Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 6

Fig. 7

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This invention relates to insulated cartons for filled beer cans or similar containers for liquids or consumable products.

Prior insulated beer cartons with which I am familiar have had defects insofar as use thereof is concerned. Some could be readily opened, but once opened, could not be readily and properly reclosed. Others, such as the double open box type, expose all of the cans even though they are opened for the purpose of removing only one can, thus allowing the escape of cold from (that is, absorption of heat by) the box and its contents. Other cartons are not readily carried about, having to be supported in both hands or carried under an arm.

It is the main object of the present invention to provide an insulated carton for filled beer cans or similar containers, which carton has a handle, allowing it to be readily carried about, and which carton can be opened to remove one or more cans without exposing all the cans, and which carton can thereafter readily and effectively be reclosed to retain the cool temperature of the remaining filled beer cans, to enable subsequent consumption thereof by the purchaser and his friends.

The insulated reclosable carton of the present invention is characterized by having a sleeve type outer carton member and a box type inner carton member slidably received by the outer carton member in snug relation thereto. The outer carton member has a handle by which it, together with the inner carton member, can be readily carried. The inner carton member is provided with one and preferably two hatch flaps in the side walls of the inner carton member, the hatch flaps being openable to provide an opening through which one or more can be removed from the carton. The hatch flaps are then readily flipped back to their closed positions and maintained in such closed position by the outer carton member when the inner carton member is again slid back into the outer carton member. The hatch flaps are located in staggered relation and near the end margins of their respective side wall panels so that the inner carton member does not have to be completely removed from the outer carton member in order to remove one or more cans, and, by staggering the hatch flaps, it is immaterial which way the inner carton member is moved relative to the outer carton member because one of the hatch flaps will be exposed regardless of which way it is shifted. The inner carton member and outer carton member are so constructed that the inner carton member is releasably retained in its fully supported condition by the outer carton member to avoid accidental displacement of the inner carton member relative to the outer carton member.

Various other objects of the present invention will be apparent from the following description taken in connection with the accompanying drawings wherein:

FIG. 1 shows a purchaser carrying a filled insulated reclosable carton of the present invention; FIG. 2 shows the carton as having been opened and a purchaser and a friend enjoying part of the contents of the carton; FIG. 3 shows the carton reclosed to enclose the remaining cans in the carton whereby to maintain them cool for subsequent enjoyable consumption, and shows the reclosed carton being carried by the purchaser away from the FIG. 2 location;

FIG. 4 is a side perspective view of a filled insulated carton of my invention and showing the carton in its normal upright carrying condition;

FIG. 5 is a view of the carton on one side and showing the inner carton member as having been shifted to an offset position relative to the outer carton member and showing the inner carton member as having been opened through one hatch flap of the inner carton member;

FIG. 6 shows the carton in the process of being reclosed;

FIG. 7 shows the carton on its opposite side and opened by means of a second hatch flap of the inner carton member;

FIG. 8 is a perspective view of the inner carton member showing the relationship of the hatch flaps in the opposite side walls of the inner carton member;

FIG. 9 is an enlarged vertical sectional view taken along lines 9-9 of FIG. 4 showing an interlock of the two carton members;

FIG. 10 is a view of the inner carton member blank prior to its being folded; and

FIG. 11 is a view of the outer carton member blank prior to its being folded.

The inventive reclosable carton of the present invention is best shown in FIGS. 4-11, where it is evident that the carton includes as primary members a sleeve-type outer carton member generally entitled 11, and a box-type inner carton member 13, both formed of pressed paperboard. Both carton members are of rectangular cross-section and the inner carton member is dimensioned so that it is only slightly smaller than the outer carton member 11 an extent such as to have a snug sliding fit therewith, whereby the inner carton member 13 is releasably retained in its carrying position until forcibly moved therefrom by the purchaser (or other individual).

Referring to FIGS. 4 and 11, the outer carton member has a bottom panel 11a joined to side panels 11b and 11c at score lines 15. The side panels are joined to top panels 11d and 11e at score lines 17.

Each top panel has die cut lines 19 and 21, and score lines 23 to define a pair of handle elements 25 and 27 which are joined to their panels medially therefrom at the score lines 23. In the folded final form condition of the outer carton member 11, overlapping portions of the top panels 11e and 11d are glued or otherwise adhesively secured together, and the two handle elements 25 and 27 are glued or otherwise adhesively secured together to form a single handle 1H by which the carton may be readily carried.

Panel 11e also has edge notches 31 defining a pair of locking tabs 33 about which more will be presently said.

The construction of the inner carton member 13 is best shown in FIGS. 8-10, where it is evident that such inner member includes a bottom panel 13a, side panels 13b and 13c joined to the bottom panel at score lines 41, and top panels 13d and 13e joined to the side panels at score lines 43. The bottom panel has end flaps 13c', while each side panel has end flaps 13b' and 13c', and each top panel has end flaps 13d' and 13e'.
In the folded final form condition of the inner carton member 13, the top panels have overlapping portions glued or otherwise adhesively secured together, with the top panel 13d being disposed outermost (Fig. 8). The associated pairs of end flaps 13c' and 13b' have overlapping portions glued or otherwise adhesively secured together and these cover end flaps 13d', 13d and 13e', to which the end flaps 13c and 13d preferably are adhesively secured to provide end panels for the inner carton member 13.

It is pointed out that the cans of beer, twelve being shown in FIG. 4, are placed in the inner carton member during its erection so that when the carton is finally erected with all the flaps and panels adhesively secured together, the cans are securely retained within the inner carton member 13.

The filled inner carton member 13 may now be inserted into the outer carton member 11 and as previously mentioned, the inner carton member has a snug fit within the outer carton member so that it resists sliding movement relative thereto so that it is releasably held in a generally concealed condition (that is, it is enclosed except for the end panels thereof), within the outer carton member 11.

Prior to the insertion of the inner carton member into the outer carton member, the locking tabs 33 are bent inwardly, as shown in the case of one tab 33 in FIG. 9. When the inner carton member 13 is inserted into the outer carton member, its top panels 13d and 13e are arranged to be uppermost so as to dispose two notches 53 (FIGS. 5 and 10) next to the top panels of the outer carton member 11. The spacing of the notches and the tabs (in the inwardly bent condition of the latter) is such that the end edges of the tabs engage the outwardly facing, inwardly disposed side edges of the notches 53 as is shown in FIG. 9 wherein the end edge 33e of the tab 33 engages the side edge 53e of the notch 53. This engagement of the top and notch edges prevents the relative releasable locking arrangement (in addition to the snug fit previously mentioned).

To project the inner carton member 13 from the outer carton member 11, end pressure is applied to the inner carton member and when this pressure is sufficient (which actually can be accomplished with a moderate pressure by an individual) the tab 33 will snap over the adjacent engaged notch edge (or be bent sufficiently so as to snap over the same) to enable the inner carton member to be moved to a position such as shown in FIG. 5.

In the FIG. 5 position of the carton members, a hatch flap 61 is provided in side panel 13c of the container member and carrying member for releasably holding the two members against relative sliding movement, said container member and carrying member for releasably holding the two members against relative sliding movement, said

After as many cans as desired are removed, the hatch flap 61 is pressed downwardly in place and the torn edges at the die-cut perforate line 63 will normally be sufficient to retain the hatch flap 61 in its closed position. Even if this were not so, when the inner carton member 13 is again shoved back into the outer carton member 11, as shown in FIG. 6, the contact of the outer carton member with the hatch flap 61 would effect a closure of the hatch flap to thus completely reclose the inner carton member thus placing the overall carton in substantially the same condition it was prior to removal to one or more cans, thereby maintaining the remaining cans in an insulated and thus cooled condition for subsequent enjoyable consumption.

Referencing to FIGS. 8 and 10, the inner carton member 13 has a second hatch flap 71 similar in form and construction to hatch flap 61, but oppositely located relative to the center line of the inner carton member 13, as is evident from the just-mentioned figure, whereby the hatch flap 71 is disposed to overlie one can in the opposite end of the inner carton member, and partially overlie other cans in a manner similar to the way hatch flap 61 completely or partially overlaps cans C1-C6.

Referencing to FIGS. 5 and 8, it is evident that the top panel 13d of flaps 63 are bent inwardly at an arrow 81 pointing in the direction of the hatch flap 61, whereas the bottom panel 13a has an oppositely directed arrow 83 pointing to the hatch flap 71. It is pointed out that since both of the arrows 81 and 83 are on the top panels of the inner carton member that one of these arrows will be exposed regardless of the direction in which the inner carton member is shifted. Normally, the inner carton member will be placed down in a position like that shown in FIG. 4, and the user merely shifts the container one way or the other in the position shown in FIG. 4, and as soon as he sees the arrow either 81 or 83, he knows which way to lay the carton down to expose the appropriate hatch for removal of cans.

FIGS. 1 through 3 are believed self-evident insofar as what is depicted. FIG. 1 depicts a purchaser or individual having a carton of the present invention filled with cooled or bottled cans of beer or other consumable liquid or product. FIG. 2 shows the individual seated at a table with one of the hatch flaps open, and he and a friend enjoying a can or several cans of beer from the carton. It is presumed that there will be left filled cans of beer so that the carton will be reclosed as above described and when so reclosed the carton is then substantially in the condition it was in FIG. 1. Therefore, the purchaser may then again grasp the handle H and readily carry the partially filled carton with him to his next destination.

Having described the invention in what is considered to be the preferred embodiment thereof, it is desired that it be understood that the invention is not to be limited other than by the provisions of the following claims.

I claim:

1. A releasable insulated container for cooled filled beer cans or the like, said container comprising a carrying member in the form of a sleeve of rectangular cross section, a handle on the exterior of said sleeve by which said sleeve may be carried, a container member of parallellopedon form slidably receivable within said sleeve and having opposed side walls, at least one of said side walls having a portion that can be opened to facilitate removal of a beer can and can be subsequently closed to again enclose said cans, said portion being covered by said sleeve but being exposed when said container member is moved to a predetermined relative to said sleeve, an engaging latch means on said container member and carrying member for releasably holding the two members against relative sliding movement, said
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interengaging latch means being separate and distinct from said handle.

2. A reclosable insulated carton for cooled filled beer cans or the like, said carton comprising
a carrying member in the form of a sleeve of rectangular cross section,
a handle on the exterior of said sleeve by which said sleeve may be carried,
a container member of parallelopipedon form slidably receivable within said sleeve and having opposed side walls and a top wall next to said handle and a bottom wall remote from said handle,
at least one of said side walls having a portion that can be opened to facilitate removal of a beer can and can be subsequently closed to again enclose said cans,
said portion being covered by said sleeve but being exposed when said container member is moved a predetermined extent relative to said sleeve,
said portion being located closer to one end of said container member than to the other end so that regardless of which way said container member is shifted relative to said carrying member, cans may be removed from said container member without separating it from said carrying member,
said top wall of said container member bearing thereon two markings, one of which is disposed adjacent one end of said container member and the other of which is disposed adjacent the other end of said container member, wherein each marking is disposed closer to the side wall of said container member having the nearest openable portion, so that with the container carton in an upright position, the user can push the carton either way relative to the sleeve to expose an end portion of the carton whereupon the marking thereby exposed automatically indicates which way the carton should be tilted to expose the nearest openable portion thereby eliminating guess work on the part of the user as to which way to tilt the carton.

3. A reclosable insulated carton for cooled filled beer cans or the like, said carton comprising
a carrying member in the form of a sleeve of rectangular cross section,
a handle on the exterior of said sleeve by which said sleeve may be carried,