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BEVERAGE COOLER, MIXER, AND DISPENSER

Filed Sept. 18, 1925

FIG. 1.

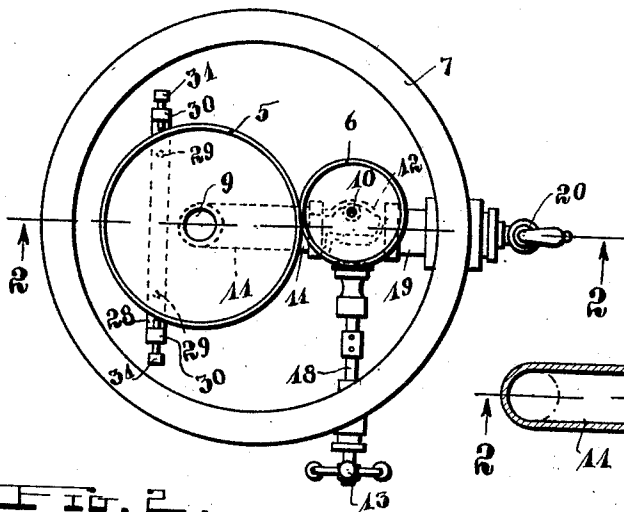


FIG. 2.

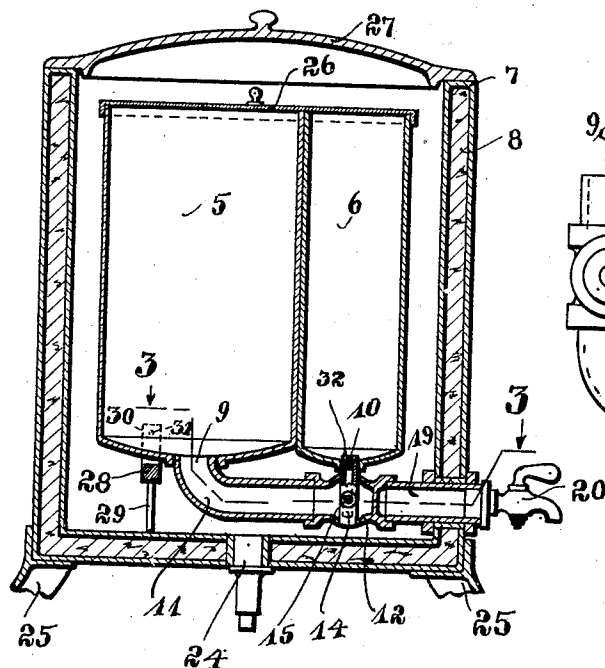


FIG. 3.

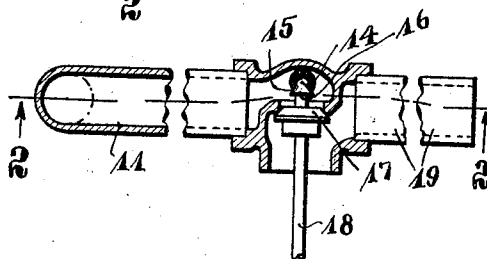
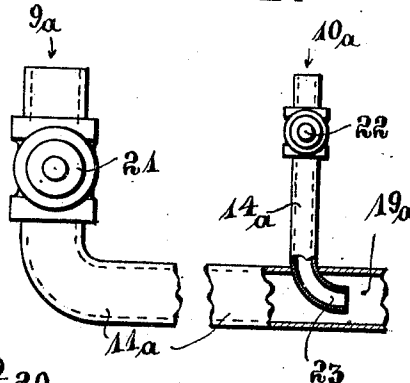


FIG. 4.



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BEVERAGE COOLER, MIXER, AND DISPENSER.

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This invention relates to devices used for dispensing beverages for immediate use.

One of the objects of this invention is to provide a dispenser with an automatic mixer, to operate as liquid is drawn from the device.

Another object is to provide containers of different volumes for different liquids to be mixed by the dispenser.

Another object is to provide a communication between the different containers, and controlling means between the containers whereby the communication may be checked.

Another object is to provide means whereby the different containers are held so as to bring the different liquids in a common level from the top to the bottom, to facilitate an even mixing throughout the dispensing.

Another object is to provide a dispensing outlet in connection with the mixing communication.

Other objects will appear from the following description and appended claims as well as from the accompanying drawing, in which—

Fig. 1 is a top plan view of a cooler with inserted containers and required controlling means of a simple form embodying this invention.

Fig. 2 is a vertical midsectional view taken on line 2—2 of Fig. 1, leg-members being broken off, and having a lid over the top of the cooler and a separate lid or cover over the two adjacent containers.

Fig. 3 is a fragmentary slightly enlarged horizontal section through the controlling means for the containers, taken on line 3—3 of Fig. 2, the dispensing faucet and the handle and bushing of the controlling valve being omitted.

Fig. 4 is a fragmentary vertical midsectional view of a slightly modified form of controlling means, having separate shut-off valves for the different containers.

In dispensing beverages, it has become customary to use juice or flavoring of somewhat condensed form to be diluted or mixed with another liquid or medium, usually water.

Since the juice, or flavoring, or like basic matter is commonly of a known strength, it remains merely a matter of deciding upon the proportion in which this basic matter is to be dispensed within a drink. Whether

the diluting medium is water or of any other substance is immaterial, the volume of such a diluting medium can readily be proportioned to the volume of the basic matter to always result in a desired drink.

To dispense a certain mixture of a drink is then really a matter of providing containers to hold the required volume or amount of each of the different liquids or other matter to be used in the mixture.

Any number of containers according to the number of different liquids or ingredients to be used in a drink may be provided. In the drawings, in Figs. 1 and 2, two containers 5 and 6 are provided, but it must be understood that this invention is not limited to this exact number of containers and may be modified and varied in agreement with the above.

Making use of the well-known principle that liquids in interconnected containers placed side by side will maintain a common level, the different containers in the dispenser embodying this invention are preferably made of an equal height, as illustrated in Fig. 2, while differing in the horizontal cross sectional area, as illustrated in Fig. 1, so that a draining of the different containers will result in a proportionate discharge of the different ingredients held in the containers and thereby in a proportionate mixture from the different ingredients as to volume, due to the equalizing tendencies in such interconnected containers.

To facilitate a dispensing of beverages in a desirably cool state, the containers are preferably mounted within a cooler 7. The cooler is made of hollow structure, enclosing granulated cork or the like insulating material, to insure an economic maintainance in the cooling of the whole device.

The containers 5 and 6 are provided with outlet openings 9 and 10 in the bottom, interconnected by a communicating tube 11.

In the form as illustrated in Figs. 1 and 2, a common control valve for both containers is provided, as indicated at 12, operative by a common handle member indicated at 13 in Fig. 1. A comparatively small tubular connection 14 from the smaller container 6 terminates within the control valve 12. This tube 14 is provided with an opening finished in form of a valve-seat 15, as illustrated more clearly in the cross and

horizontal section of Fig. 3. A suitable valve 16 is provided on the front end of the main valve 17, so that the outlet from the container 6 can be closed simultaneously with the closing of the main valve 17 by the stem 18.

A closing of the control valve 12 shuts off the communication of the containers with the large common discharge tube 19. The valve-housing and the discharge tube 19 are preferably of comparatively large size to form a mixing chamber for a suitable volume of the beverage preparatory to being dispensed by the discharging faucet 20.

In the slightly modified form illustrated in Fig. 4, separate valves 21 and 22 are provided for the different containers to connect with the containers at 9_a and 10_a, the smaller tube 14_a being provided with a bent portion 23 terminating within the communicating tube 11_a in the direction of the mixing chamber 19_a within the discharging tube, the latter being in this modified form merely the termination of the communicating tube 11_a.

To keep the beverage cool, the containers are preferably packed in ice surrounding the containers within the cooler 7. For draining the waste water from the ice chamber of the cooler, a drain 24 is provided as illustrated in Fig. 2.

Any desirable support may be provided for the cooler, leg-portions being indicated at 25 in Fig. 2, but other means or structures may be substituted for this.

Over the top of the several containers within the cooler, a lid 26 is provided to keep the beverage clean and sanitary, while a main cover 27 allows a replenishing of ice around the closed containers within the cooler.

As illustrated in the drawing, the containers being merely placed on top of the communicating and discharging tubes, a special support is provided under the furthest end of the containers. The cross bar 28 with the uprights 30 is provided with leg-portions 29. Set-screws 31 serve to clamp this support to one of the containers, so that the whole weight of the containers is not entirely resting on the tube discharging connection within the walls of the cooler.

With the arrangement described above, the containers can easily be removed and replaced from the ends of the tubes 11 and 14, and smaller or larger containers can be used or applied to the ends of the tubes 11 and 14, to facilitate a desired proportioning in the dispensed mixture in conjunction with the operation of the control valves.

By providing the small removable and exchangeable plugs 32, indicated in Fig. 2, the outlet orifice of one or more of the containers can be made of different size, to eliminate or avoid any undesired or even

unexpected variations in the discharge of the contents which might eventually be due to the various consistencies of the different ingredients.

Having thus described my invention, I claim:—

1. In a dispenser, containers of different cross-sectional areas interconnected by a common discharging means adapted to allow a mixing of different ingredients from the containers in a desired proportion.

2. In a dispenser, containers of equal height but different volumes interconnected by a common discharging means adapted to cause a drawing of different ingredients from the containers in desired proportion due to the tendency of liquid in interconnected containers to automatically assume and maintain a common level.

3. In a dispenser, containers of equal height but different volumes, communicating means between the containers arranged so that different amounts of liquids may be drawn from the containers due to the equalizing of the liquids to a common level, dispensing means, and controlling means between the containers and the dispensing means.

4. In a dispenser, containers of different cross-sectional areas interconnected by a common discharging means adapted to allow a mixing and drawing of different ingredients from the containers in proportion to such different cross-sectional areas, and a cooler enclosing the interconnected containers.

5. In a dispenser, containers of different cross-sectional areas interconnected by a common discharging means adapted to allow a mixing and drawing of different ingredients from the containers in proportion to such different cross-sectional areas, and controlling means for the individual containers to facilitate a proportioning and adapted to allow a shutting-off of the containers from the common discharging means when the dispenser is not in continuous use.

6. In a dispenser, containers of different cross-sectional areas interconnected by a common discharging means adapted to allow a mixing and drawing of different ingredients from the containers in proportion to such different cross-sectional areas, controlling means for the individual containers to facilitate a proportioning and adapted to allow a shutting-off of the containers from the common discharging means when the dispenser is not in continuous use, and a main dispensing valve at the termination of the common discharging means.

7. In a dispenser, containers of different cross-sectional areas interconnected by a common discharging means adapted to allow a mixing and drawing of different ingredients from the containers in proportion to

such different cross-sectional areas, the containers having individual outlets including exchangeable proportioning means, a main dispensing valve, and individual controlling means for the containers at points between said main valve and said proportioning means adapted to allow a shutting-off of the containers from the common discharging means when the dispenser is not in continuous use. 10

In testimony that I claim the foregoing as my invention I have signed my name.

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