

July 16, 1935.

F. C. ARMBRUSTER

2,008,121

PORTABLE BEVERAGE DISPENSER

Filed Feb. 14, 1933

Fig. 1.

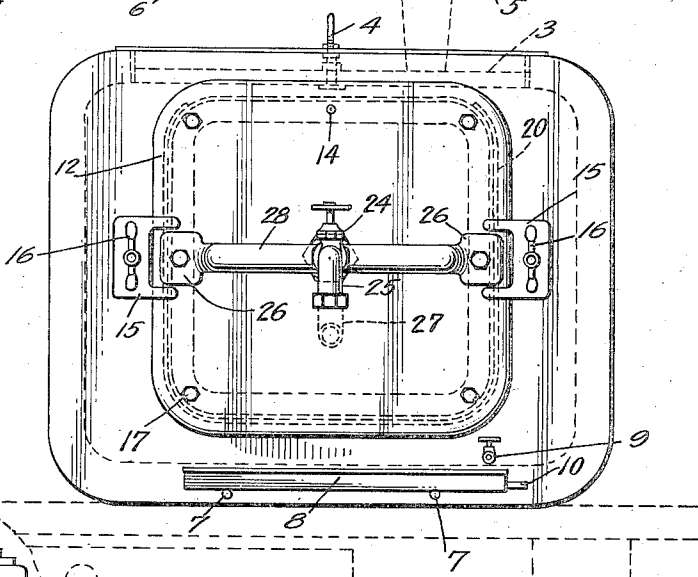
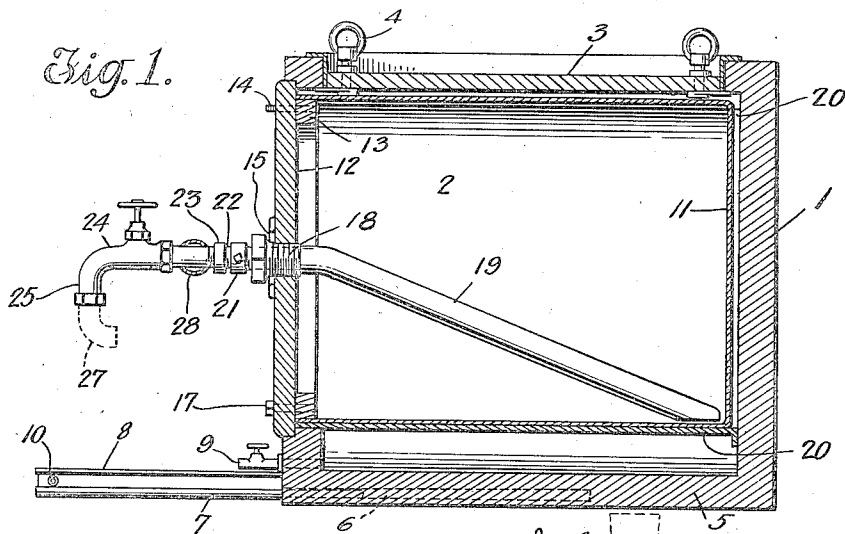


Fig. 3.

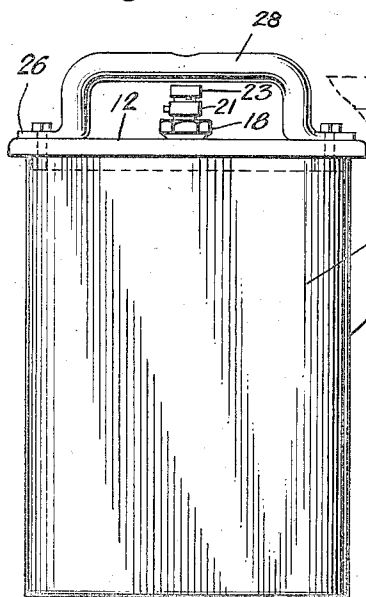


Fig. 2.

Inventor

FRED C. ARMBRUSTER.

By

Alfred E. Stearns

Attorney.

UNITED STATES PATENT OFFICE

2,008,121

PORTABLE BEVERAGE DISPENSER

Fred C. Armbruster, Rochester, N. Y.

Application February 14, 1933, Serial No. 656,739

9 Claims. (Cl. 225—40)

This invention relates to improved means for the convenient handling, in trade, of beverages, for example, beer, and also provides improved and novel means for the dispensing of such a beverage in the home, or in a cafe where the beverage is to be served and consumed. The invention therefore relates to an improved form of container suitable for the shipment and distribution of beverage liquids in trade, and such container is constructed and intended for use in conjunction with a portable refrigerator unit or cooler, into which the container may be inserted and secured or retained during the time that the beverage is being chilled, and then served or dispensed for consumption purposes.

It is proposed, in the practice of this invention, that the customer or consumer will be furnished with the refrigerating or cooling unit, and that such customer will purchase the beverage conditioned upon its delivery to him in containers which are constructed as herein disclosed, and which containers are designed to fit snugly within the cooling unit, and to be detachably retained therein in such a manner that the combined structure comprises a convenient and portable dispensing outfit which occupies only a small space and can therefore be easily moved about, for example, from one room to another as the occasion may require. The combined unit may be made of different sizes and capacities, depending on the intended use, that is, for home or cafe; and it is also intended that the improved container of this invention may be used as a dispensing unit in connection with other types of refrigerating or cooling means than the specific construction of cooler herein disclosed.

In the past, beverage liquids, and notable fermented beverages such as beer, have been shipped and handled in trade either in wooden kegs, or in bottles arranged in cases. Both known forms of containers are subject to objections which detract from their usefulness. Kegs as well as bottles are difficult to clean and maintain in sanitary condition; and in dispensing from a keg it is generally necessary to provide permanent pipe connections and valves, the cleaning and maintenance of which in a cleanly and sanitary condition present practical difficulties. To overcome these objections, the present invention seeks to provide a new kind of container of such size and weight as can be conveniently handled in shipping and having a form and closure which admits of easy access to the entire interior surfaces for thorough and complete cleansing. The container, as well as the cooler unit, admit of

inexpensive manufacture, and their joint use in the home provide a convenient dispensing device not heretofore provided or known. Other conspicuous advantages and objects of this invention will be apparent from the following specification which describes an embodiment of the invention which is illustrated in the accompanying drawing.

Referring to the drawing,

Fig. 1 is a vertical section of the portable beverage dispensing device;

Fig. 2 is a front elevation of the assembled devices supported on one corner of a kitchen table; and

Fig. 3 is a side elevation of the beverage container.

The portable cooler consists of a cabinet 1, the walls of which are provided with or constructed of heat insulating material as well known in the art. The cabinet 1 is provided with an inner compartment having an open end for the insertion of the beverage tank 2. The top of the cabinet 1 is provided with a relatively large opening for the admission of crushed ice or other refrigerating medium into the space between the partition 20 which defines the inner compartment and the inner walls of cabinet 1. The opening in the top of the cabinet is normally closed by a removable tray 3 which is provided with lifting handles 4 the latter also operating lock catches for securing the tray in cabinet top opening.

The beverage container 2 comprises a substantially rectangular tank 11, provided with a detachable closure 12. The body of the container is preferably made from heavy gauge sheet metal. The interior surfaces of the tank may be suitably coated with a material which is chemically inert to fermented beverage and the like. A reinforcing ring member 13 is secured to the edges of the open end of the tank 11 by welding or other means. The closure 12 is preferably formed of some heat insulating composition material, for example, bakelite, and is removably secured to the ring member 13 by the bolts 17. Thus the tank 11, with closure 12 applied, forms a closed beverage package which may be easily cleaned and maintained in a sanitary condition.

The cabinet 1 is provided internally with an inner partition or wall member 20 which surrounds the bottom and sides of the beverage tank 2 when the latter is inserted in the cabinet. This partition excludes ice from the tank space when the tank is withdrawn from the cabinet and therefore permits a tank to be easily inserted into the cabinet. The partition also provides partial

support for the inner end of the beverage tank. The partition is secured in any appropriate way to the inner walls of the cabinet.

The bottom wall 5 of the cabinet is provided with a plurality of tubular chambers or recesses 6 which serve as housings for rods 7 which are slidably positioned in the chambers. When the dispensing unit is to be used, the rods 7 are partially withdrawn from the housings 6 and in their extended position provide support for a drip tray 8. The rods 7 may be provided with suitable friction surfaces or stops to retain them either in the extended or in the closed position. The cabinet 1 is also provided with a drain cock 9 for the removal of water from the interior of the cabinet when ice is used as the cooling medium. Likewise the drip tray 8 is provided with a hose nipple 10 for conducting away spilled beverage.

The beverage package 2 is rigidly clamped within the cabinet 1 by means of the clamps 15 and wing nuts 16 which are threaded on studs projecting from the cabinet wall. The clamps engage the lateral edges of closure 12.

The closure 12 is provided with a central opening in which a pipe coupling 18 is rigidly secured. A tube 19 is positioned within the tank with one end rigidly secured to the coupling 18 or to the closure about the coupling by soldering or equivalent means. The inner end of the tube 19 is positioned near the bottom of the tank 11 at the side opposite the tank closure 12. The inner end of the tube 19 is open for the entrance or exit of the beverage.

A nipple 20 is secured to the coupling member 18 and positioned outside the tank closure. A stop cock 21 is secured to this nipple, and serves to close and seal the outer end of the tube 19 when the package or container has been fitted. A second nipple 22 is secured to the outer side of the stop cock and a fitting 23 is attached to the latter nipple 22. This fitting 23 is adjacent an opening through the handle 28. The fitting 23 is provided with internal threads for engaging external threads on a faucet or tap 24 provided with a spout 25 at right angles to the axis of the passage through coupling 18, nipple 20, stop cock 21, nipple 22 and fitting 23. Thus a controlled passage is provided through which the beverage is dispensed.

The handle 28 is provided at either end with offset supporting flanges 26 which are rigidly fastened to the closure 12. A valved coupling 14 in communication with the interior of the tank 2 and the atmosphere is also secured in the closure 12. This valve may be operated to relieve pressure in the tank while filling or to admit fluid pressure for charging the contents of the tank.

My improved beverage dispensing unit is operated as follows: The beverage package 2 which has been partially or completely filled with a beverage and preferably charged with a fluid under pressure by the beverage manufacturer, is inserted in the cabinet and securely clamped therein. A refrigerating medium, for example, crushed ice, is then introduced into the cabinet through the opening uncovered by removal of the tray 3 and is packed into the space between the beverage tank partition and the inner walls of the cabinet. The tray is then replaced on the top of the cabinet. Next, a closed faucet or tap is screwed through the handle 28 into the fitting 23 and the stop cock 21 is opened. After extending the rods 7 and placing a drip tray thereon, the unit is

ready for service. When the faucet or tap is opened, the pressure of the charged beverage within the tank forces beverage to flow from the tank through the tube 19 and accompanying fittings in the quantity desired.

When the tank is empty it may be quickly and easily replaced by another charged beverage package. These beverage packages may be of such size as to contain a volume equal to that contained in a case or more of bottled beverage. Larger sized units are well adapted for use in cafes. The beverage package is provided with a convenient handle which facilitates its handling in distribution to the trade. This handle enables carrying the beverage package alone or carrying the complete refrigerated dispensing device when the package is inserted and secured in the cooling unit or cabinet.

Besides use in combination with the herein disclosed refrigerating cabinet, the beverage package may be used without said cabinet. The package may be inserted in the ordinary household refrigerator for cooling the beverage when a cooled portable dispensing unit is not available. The package may also be used in an upright position as shown in Fig. 3 of the drawing. In such case, an elbow fitting 27 as shown dotted in Figs. 1 and 2 may be attached to the spout 24 of the faucet 23 to direct the flow of beverage downward into a glass or other dispensing receptacle.

It will also be apparent that the cooling cabinet 1 may be equipped with known means, other than ice, for cooling or refrigerating the contents of the removable package receptacle. Thus, cooling coils for connection with household or other mechanical refrigerating machines may be installed within the cabinet space and positioned adjacent the side walls or partitions 29 which define the open-ended compartment of the cabinet. Preferably, such cooling coils should be removably associated with the cabinet, and for this purpose may be conveniently supported from the removable tray 3 which closes the top of the cabinet, and in which tray the fittings necessary for operatively connecting the coil or coils to a mechanical refrigerating system may be installed.

The complete beverage dispensing unit is well adapted for use as a portable bar in the home of the consumer. It may easily be carried from room to room and set up where desired. The trays provide for catching all drip and also provide a place for storing drinking glasses. The use of a sealed beverage package supplied by the beverage manufacturer obviates the necessity for the consumer to clean and refill the beverage container and dispensing fittings.

Having now described my invention, what I claim as new is:

1. A portable beverage dispensing device comprising a refrigerating cabinet and a sealed beverage package detachably secured therein, the said package being insertable and removable from said cabinet as a sealed unit, the said cabinet having an open ended compartment of shape and size to accommodate the said package, the said package having secured thereto an end closure which also forms a closure for the said compartment, and securing means mounted on the cabinet for engaging the package and retaining it within the cabinet with the package end wall effectively sealing the open end of the cabinet compartment.

2. A portable beverage dispensing device comprising a refrigerating cabinet and a sealed beverage package detachably secured therein, the

said package being insertable and removable from said cabinet as a sealed unit, the said cabinet having an open ended compartment of shape and size to accommodate the said package, the said package having secured thereto an end closure which also forms a closure for the said compartment, and a valved outlet fitting carried by said closure for dispensing the package contents.

3. A portable beverage dispensing device comprising a refrigerating cabinet and a sealed beverage package detachably secured therein, the said package being insertable and removable from said cabinet as a sealed unit, the said cabinet having an open ended compartment of shape and size to accommodate the said package, the said package having secured thereto an end closure which also forms a closure for the said compartment, a valved outlet fitting for dispensing the package contents carried by said closure, and a carrying handle mounted upon the closure of the package for handling the said device as a unit.

4. A portable beverage dispensing device comprising a refrigerating cabinet and a sealed beverage package detachably secured therein, the said cabinet having an open ended compartment of shape and size to accommodate the said package, the said package being provided with an end closure which also forms a closure for the said compartment, securing means mounted on the cabinet for engaging the package and retaining it within the cabinet with the package end wall effectively sealing the open end of the cabinet compartment, and a tray detachably fastened to said cabinet and forming a closure for an opening in the top of said cabinet.

5. A portable beverage dispensing device comprising a refrigerating cabinet and a sealed beverage package detachably secured therein, the said cabinet having an open ended compartment of shape and size to accommodate the said pack-

age, the said package being provided with an end closure which also forms a closure for the said compartment, a valved outlet fitting carried by said closure for dispensing the package contents, and a drip tray positioned beneath said fitting and removably supported upon rods which extend from and are adapted to slide in rod housings provided in the base of the cabinet.

6. In a beverage dispensing unit, a beverage container to be received therein comprising a tank having an open end, a closure member for said end, a handle secured to said member, and a beverage dispensing fitting passing through said handle.

7. In a beverage dispensing unit, a beverage container to be received therein comprising a metal tank having an open end, a closure member of heat insulating material for and secured to said end, handling means secured to said member, and a beverage dispensing fitting secured in said closure, the said beverage container being insertable and removable from said unit as a sealed tank.

8. In a beverage dispensing unit, a beverage container to be received therein comprising a tank having an open end, a closure member for said end, handling means secured to said member, a beverage dispensing fitting passing through said handle, and a second valved fitting in said closure member.

9. In a beverage dispensing unit, a sealed beverage package to be received therein comprising a metal tank open at one end, a reinforcing ring secured to the open end of said tank, a closure member of heat insulating material for said open end, said closure being detachably secured to said ring, a valved dispensing fitting secured in said closure, and a second valved fitting in said closure, the said sealed beverage package being insertable and removable from said unit.

FRED C. ARMBRUSTER.