Aug. 29, 1967 H. M. PIKER 3,338,068

COOLER CHEST FOR INDEPENDENT CONTAINER

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Fig. 2.

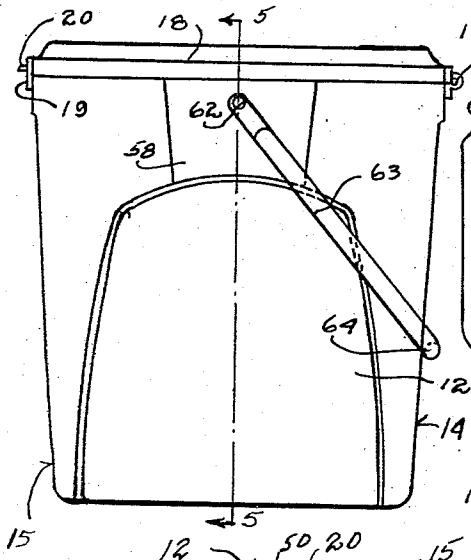
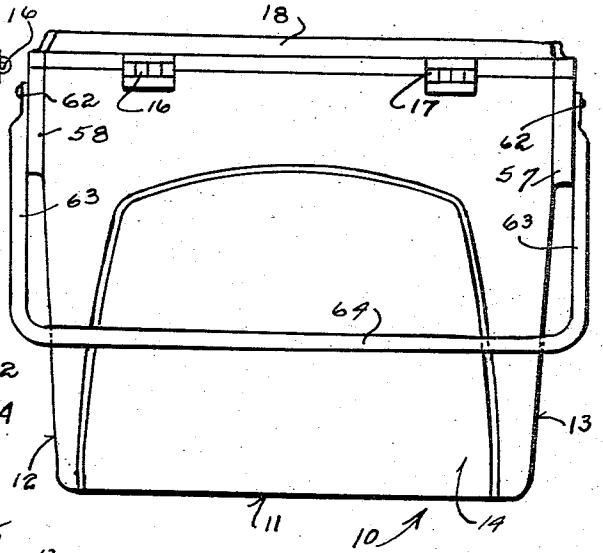


Fig. 3.



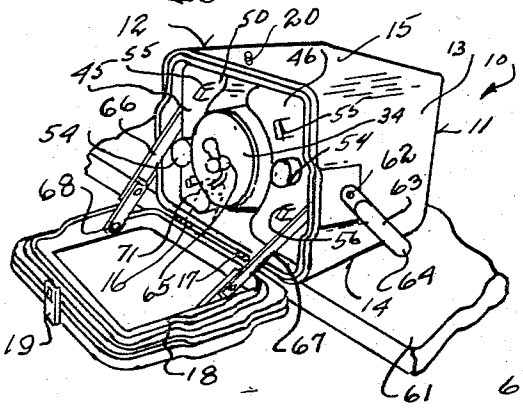


Fig. 1.

Fig. 4.

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COOLER CHEST FOR INDEPENDENT CONTAINER

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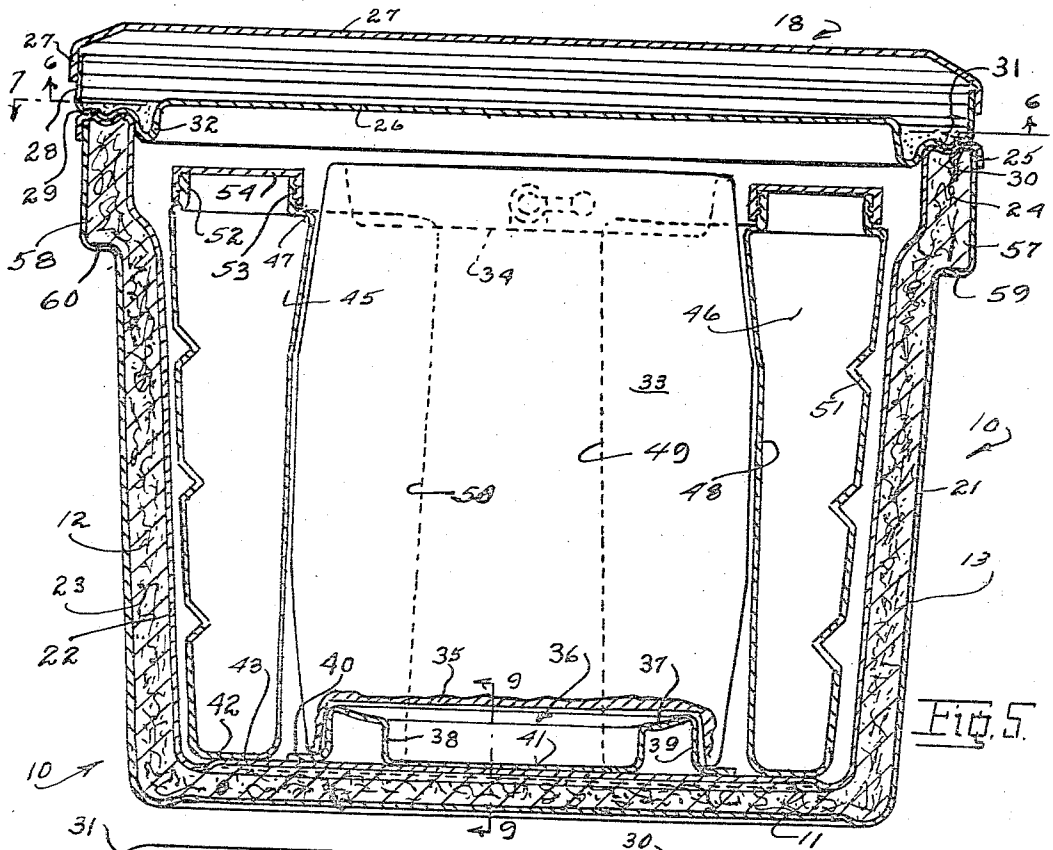


Fig. 5.

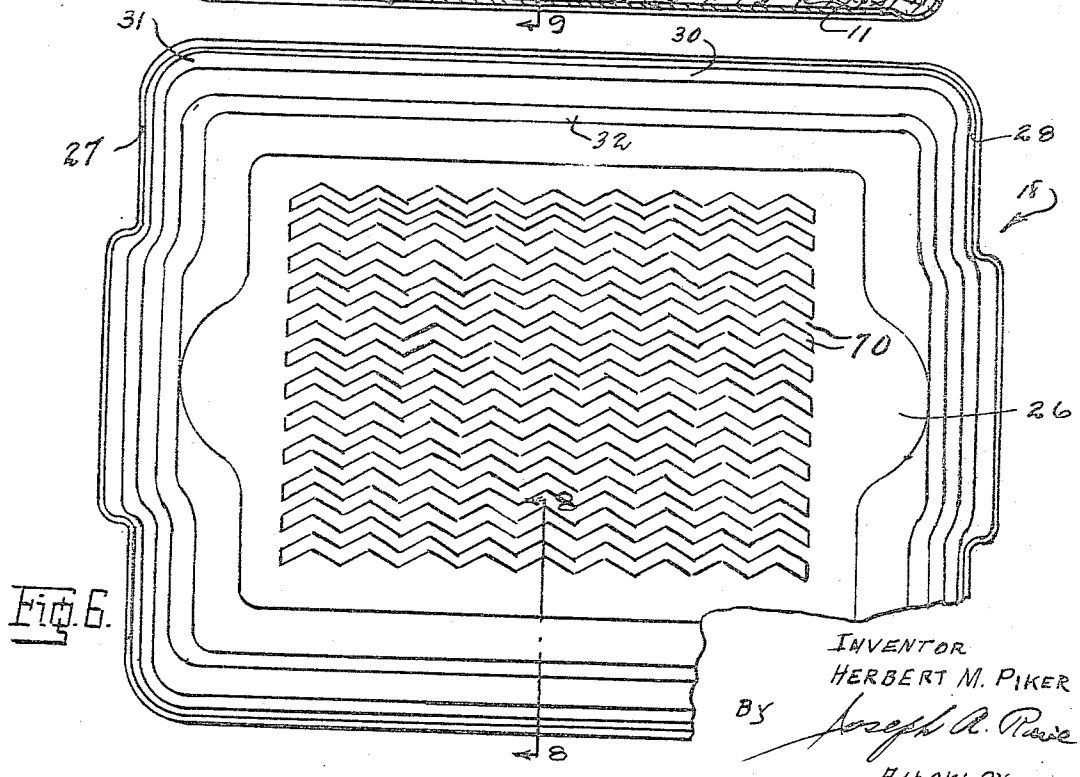


Fig. 6.

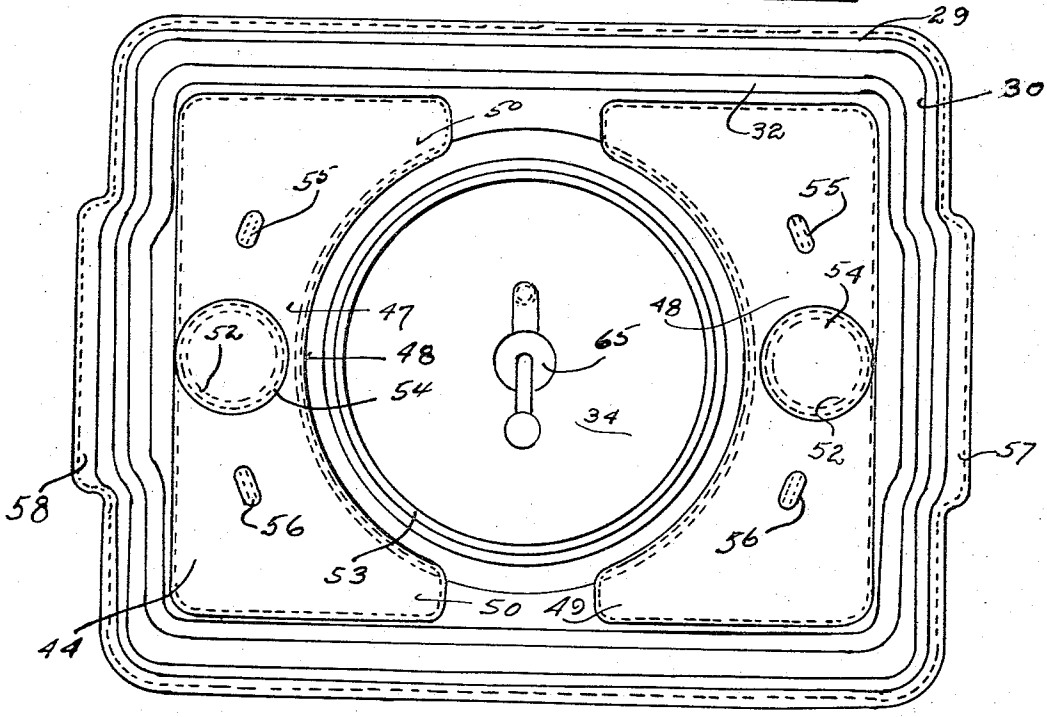
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COOLER CHEST FOR INDEPENDENT CONTAINER

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Fig. 7



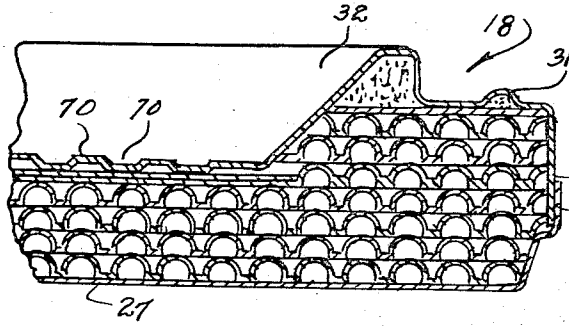


Fig. 8

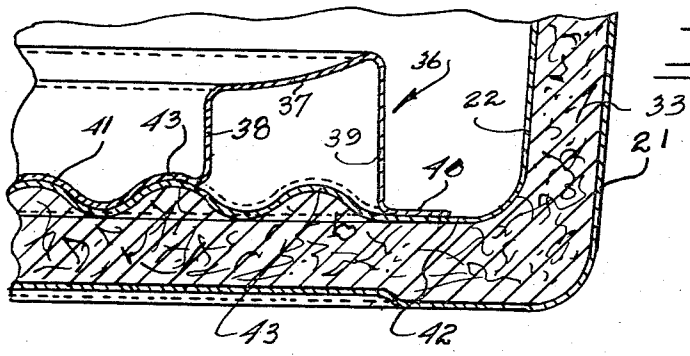


Fig. 9

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3,338,068

COOLER CHEST FOR INDEPENDENT CONTAINER

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Filed Jan. 21, 1966, Ser. No. 522,238
11 Claims. (Cl. 62—398)

This invention relates to improvements in cooler chests and particularly to such chests when arranged to maintain a container and its contents, while in the chest, at a desired temperature.

The principal object of this invention is, therefore, the provision of a cooler chest adapted to hold or have disposed therein a container which would contain material, such as liquids, to be dispensed at a given temperature, whether hot or cold.

Another object of this invention is the provision of a cooler chest in which is disposed a container for liquids and which container discharges therefrom the liquids in individual servings together with means within the cooler for maintaining the container with its liquid in a cool or cold condition.

Another object of this invention is the provision of a cooler chest wherein removable bottles or other rechargable holders are disposed to embrace a container for beverages, which bottles or other rechargable holders contain a refrigerating or cooling medium for maintaining the beverage in the beverage container in a cold refreshing condition.

Other objects and advantages of the present invention should be readily apparent by reference to the following specification considered in conjunction with the accompanying drawings forming a part thereof and it is to be understood that any modifications may be made in the exact structural details there shown and described, within the scope of the appended claims, without departing from or exceeding the spirit of the invention.

FIG. 1 is a perspective view of the cooler chest of the present invention in its usable operative position.

FIG. 2 is an end elevational view of the cooler chest of FIG. 1.

FIG. 3 is a longitudinal elevational view of the cooler chest of FIGS. 1 and 2 as seen, for example, from the rear side thereof.

FIG. 4 is an end elevational view of the cooler chest of the present invention, similar to FIG. 2, showing the cooler chest in its operative position, such as seen in FIG. 1.

FIG. 5 is a longitudinal sectional view of the cooler as seen from line 5—5 in FIG. 2.

FIG. 6 is a plan view of the interior of the cover or lid of the cooler chest of the present invention, as seen looking in the direction of the arrows 6—6 on FIG. 5.

FIG. 7 is a top plan view of the interior of the cooler chest and its contents, as seen looking in the direction of the arrows 7—7 on FIG. 5.

FIG. 8 is a fragmentary, sectional view through the cover or lid of the cooler chest as seen from line 8—8 on FIG. 6.

FIG. 9 is a fragmentary, enlarged, sectional view through the bottom of the cooler chest as seen from line 9—9 on FIG. 5.

Throughout the several views of the drawings similar reference characters are employed to denote the same or similar parts.

As noted above the present invention relates to a cooler chest for use with a container from which a beverage, such as beer, may be dispensed into individual glasses, mugs, and the like, and which beverage is maintained in its cool or cold condition from start to finish of the dispensing from said enclosed container.

In other words, this invention is adapted for use in dispensing a beverage, such as beer, from a container containing a relatively large amount, or a relatively large number of glasses of said beverage, such as a "pony" keg and with said keg and its contents maintained in its iced or refrigerated condition from the time it was brewed until the last glass full has been drawn therefrom.

The cooler chest of the present invention, indicated in its entirety by the reference numeral **10**, comprises a bottom **11** from the ends of which upstand end walls **12** and **13** which have their similar opposite ends connected to one another by a back wall **14** and a front wall **15**, integral with and upstanding from the bottom **11**. Hingedly connected, as by hinges **16** and **17** to the upper end of the back wall **14** is a lid or cover **18**. The lid or cover **18** is adapted to be releasably latched in its closed position by a latching member or strap **19** cooperating with a latching pin **20**.

As seen in FIG. 5, for example, the cooler chest **10** comprises an outer plastic shell **21** and an inner plastic liner **22** nested with respect to one another to provide a space between said shells in which is disposed insulation **23**. It is to be understood that it is the spaced shells together with the insulation therebetween that provide the cooler chest bottom **11**, end walls **12** and **13** and front and back walls **14** and **15**.

Any suitable or desired method may be employed with respect to forming and positioning said chest shells, that illustrated in the drawings consisting of the inner liner **22** at the upper ends of its end walls and front and back walls having outwardly projecting walls forming top members **24** which are projecting in a substantially horizontal plane for a perceptible distance, that is, the width of the insulation plus the thickness of the outer shell upstanding wall members, all as seen in FIG. 5. At the outer edge of each of said walls top members **24** there is provided an integral downwardly extending flange **25** which controls the upper ends and depends exteriorly of the outer shell end walls, front wall and back wall for thereby effecting a gauge for the spacing of the said inner and outer shells bottom, end walls and front and back walls, from one another. There is disposed within the space between said shells insulation **23** which also effectively locks the cooler chest shell and liner in the positions above set forth. It should be noted that the said insulation **23** is initially in the form of liquids which upon being brought into association with one another chemically react as a foam which readily hardens into the plastic foam insulation, as is well known and this solidified foam insulation positively prevents separation of the inner liner from the outer shell, as illustrated in FIG. 5.

The cover **18** similar to the cooler chest, per se, is formed of an inner liner **26** and an outer shell **27** with said outer shell similar to the chest inner shell having at its outer edge a depending flange **27** that engages with the inner surface and depends below the upstanding wall flange **28** of the lid or cover inner liner **26**. The said lid inner liner is provided inwardly of its upstanding flange **28** with a flat surface **29** that is similar, in size, to and engages with the flat upper wall surface of the chest walls and said flat surfaces are in face contact or engagement with one another on the upper ends of each of the cooler chest end, front and back walls.

The said chest walls top or flat member **24** is provided substantially centrally thereof with a downwardly projecting groove **30** to receive a similar formed complementary bead **31** downwardly projecting from the lid or cover flat end, side and back walls, top walls or flat faces **29**. The

said groove and bead **30** and **31** when interengaged with the lid or cover **16** is in its closed position acts as a seal against any inadvertent loss of cold within the chest, per se. To further discourage loss of cold from within the chest the cover or lid inner shell **26** is provided at the inner edge of its flat surface or wall **29** with a depending bead or lip **32** which enters the chest at the upper end thereof. This bead or lip **32** engages with the inner surface of the chest end, front and back walls at and just downwardly of the upper ends thereof and serves as a positioning means for positioning the cover with respect to the chest and thereby insures the interengagement of the groove and bead, **30** and **31**, and at the same time acts as an additional seal against loss of cold from the chest and the entrance thereinto the warmer atmospheric air.

As disclosed in FIG. 5 a container, here illustrated as what is generally called a "pony keg," indicated in general by the reference numeral **33**, having each end countersunk to provide a top portion or head **34** and a bottom portion or lower end **35**. The bottom end **35** together with the recess outwardly thereof is adapted to embrace an upstanding centering member indicated in its entirety by the reference numeral **36**.

The centering member **36** is formed of plastic the same as the inner and outer liners **21** and **22** with said centering member **36** being cylindrical in form and having an upstanding portion which includes a substantially, circular, ring-like top **37** from the inner and outer peripheries of which depends legs **38** and **39**. In order that the upstanding ring of the centering device may readily enter the concavity **36** at the lower end of the keg the said ring has the inner leg thereof of less height than its outer leg **39** with the top connecting portion concaved in connecting the different heights of the legs **38** and **39**.

The said centering device **36** has its outer legs **39** integral with an outwardly projecting flange **40** and the lower end of the inner legs **38** are connected by a web or bottom **41**.

The centering mechanism **36** may be formed integral with the bottom **42** of the inner shell **22**, but, since the kegs **33** are machine spun they may differ in actual size from one another a relatively small amount, but, the difference is such that a fixed centering member **36** would encounter possible difficulty in having successive kegs properly centered; also, and as will shortly be made clear, the cooling devices may be such that a slightly off dimension, or unfamiliarity of the assembly of the parts by the user may again offer difficulty in the assemblying of the parts for return to the original producer.

In all instances, however, the concentricity of the bottom concavity **35** of the keg will permit the entry of the centering member **36** and it has further been found that the material alignment of the keg bottom cavity and centering device is in the longitudinal direction of the chest. As seen, therefore, in FIGS. 5 and 9, the chest inner liner bottom **42** is provided with a undulated upper surface **43** and the centering mechanism flange **40** and base **41** are similarly provided with undulations **43** substantially identical with that of the chest liner bottom. With this arrangement the centering device **36** is held in substantially concentric relation with respect to the chest bottom and will thereby receive enough of the keg bottom concavity to automatically shift the centering device to align axially with respect to the axis of the keg.

As seen in FIGS. 1, 5 and 7, the cooler chest encloses, on each side of the keg **33**, in the longitudinal direction of the said chest, similar cooling devices hereinafter called, as they are each referred to in the trade, a bottle **45** and **46**. Since each of these bottles is identical with the other and, in fact, may be interchanged with respect to one another, only one of them will be described in detail.

Accordingly the bottle **45** is of a height slightly less than the height of the keg itself and has at its upper end a top **47** which is, in the broad sense of the word, crescent shaped in a horizontal plane to include the central portion **48** and the side or wing portions **49** and **50**. For convenience in assembling the bottles with respect to the chest and keg, the body portion **48** is provided, along one vertical face, preferably the outer face, with inwardly formed reinforcing ribs **51** which permit a slight displacement, if needed or necessary, in the bottle body portion when being positioned.

Extending upwardly from the top **47** of each bottle, substantially on a line centrally longitudinally of the cooler chest, is a neck **52** provided with screw threads **53** through which a closure cap **54** is secured in operative position.

Extending upwardly from the top of each bottle, one on each side of the filling neck and closure cap **54**, are lugs **55** and **56** through which the said bottles are engaged for lifting the same from the chest and through which hand-hold pieces the said bottles are lowered into their proper and operative positions.

In other words, each bottle through its upstanding hand-holds **55** and **56** may be removed from the chest and after removal of the cap **54**, ice in chopped or cubed form and condition inserted within the bottle, or the bottle may be filled with water and then frozen in a suitable freezer, or a refrigerant in liquid disposed within each bottle and whereupon the bottles are returned to their operative positions. It is understood of course that the kegs **33** upon being filled at the brewery are immediately or shortly thereafter chilled or cooled as is the usual custom, whereupon the said filled keg is disposed within the cooler chest and the bottles disposed adjacent thereto for maintaining the keg and its contents at the cool temperature as desired and which chest with its keg is then shipped to a customer, or to a retail point for subsequent delivery to a customer or user.

The cooler chest is provided at the upper ends of its end walls with thickened portions **57** and **58** each of which has an under surface **59** and **60** for a user's hand in raising and positioning the cooler chest with respect to a supporting table or the like. Said table is illustrated in FIGS. 1 and 4 and identified by the reference numeral **61**.

The enlarged handle or grip portions **57** and **58** are each further adapted to provide a pivot **62** for the inner end of a leg **63** of a bail type carrying means which also includes a connecting handle **64**. As shown in FIGS. 1 and 4 the handle **64** may be arranged to be beneath the back side of the chest and thereby, in effect, level or dispose the longitudinal axis of the chest in a plane substantially horizontal to the upper surface or plane of the table or other support **61** since as seen particularly in FIGS. 1, 2, 3 and 4, the sides of the cooler chest taper downwardly from the top thereof. This tapering of the ends, front and back walls of the chest being for appearance sake as well as of necessity due to the depth of the draw of the chest inner and outer members while in the process of manufacture.

With the cooler chest in position, therefore, as illustrated in FIGS. 1 and 4, the cover or lid extends outwardly therefrom on the hinges **14** and **15** thereof. The said lid or cover, as further illustrated in FIGS. 6 and 8, is provided for a considerable area of the inner or under surface thereof, that is, within the positioning lip **32** with a depressed surface which could and does, as will presently be made clear, act as a supporting bar for glasses or other individual containers for the beverage within the keg.

As illustrated in FIG. 1 the keg **33** has extending from the base of the upper depression or of its top member **34** a dispensing cock **65** which is manually controlled, as is very well-known, for dispensing beverage from the said keg. The filled glasses or other individual containers are then disposed on the now exposed inner surface cover or lid **16** as illustrated in FIG. 1. In order to maintain the said lid or cover **16** in the position thereof as illustrated in FIG. 1, and in solid lines in FIG. 4, use is made of

positioning or holding straps **66** and **67** each of which has its inner end secured at **68** to the inner surface of the positioning lip **32** of the cover or lid inner member or liner **20**, with each strap having its other end secured as at **69** somewhat below the upper ends of the end walls **10** and **11** to be just below the inner edge of the cover or lid positioning lip.

As illustrated in FIGS. 6 and 8 the said exposed surface of the cover or lid **16**, that is the lid-liner, lid-bar, **20**, is provided with a series of alternating hills and dales **70** into which any drainage from the glasses or other individual containers will drain so that the upper surface of the lid-bar is not overrunning and thereby cause or permit a drippage from the bottom of said glasses or other containers in transferring them from said lid or cover-bar surface.

The arrangement of the parts are such that an average beer glass or tumbler, as illustrated in FIG. 1 by dot and dash lines **71**, will be accommodated while to fill what is known as "pilsner" glass it will be necessary to drop the said cover or lid from its horizontal position in FIGS. 1 and 4 to the dot and dash position thereof in FIG. 4, and which second position is identified by the numeral **72**. In order to drop the said cover or lid **16** the supporting side straps **66** and **67** are each formed in two pieces with the adjacent ends of the pieces connected to one another through a well-known snap fastener **73** and whereby the said lid or cover may be readily arranged in either of its positions in said FIG. 4.

From the foregoing it is believed now evident that there has been provided a cooler for containers, such as kegs, in which beverages of the pressurized type, are contained for dispensing therefrom into glasses, or other separate containers, and otherwise accomplishes the objects initialy set forth.

What is claimed is:

1. In a device of the class described the combination of a cooler chest including a substantially rectangular bottom, opposed upstanding end walls, an upstanding front wall and an upstanding back wall from the bottom, each of said walls having its upper end flat and in a common plane forming a top wall around an opening to the interior of the chest, a movable cover for said chest engaging the chest top wall to close the chest opening and movable from said closed position on said chest top wall to an open position, said chest lying on its back wall when in operative position and with said cover removed, a separate container within said chest walls having a bottom on said chest bottom and a top below the chest top wall, said container having a controllable discharge from its top for discharging its content through the chest opening when the chest is disposed on its back wall and the cover in its open position, said chest end walls and the separate container walls having space between them, and means within said space including a refrigerant for maintaining the separate container and its contents in a cool condition while the contents of the container is being intermittently, controllably discharged.

2. In a device of the class described as set forth in claim **1** characterized by, and hinge means hingedly connecting the cover to the chest back wall whereby the cover may be moved from a closed position on the chest top wall to a position permitting full access through the chest opening.

3. In a device of the class described as set forth in claim **1** characterized by, hinge means hingedly connecting the cover to the chest back wall whereby the cover may be moved from a closed position on the chest top wall to a position permitting full access through the chest opening, and means limiting the movement of the cover from its closed position on the chest top wall to a position outwardly of the chest to be in the plane of the back wall when the chest is lying on its said back wall.

4. In a device of the class described as set forth in claim **1** characterized by, said cover when in closed position having a portion thereof in contact with the chest top wall, and means keying said chest top wall and cover contacting portion to one another to prevent leakage therebetween.

5. In a device of the class described as set forth in claim **1** characterized by, said cover when in closed position having a portion thereof in contact with the chest top wall, and means keying said chest top wall and cover contacting portion to one another to prevent leakage therebetween in the form of a tongue and a groove respectively projecting from one of the chest top wall and contacting portion of the cover and the other inwardly formed in the remaining one of said chest top wall and cover contacting portion.

6. In a device of the class described as set forth in claim **1** characterized by, said cooler chest and separate container having a common vertical axis when their bottoms are in contact and upstanding on the chest bottom and said chest having downwardly and inwardly inclined end, front and back walls whereby when said chest and separate container are lying on the chest back wall the said chest and separate container have their common axis inclined, and carrying means hingedly connected with the chest end walls disposed below the chest back wall to elevate said chest and separate container bottoms to dispose the axis of the separate container, at least, in a horizontal plane.

7. In a device of the class described as set forth in claim **1** characterized by, said cooler chest and separate container having a common vertical axis when their bottoms are in contact and upstanding on the chest bottom and said chest having downwardly and inwardly inclined end, front and back walls whereby when said chest and separate container are lying on the chest back wall the said chest and separate container have their common axis inclined, and carrying means hingedly connected with the chest end walls disposed below the chest back wall to elevate said chest and separate container bottoms to dispose the axis of the separate container, at least, in a horizontal plane, said carrying means in the form of a U-shaped bail handle including a carrying bar and attaching legs with the carrying bar beneath the chest back and the legs from the ends of the bar pivotally connected with the chest ends.

8. In a device of the class described as set forth in claim **1** characterized by, said space between the separate container and chest end walls is located on each side of said separate container and its opposed chest wall, and a refrigerant means in said space including a refillable bottle for refrigerating material with said bottle including a tightly closable opening for the refrigerant.

9. In a device of the class described as set forth in claim **1** characterized by, said space between the separate container and chest end walls is located on each side of said separate container and its opposed chest wall, and a refrigerant means in said space including a refillable bottle for refrigerating material with said bottle including a tightly closable opening for the refrigerant, and handle means on each bottle for removing and inserting the bottles in the space.

10. In a device of the class described as set forth in claim **1** characterized by, hinge means hingedly connecting the cover to the chest back wall whereby the cover may be moved from a closed position on the chest top wall to a position permitting full access through the chest opening, means limiting the movement of the cover from its closed position on the chest top wall to a position outwardly of the chest to be in the plane of the back wall when the chest is lying on its said back wall, thereby exposing the normal inner surface of said cover, and said exposed inner surface counter-sunk to provide a bar surface for individual receiving means fillable through the said separate container controllable discharge while within the cooler chest walls.

11. In a device of the class described as set forth in

claim 1 characterized by, hinge means hingedly connecting the cover to the chest back wall whereby the cover may be moved from a closed position on the chest top wall to a position permitting full access through the chest opening, means limiting the movement of the cover from the closed position on the chest top wall to a position outwardly of the chest to be in the plane of the back wall when the chest is lying on its said back wall, thereby exposing the normal inner surface of said cover, said exposed inner surface counter-sunk to provide a bar surface for individual receiving means fillable through the said inner container controllable discharge while within the cooler chest walls, and said bar surface having undercut portions whereby drainage will be beneath the said individual refillable members while on said cover supporting bar surface.

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