This invention relates to a displaying and dispensing apparatus for beverages, such apparatus being of the type which displays a continuous stream or fountain of the beverage while affording means for dispensing the beverage directly from a cooled container.

The invention furthermore comprehends a novel valve construction which is connected with a source of beverage supply in a cooled container for constantly feeding to a fountain or display stream, a uniform quantity of beverage irrespective of whether the valve is in a dispensing or non-dispensing position with respect to a dispensing nozzle.

One of the principal objects in view is to provide a combined displaying and dispensing apparatus for beverages, which avoids unnecessary increase in temperature of the cooled beverage by the portion which is used for the display stream or fountain.

Other objects reside in the comparative simplicity of construction of the apparatus, the economy with which the same may be produced, and the general efficiency derived therefrom.

With the above recited and other objects in view, reference is had to the following description and accompanying drawings in which there is exhibited one example or embodiment of the invention, while the appended claims define the actual scope of the invention.

In the drawings—

Figure 1 is a vertical sectional view through the displaying and dispensing apparatus;

Fig. 2 is an enlarged sectional view of the valve taken approximately on the line 2—2 of Fig. 1, and illustrating the valve in a position for dispensing the beverage through the outlet nozzle;

Fig. 3 is a similar view illustrating the valve in a non-dispensing position.

Referring to the drawings by characters of reference, 10 designates a receptacle or container for a liquid beverage which may be cooled in any suitable manner, such as by placing the receptacle in a vessel 11 supplied with ice or by any suitable cooling or refrigerating means. The container or receptacle 10 together with the vessel 11, is preferably installed under a suitable counter 13 upon which the base 14 of the display and dispensing mechanism is arranged. The base 14 supports a bowl 15 having a depending neck 16 which is seated in a tubular supporting member 17 having an outlet nozzle 18 at its lower end. The outlet nozzle 18 is connected by a pipe or conduit 19 leading to the receptacle or container 10. The bowl 15 has projecting upwardly therethrough an overflow pipe 20, the upper open end of which maintains a suitable level of the beverage within the bowl, while the lower open end thereof communicates with and permits the drainage of the overflow outwardly through the outlet nozzle 18 and pipe 19 to return to the container or receptacle 10. The upper end of the bowl is covered by a transparent inverted cup-shaped element 21. If desired, the bowl and element 21 may be enclosed by a second larger inverted cup-shaped transparent element 22 which will positively exclude dust, dirt or other foreign matter from gaining access to the interior, and which will further serve to insulate the beverage being displayed from the temperature of the room or outer atmosphere. If desired, the bowl 15 and member 21 may be made in one piece or substantially in the form of a bottle. Leading from a point adjacent the bottom of the receptacle or container 10 is a supply pipe 23 which extends upwardly and connects with a suitable pump 24. The pump outlet has leading therefrom a pipe 25 which connects with the inlet port 26 of a valve 27. The valve 27 is provided with a circular bore 28 in which a core 29 is rotatably mounted. The core is provided with radially disposed ports, 30 and 31, the former being of greater size than the latter. The valve 27 is provided with an outlet port 32 with which a dispensing nozzle 33 communicates, and with a fountain or display stream port 34 and a beverage return port 35. From the fountain or display stream port 34 a pipe 36 leads into and upwardly through the neck 16 and overflow pipe 20 slightly above the upper end of said overflow pipe. From the beverage return port 35, a pipe 37 leads through and into the discharge nozzle 18. The valve core 29 is provided with a manipulating handle 38.

In use and operation, the valve core is limited to a movement from the position illustrated in Fig. 2 to the position illustrated in Fig. 3, and vice versa. When in the position illustrated in Fig. 2, the enlarged port 30 of the valve core establishes communication between the beverage supply pipe 25 and the fountain or display stream pipe 36, due to the fact that the ports
26 and 34 are in communication. At the same time, the smaller port 31 is in communication with the dispensing nozzle port 32 to dispense the beverage into a glass or drinking vessel 39. In this position it will be observed that the supply of beverage to the return pipe 37 through the beverage return port 35 is closed.

When the valve core 29 is in the position illustrated in Fig. 3, the enlarged port 30 of the valve core establishes communication between the valve ports 26, 34 and 35, while the valve core port 31 is out of communication with the dispensing nozzle port 32. In this position the beverage supply in excess of the fountain or display stream supply, is returned to the container or receptacle 10, through the pipe 37 and the pipe 19 without being led into the display apparatus. It thus follows that the beverage display apparatus is not affected by the dispensing operation so that the fountain or display stream maintains a uniform appearance. It will be further noted that the beverage which is dispensed is always drawn directly from the supply in the cooled container or receptacle 10, insuring to the purchaser a cool drink.

What is claimed is:

1. A displaying and dispensing apparatus for beverages, including a display fountain, a dispensing nozzle, a valve connected with a source of beverage supply and through which the beverage is constantly fed to the fountain, and a common return connected with the valve and the fountain overflow.

2. A displaying and dispensing apparatus for beverages, including a display fountain, a dispensing nozzle and a valve connected to a source of beverage supply through which the beverage is constantly fed to the fountain and by means of which the beverage is selectively fed to the dispensing nozzle or returned to the source of supply, without affecting the uniform appearance of the fountain.

3. In a displaying and dispensing apparatus for beverages, a beverage reservoir, a valve having an inlet connected with the reservoir and an outlet connected with the reservoir, means for supplying the beverage under pressure to the valve inlet, a dispensing nozzle on said valve, a supply leading from said valve to the display fountain, and a valve core movable in the valve for selectively feeding the beverage to the nozzle or to the return leading to the source of supply, whereby the appearance of the fountain is unaffected by dispensing of the beverage through the dispensing nozzle.

4. In a displaying and dispensing apparatus for beverages, including a beverage reservoir, a beverage dispensing nozzle and a beverage displaying fountain, a valve for selectively feeding the beverage through the dispensing nozzle or returning the same to the reservoir without affecting the beverage supplied to the display fountain, said valve comprising a casing having circumferentially spaced beverage inlet, dispensing, fountain supply, and return ports, and a core having angular large and small ports constantly establishing communication between the inlet and fountain supply ports and selectively establishing communication between the dispensing and return ports.

5. In a beverage dispensing and displaying apparatus, a reservoir, a transparent vessel for displaying a beverage stream, a dispensing valve having inlet, display feed, dispensing and return ports, means for continuously supplying beverage under pressure to the valve inlet port, and a ported valve core in said valve movable to positions for respectively dispensing a portion of the beverage and for returning said portion to the reservoir while constantly feeding a uniform portion to the transparent display vessel.

6. A valve including a casing having an inlet port and three outlet ports, the outlet ports being approximately one-half the capacity of the inlet port, and a core having a pair of radially disposed ports of a size to establish communication between the inlet port and two of the outlets, the other port being of a size to establish communication with the remaining outlet, said core being movable to positions for respectively opening and closing one of the first-mentioned outlet ports while obtaining a reverse condition of the last-mentioned outlet port simultaneously with the establishment of communication between the inlet port and the other of the first-mentioned outlet ports.

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