The present invention relates generally to a beverage dispensing system. More particularly, it relates to the adaptation of a chilled beverage dispensing system either to a home bar or to a portable "picnic" ice chest.

In recent years it has become increasingly popular to serve chilled beverages dispensed from bulk containers or tanks in the home as well as out of doors. This has proven to be a more economical as well as practical way in which to serve a large number of chilled beverage drinks, as it obviates the need for purchasing, handling and chilling large numbers of small bottle or can containers. Moreover, there is a degree of added charm in dispensing chilled beverages in the same manner as do commercial establishments.

Some people have gone to the great expense to have a built-in bar put in their homes. Very few, however, have gone to the considerably additional expense to incorporate in their home bars a system for dispensing chilled beverages from bulk containers, such as beer kegs, etc. Typically, these home bar setups require a considerable amount of space and thus require a reasonably large room to accommodate it.

Quite obviously, those living in leased quarters would not undertake the construction of such a home bar setup knowing that once they moved out they would either have to dismantle it or leave it behind.

For outdoor gatherings, such as picnics, chilled beverages are customarily served. Typically, in order to chill the beverages to a suitable temperature for drinking, a plurality of small beverage containers are placed in a container such as an ice chest, filled with ice. The problem of suitably chilling beverages dispensed from bulk containers can be particularly difficult one when out of doors. Quite obviously, ice in some form has to be used either to cool the bulk containers or to cool the beverage as it is drawn from the bulk container and dispensed through beverage taps. While it is generally much preferred to be able to dispense chilled beverages from bulk containers, dispensing apparatus which is sufficiently portable and convenient to use is not readily available.

Accordingly, it is an object of the present invention to provide a portable chilled beverage dispensing system.

An additional object is to provide a chilled beverage dispensing system of the above character which is readily implemented with means for chilling the beverage to be dispensed.

Another object is to provide a chilled beverage dispensing system of the above character for dispensing plural kind of beverages from different bulk containers.

Still another object is to provide a chilled beverage dispensing system of the above character which is compact, inexpensive, and simplified in design.

Other objects of the invention will in part be obvious and will in part appear hereinafter.

The invention accordingly comprises the features of construction, combinations of elements, and arrangement of parts which will be exemplified in the constructions hereinafter set forth, and the scope of the invention will be indicated in the claims.

For a fuller understanding of the nature and objects of the invention, reference should be had to the following detailed description taken in connection with the accompanying drawings in which:

FIGURE 1 is a perspective view of an embodiment of a beverage dispensing system constructed according to my invention and adapted to a home bar;

FIGURE 2 is a partial vertical sectional view showing the lid of the home bar of FIGURE 1 in the closed position;

FIGURE 3 is an enlarged perspective view of the drip tray shown in FIGURE 1;

FIGURE 4 is a perspective view of an embodiment of my invention adapted to a portable picnic ice chest; and

FIGURE 5 is a vertical sectional view showing the lid of the ice chest of FIGURE 4 in the closed position.

Corresponding reference numerals refer to corresponding parts throughout the several views of the drawings.

The adaptation of my invention to a home bar, generally indicated at 10, is shown in FIGURE 1. The home bar 10 may be adapted with wheels (not shown) to facilitate moving it about a room or from room to room as desired. It can be readily provided with various wood finishes and thus becomes an article of furniture suitable for homes, apartments, offices, etc. The home bar 10 is constructed having side walls 12, 14, a back wall 16, and a floor 18. Front doors 20 and 22, hinged to side walls 12 and 14, provide access to an enclosure 24 formed by walls 12, 14, and 16.

The upper section of the home bar 10 below the very top is constructed as a counter 25 having a flat working surface 26. Between the counter 25 and side wall 14 a recess 28 is provided to accommodate glassware. A recess 30 between the counter 25 and the back wall 16 may accommodate an assortment of bottled spirits. Adjacent the working surface 26, the counter 25 is cut out to receive a stainless steel basin 32 which, as will be described in connection with FIGURE 3, is filled with ice for the purpose of chilling beverages as dispensed.

The counter 25 is closed off by an L-shaped lid 34 which is hinged to a top portion 36 secured to the upper edges of the side walls 12, 14 and back wall 16. Brackets 38 and 40, fashioned at their ends to the side walls 12, 14 and to the underside of the lid 34, releasably lock the lid in a generally upright position as shown in FIGURE 1. Handles 42 secured to the front portion of the lid 34 facilitate manipulation of the lid.

According to an important feature of my invention, beverage taps 44 are mounted to the undersurface of the top portion of the lid 34. Thus, when the lid 34 is locked in the upright position as shown in FIGURE 1, the taps 44 are automatically properly oriented to dispense beverages. When the lid 34 is closed, as seen in FIGURE 2, the taps 44 are fully concealed. The taps 44 are mounted to the lid 34 at positions vertically above the basin 22 such that when the lid is closed the taps drop into the basin. This provides for a considerable saving in space, thus lending to a more compact construction.

As best seen in FIGURE 2, the taps 44 are mounted by a bracket 46 which is, in turn, secured to the undersurface of the lid 34. Lines 48 leading to the taps 44 pass through holes 49 in the bracket 48 and slide freely through holes 50 in a vertical partition member 52. Partition member 52 is secured between the top portion 36 and the counter 25. The lines 48 continue downwardly to where they are connected to the outlets of a cold plate 54 disposed in the bottom of the basin 32. The cold plate 54 is of conventional construction such as manufactured by Dunham-Bush Inc. of Marshalltown, Iowa. The bottom of the basin 32 is formed with a slot 56 to accommodate the downwardly extending inlet and outlet connections for the cold plate 54. The gap between the cold plate 54 and the sides of the basin 32 are filled with a suitable
Rephrasing to FIGURE 1, pressurized bulk beverage containers 60 are disposed in the enclosure 24. The containers 60 may contain different types of beverages to be separately dispensed from the several taps 44. Lines 62 from each of the containers 60 convey the beverage to the inlets of the cold plate 54. Conduits (not shown) connecting corresponding inlets and outlets are arranged in tortuous paths within the cold plate 54 to bring the beverages conveyed therethrough into optimum heat transfer relationship with the ice (not shown) in the basin 32 for adequate cooling. To force the beverages from the containers 60 through lines 62, the cold plate 34, lines 48 and out the respective taps 44, the containers may be self-pressurized or pressurized from an external source, not shown.

A drip tray 64, seen in FIGURES 1 and 3, is detachably mounted to the lower front of the bracket 46 beneath the taps 44. A pair of projections 66 extending from the lower front corners of the bracket 46 are fitted with conventional bullet catches 68. The drip tray 64 is detachably mounted in place between the projections 66 with the bullet catches 68 projecting into holes 70 drilled in the upper corners of the drip tray. The bullet catches 68 depress against springs (not shown) to provide clearance between the projections 66 for attachment and detachment of the drip tray 64. Once the drip tray 64 is attached, its back engages the lower front portion of the bracket 46 so as to maintain it in a substantially horizontal orientation. When the lid 34 is closed, the drip tray 64 swings downwardly about bullet catches 68 to the position shown in FIGURE 2.

As best seen in FIGURE 3, a grate 72 is placed in the bottom of the drip tray 64 to space glasses from the bottom of the drip tray while being filled from the taps 44. A tube 74 having one end fitted into a hole 75 drilled in the bottom of the drip tray 64 carries away spillage. The other end of the tube 74, as best seen in FIGURE 2, extends through a hole 76 drilled in the cold plate 54 and the bottom of the basin 32. This end of the tube 74 is anchored in a fitting 77 engaged in the bottom of the hole 76. Another tube 78 with one end applied over the fitting 77 carries the spillage from the drip tray 64 to a container (not shown) placed in the enclosure 24.

The hole 76 is made somewhat larger than the tube 75 which extends therethrough such that ice water from the melting ice in the basin 32 may be also carried off by the tube 78. To facilitate the disposal of ice water, the cold plate 54 is provided at one end by a shin 79 (FIGURE 2) so that the ice water will readily drain through hole 76.

In the embodiment of my invention disclosed in FIGURES 4 and 5, the beverage taps are mounted to the underside of a closure lid 80 for a picnic ice chest 82. The cold plate 54 is placed in the bottom of the ice chest 82. Lines 48 connect the individual taps 44 to the outlets 81 of the cold plate. Lines 62 connect the pressurized beverage containers 60 to the inlets 83 of the cold plate 54. The ice chest is filled with ice (not shown) to chill the beverages drawn from the containers 60 and dispensed from the taps 44. Brackets 38 and 40 releasably lock the lid 80 in the upright position when the taps 44 are in use.

As seen in FIGURE 5, when the lid 80 is swung downwardly about hinges 84 to close the ice chest 82, the taps are concealed within and are protected during transport.

The ice chest 82 may be of conventional construction having an outer metallic shell 86 and preformed inserts 88 of insulating material in the lid and body. The bracket 46 for mounting the taps 44 to the underside of the lid 86 is formed with flanged inner edges 90 embedded in the lid insert 88.

It will be appreciated that the lines 62 may be passed through a side wall of the ice chest 82 rather than over the top of the side walls as shown in FIGURE 4. When the lid 80 is closed, the lines 62 are disconnected from the containers 60 and carried inside the ice chest. If the containers 60 are not too large they may also be placed inside the ice chest 82 for transport to and from the location of use.

The invention accordingly comprises the features of construction, combinations of elements, and arrangement of parts which will be exemplified in the constructions hereinafter set forth, and the scope of the invention will be indicated in the claims.

It is also to be understood that the following claims are intended to cover all of the generic and specific features of the invention herein described, and all statements of the scope of the invention, which, as a matter of language, might be said to fall therebetw een.

Having described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A system for dispensing a beverage from a bulk container, said system comprising, in combination:
   (A) a container for holding a quantity of ice;
   (B) a heat exchanger disposed in said ice container in contact with said ice;
   (C) a closure member
      (1) mounted for movement between an open position and a closed position covering the opening of said ice container;
   (D) a beverage dispensing tap mounted on the inner side of said closure member and movable therewith, said tap
      (1) being disposed in beverage dispensing position when said closure member is in said open position, and
      (2) received in the opening of said ice container when said closure member is in said closed position; and
   (E) conduits for conveying the beverage from the bulk container through said heat exchanger to be chilled and then to said tap for dispensing.

2. The system defined in claim 1 wherein there are plural taps mounted to the inner side of said closure member and plural conduits for conveying beverages from plural bulk containers through said heat exchanger and to said plural taps.

3. The system defined in claim 2 wherein said closure member assumes a substantially upright position when open and a substantially horizontal position when closed.

4. The system defined in claim 3 which further includes
   (F) bracket means for releasably retaining said closure member in said substantially upright open position.

5. The system defined in claim 4 wherein
   (1) said container is an insulated portable ice chest, and
   (2) said closure member is a lid for said ice chest,
   (3) said taps being mounted to the underside of said lid and fully received within the interior of said ice chest when said lid is closed.

6. The apparatus for dispensing beverages from a bulk container, said apparatus comprising, in combination:
   (A) a cabinet;
   (B) a container mounted in said cabinet below the top thereof;
   (C) a lid hinged to said cabinet, said lid
      (1) being swingable between a generally upright open position and a generally horizontal closed position concealing said counter;
   (D) a basin recessed in said cabinet, said basin
      (1) adapted to hold a quantity of ice;
      (E) a heat exchanger disposed in the bottom of said basin in contact with said ice; and
   (F) a beverage dispensing tap mounted to the underside of said lid and movable therewith, said tap
5 (I) being automatically disposed in dispensing position when said lid is in said open position, and
(2) at least partially received in said basin when said lid is in said closed position; and
(G) conduits for conveying a beverage from the bulk container disposed in said cabinet beneath said counter through said heat exchanger to be chilled and then to said tap for dispensing.

7. The apparatus defined in claim 6 wherein there are plural taps mounted to the underside of said lid, and plural conduits for conveying various kinds of beverages from plural bulk containers disposed in said cabinet below said counter through said heat exchanger and then to said plural taps.

8. The apparatus defined in claim 7 which further includes
(H) bracket means for releasably locking said lid in said generally upright open position.

9. The apparatus defined in claim 8 which further includes
(I) second bracket means for mounting said taps to the underside of said lid;
(J) a drip tray detachably pivotally mounted to said second bracket means beneath said taps; and
(K) a tube communicating with a drain hole formed in the bottom of said drip tray so as to convey away spillage accumulated in said drip tray.

10. The apparatus defined in claim 9 which further includes
(L) means forming a second drain hole through said heat exchanger and the bottom of said basin, said second drain hole accommodating the lower end of said tube; and
(M) a second tube communicating with said second drain hole so as to convey away spillage accumulated in said drip tray and ice water accumulated in said basin.

11. The apparatus defined in claim 10 wherein the gaps between the edges of said heat exchanger and the sides of said basin are filled with caulking.

12. The apparatus defined in claim 11 wherein said heat exchanger is inclined, as disposed in the bottom of said basin whereby to facilitate drainage of ice water through said second drain hole.

References Cited
UNITED STATES PATENTS
1,772,111 8/1930 Rice -------------- 222—146
3,180,529 4/1965 Buffington -------------- 222—146
3,195,779 7/1965 Nicko ------------------ 222—146

ROBERT B. REEVES, Primary Examiner.
HADD S. LANE, Examiner.