No. 755,723. PATENTED MAR. 29, 1904.

V. S. TAYLOR.

LIQUID DISPENSING APPARATUS.

APPLICATION FILED JULY 18, 1903.

NO MODEL. 3 SHEETS—SHEET 1.

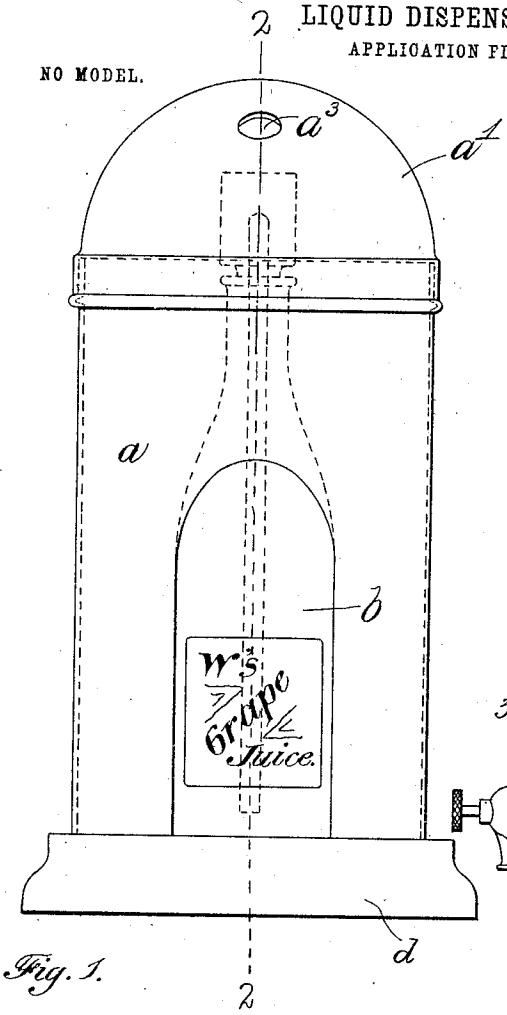


Fig. 1.

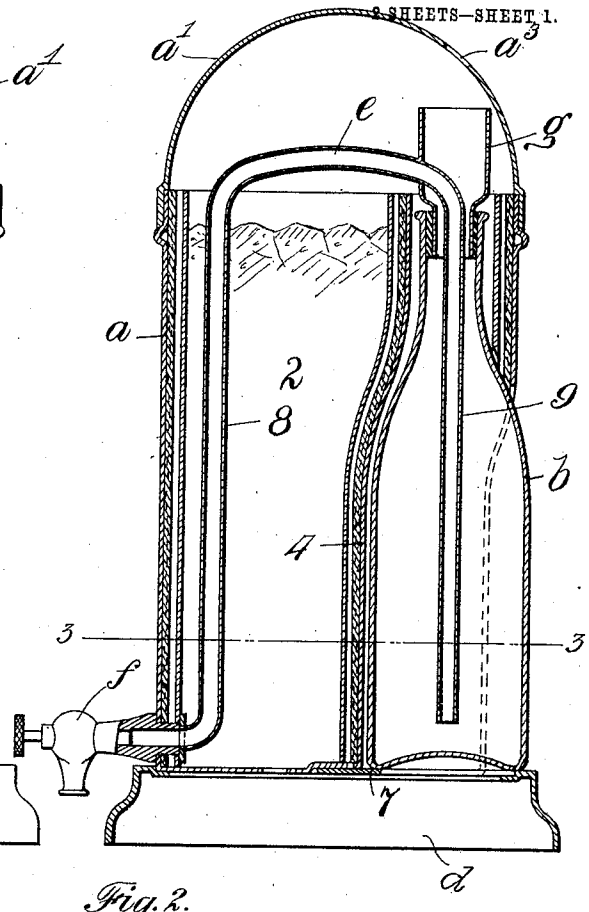


Fig. 2.

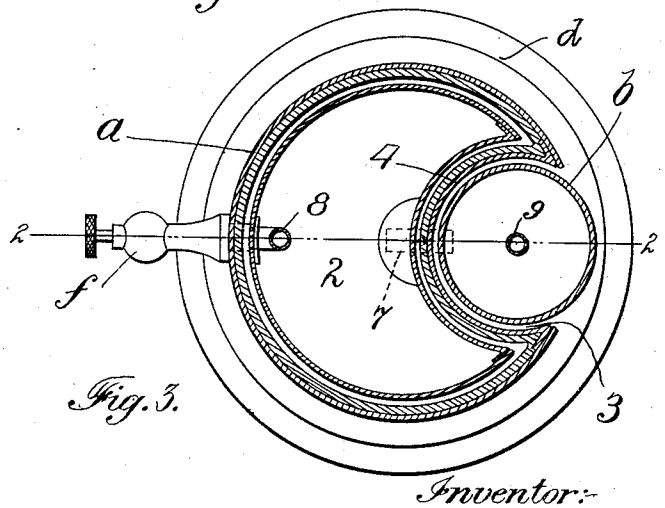


Fig. 3.

Witnesses:-
C. W. Pezzetti
E. P. Lucia

Inventor:-
Vernal S. Taylor
by Wright, Brown & Quinby
Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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NO MODEL. 2 SHEETS—SHEET 2.

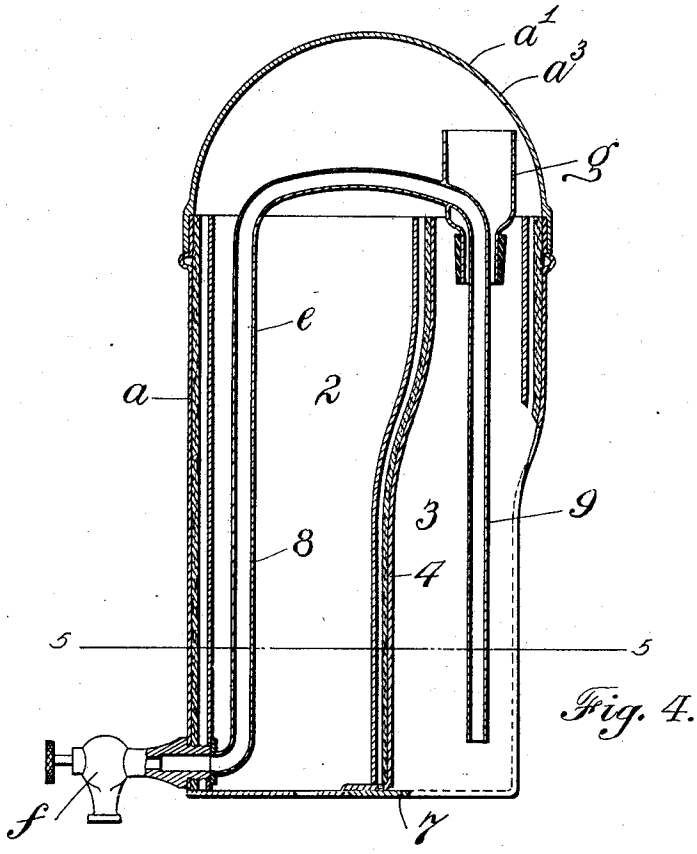
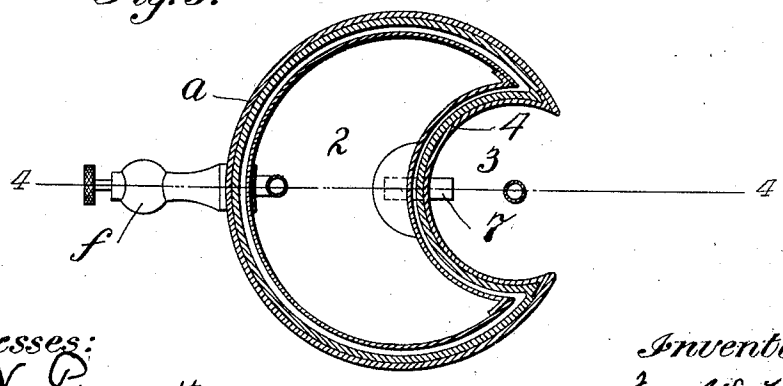


Fig. 4.

Fig. 5.



Witnesses:
P. W. Pezzetti
E. P. Lucia

Inventor:
Jemal S. Taylor
by Wright, Brown & Quinby
Attorneys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 755,723. Patented March 29, 1904.

UNITED STATES PATENT OFFICE.

VERNAL S. TAYLOR, OF CAMBRIDGE, MASSACHUSETTS.

LIQUID-DISPENSING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 755,723, dated March 29, 1904.

Application filed July 18, 1903. Serial No. 166,192. (No model.)

To all whom it may concern:

Be it known that I, VERNAL S. TAYLOR, of Cambridge, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Liquid-Dispensing Apparatus, of which the following is a specification.

This invention has for its object to provide a simple and effective apparatus for dispensing liquids, and particularly beverages, from the original packages or bottles in which they are inclosed, and at the same time cooling the liquid.

The invention also has for its object to enable the original package or bottle to be displayed in plain view of the customer while the liquid is being drawn from it.

The invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a side elevation of an apparatus embodying my invention. Fig. 2 represents a section on line 2 2 of Fig. 1. Fig. 3 represents a section on line 3 3 of Fig. 2. Fig. 4 represents a sectional view similar to a portion of Fig. 2. Fig. 5 represents a section on line 5 5 of Fig. 4.

The same reference characters indicate the same parts in all the figures.

In the drawings, *a* represents a casing having an ice-receptacle 2 and a bottle-receptacle 3, said receptacles being separated by a substantially vertical wall or partition 4, arranged to laterally support the ice in the receptacle. The bottle-receptacle is open at its lower end to permit the insertion of a bottle *b* endwise into it in an upward direction and is also preferably open along one side to display the major part of the bottle *b*, inserted in it. The preferred construction of the casing is as follows: The casing has a cylindrical body, which is cut away longitudinally at one side. The wall or partition 4 is segmental in cross-section, so that it partially surrounds the bottle, its edges joining the edges of the longitudinal opening in the side of the cylindrical body of the casing. The casing as a whole, therefore, has a crescent-shaped cross-section, as shown in Fig. 5. The cross-section of the receptacle 3 is preferably somewhat more than a half of a complete circle, so that a bottle inserted endwise in the receptacle 3 is prevented from slipping out sidewise through the side opening. Means are provided for retaining the bottle in the receptacle and preventing its downward displacement. To this end I have shown in Figs. 4 and 5 a button 7, pivoted to the bottom of the casing and arranged so that when turned in one direction it will project under the bottle-receptacle and retain the bottle therein.

When the apparatus is in use, the casing *a* rests upon a base *d*, from which it is detachable. Said base is preferably formed to project under the bottle-receptacle, so that it may serve as the means for preventing downward displacement of the bottle, the bottle being inserted in the receptacle 3 before the casing *a* is placed upon the base.

e represents a siphon which is suitably affixed to the casing *a*. The longer leg 8 of the siphon is located in the ice-receptacle 2, while the shorter leg 9 extends downwardly into the bottle-receptacle 3, said shorter leg being so located that when the bottle is inserted in its receptacle the neck of the bottle will receive the shorter leg, and when the bottle has been adjusted to place in its receptacle the shorter leg will stand in the central portion of the bottle, as shown in Figs. 2 and 3.

f represents a faucet affixed to the lower portion of the casing *a* and communicating with the longer leg of the siphon.

g represents a stand-pipe, which is formed to fit the mouth of the bottle as a stopper and extends above the neck of the bottle. The stand-pipe communicates with the interior of the bottle and constitutes an extension of the neck thereof, so that when the stand-pipe is filled with liquid its contents will form a part of a liquid column extending from the bottom of the bottle to a point somewhat above the the crown of the siphon, the stand-pipe having a receiving upper end located above the crown of the siphon and a delivering lower end located below the crown of the siphon and formed to enter the bottle-neck. It will be seen, therefore, that when the stand-pipe is thus filled and the faucet is open the pressure of the liquid column will cause the liquid

to flow through the siphon, and thus start an automatic flow, which will continue as long as the faucet remains open. When the faucet is closed, the siphon will remain filled, the liquid being held in the siphon by atmospheric pressure, so that the liquid may be drawn in portions or charges of any desired quantity and from time to time until the bottle is emptied or its contents fall below the shorter leg of the siphon. Preferably the shorter leg terminates at a sufficient height above the bottom of the bottle to leave enough liquid in the bottle to fill the stand-pipe *g* when the next bottle is inserted. The stand-pipe *g* is preferably affixed to the siphon, the latter passing through one side of the stand-pipe and being soldered or otherwise secured thereto.

The casing *a* is preferably provided with a detachable cover *a'*. Said cover may be provided with an orifice a^3, coinciding with the stand-pipe *g*, to enable the stand-pipe to be filled without removing the cover.

In using the described apparatus the receptacle 2 is charged with ice, and a bottle *b*, containing the liquid to be dispensed, is inserted in the receptacle 3, the bottle being moved endwise upwardly, so that it receives the shorter leg of the siphon. The apparatus is formed with reference to a given size and shape of bottle, so that when the bottle is fully inserted in the receptacle 3 the stand-pipe *g* is seated in the neck of the bottle. The casing is now placed upon the base *d*, and a sufficient quantity of the liquid with which the bottle is filled is poured into the stand-pipe. The apparatus is now ready for use, and the liquid may be drawn off as desired through the siphon by the opening of the faucet *f*, which is preferably provided with a spring-closed valve. After the bottle has been emptied it may be readily removed by removing the casing from the base, and another bottle may then be substituted for it, the liquid remaining in the first bottle being preferably poured into the stand-pipe *g* to prepare the apparatus for the dispensing of the contents of the newly-installed bottle.

The form and arrangement of the ice and bottle receptacles, whereby the major portion of the bottle is displayed in the sight of the customer, is a very desirable feature of the invention, enabling the customer to see the liquid drawn from the original package, which is identified by the label, the latter being displayed in the opening of the bottle-receptacle.

The stand-pipe *g* constitutes a very simple and desirable means for starting the siphonic flow. If desired, the longer leg of the siphon may be given a helical form to increase its length, and therefore the area of surface exposed to the cooling action of the ice.

It will be observed that the relatively thin substantially vertical wall or partition 4, conforming to the external shape of the bottle and forming a part of the vertical wall of the ice-receptacle, so that it supports the ice laterally, enables the contents of the bottle to be cooled by the close proximity of the bottle to the ice, the latter remaining in contact with the partition 4 until melted.

It is obvious that a siphon arranged for use with a bottle or other like receptacle and provided with a stand-pipe *g*, which is adapted to be seated in or on the bottle-neck to increase the height of the liquid column in the bottle, may be used without the other parts of the dispensing apparatus here shown or in connection with any other form of apparatus.

I claim—

1. A liquid-dispensing apparatus comprising a casing having an ice-receptacle, and a bottle-receptacle separated from the ice-receptacle by a wall or partition, a siphon the longer leg of which is in the ice-receptacle, while its shorter leg projects downwardly into the bottle-receptacle, and a faucet connected with the longer leg, the bottle-receptacle having an opening at its lower end to permit the endwise movement of a bottle into the receptacle in position to receive the shorter leg of the siphon.

2. A liquid-dispensing apparatus comprising a casing having an ice-receptacle, and a bottle-receptacle separated from the ice-receptacle by a substantially vertical wall or partition arranged to laterally support the ice in the receptacle and formed to partially surround the bottle, said bottle-receptacle being open at one side to display a bottle therein, a siphon having its longer leg in the ice-receptacle and its shorter leg in the bottle-receptacle, and a faucet connected with the longer leg of the siphon.

3. A liquid-dispensing apparatus comprising a casing having an ice-receptacle, and a bottle-receptacle separated from the ice-receptacle by a wall or partition, the bottle-receptacle being open at its lower end to permit the endwise insertion of a bottle, means for preventing endwise downward displacement of the bottle, a siphon having its longer leg in the ice-receptacle and its shorter leg in the bottle-receptacle, and a faucet connected with the longer leg of the siphon.

4. A liquid-dispensing apparatus comprising a casing having an ice-receptacle, and a bottle-receptacle separated from the ice-receptacle by a wall or partition arranged to laterally support the ice in the receptacle, a siphon having its longer leg in the ice-receptacle and its shorter leg in the bottle-receptacle, a faucet connected with the longer leg of the siphon, and means for starting a flow of liquid from the bottle through the siphon.

5. A liquid-dispensing apparatus comprising a casing having an ice-receptacle, and a bottle-receptacle separated from the ice-receptacle by a wall or partition, a siphon having its longer leg in the ice-receptacle and its shorter leg in the bottle-receptacle, a faucet connected

with the longer leg of the siphon, and a stand-pipe formed to enter the neck of a bottle in the bottle-receptacle to increase the height of the column of liquid in the bottle and start the flow of liquid through the siphon.

6. A siphon having a stand-pipe located at its upper portion, said stand-pipe having a receiving end located above the crown of the siphon, and a delivering end located below the crown of the siphon and formed to enter the neck of a liquid-receptacle.

7. The combination of a liquid-receptacle having a contracted neck, a siphon having its shorter leg located within the receptacle, and a stand-pipe having a receiving end located above the crown of the siphon, and a delivering end located below the crown of the siphon and formed to enter said neck.

In testimony whereof I have affixed my signature in presence of two witnesses.

VERNAL S. TAYLOR.

Witnesses:
C. F. BROWN,
E. BATCHELDER.