thin liner in said body member, an edible mass filling the lined interior of said body member, a content ejecting member wholly within said body member adjacent a closed end thereof for displacement therein, and a slicing attachment detachably engaging the open ends of said body member to sever slices from the contents displaced in the path thereof by said ejecting member.

3. In a food package, the combination with a tubular thick paper body member open at both ends, of a thin liner in said body member, an edible mass filling the lined interior of said body member, end closures frictionally associated with said body member to enclose the open ends thereof, a slicing attachment detachably engaging the open ends of said body member to sever slices from the contents displaced in the path thereof by said ejecting members, and an adjustable stop on said slicing attachment to cooperate with said ejecting member to displace the contents thereto prior to the operation of said slicing attachment.

CHARLES DOERING.