April 8, 1924. 1,489,840

H. C. LYONS

BILIQUID MEASURING AND DISPENSING FAUCET

Filed May 17. 1922

Fig. 1.

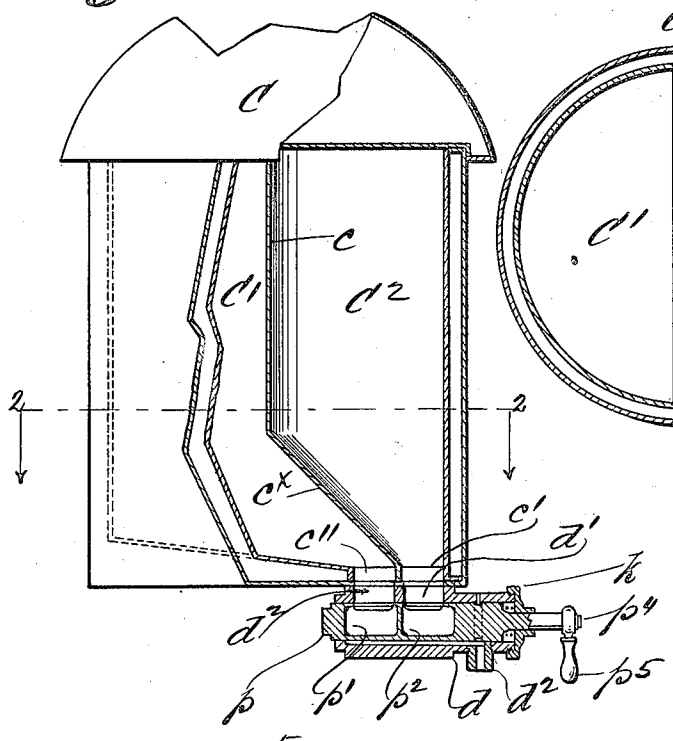


Fig. 2.

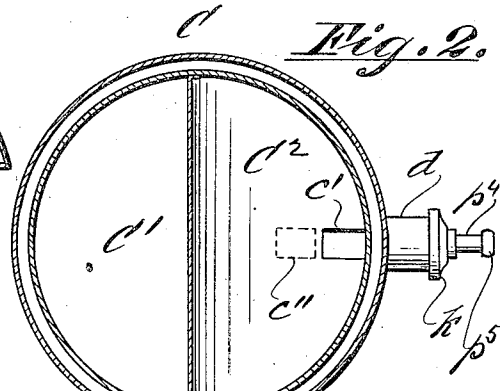


Fig. 5.

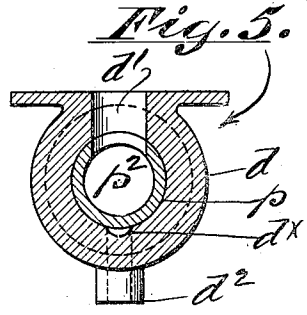


Fig. 3.

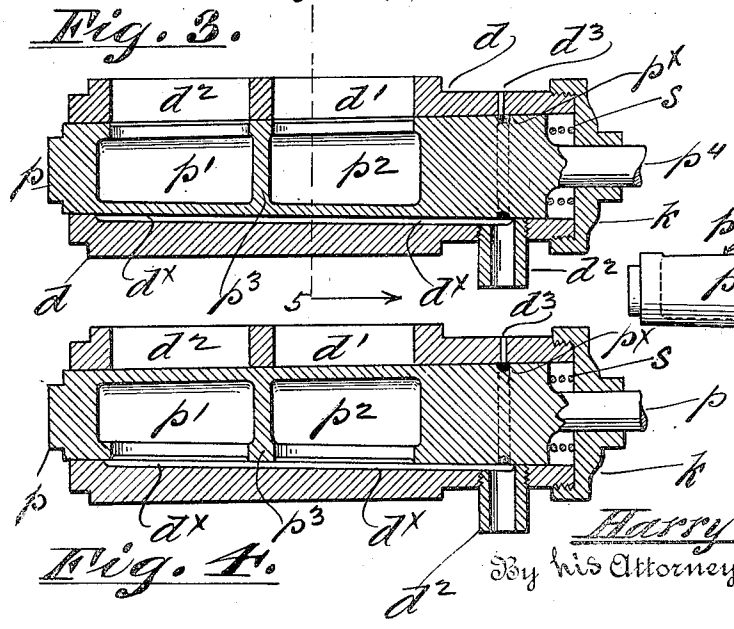


Fig. 6.

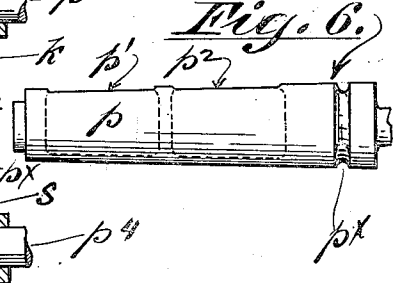


Fig. 4.

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# UNITED STATES PATENT OFFICE.

HARRY C. LYONS, OF NEW YORK, N. Y.

## BILIQUID MEASURING AND DISPENSING FAUCET.

Application filed May 17, 1922. Serial No. 561,574.

*To all whom it may concern:*

Be it known that I, HARRY C. LYONS, a citizen of the United States, and a resident of the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Biliquid Measuring and Dispensing Faucets, of which this is a specification.

My improvements relate to the class of duplex liquid dispensers analogous to that disclosed in Letters Patent issued to me May 2nd, 1916, No. 1,367,823, and in my concurrent applications Serial No. 512,719, filed Nov. 4th, 1921, and Serial No. 522,779, filed Dec. 16th, 1921, in which two fluid constituents of a beverage are drawn off simultaneously from separate containers and delivered through a spout common to both.

The object of my present invention is to prescribe the relative proportions of each fluid constituent to be thus simultaneously dispensed; and it consists essentially in forming the dispensing faucet with a plurality of measuring compartments each receiving a fluid constituent from a separate container, but discharging through a common duct and spout, substantially as herein set forth and described and claimed specifically.

In the accompanying drawings,

Fig. 1, is a sectional elevation of a dispensing urn formed with two separate containing chambers for the temporary storage of liquids to be withdrawn simultaneously to constitute a beverage:

Fig. 2, is a horizontal section taken upon plane of line 2—2, Fig. 1.

Fig. 3, is a central longitudinal sectional elevation of the dispensing faucet with the valve plug shown in the same position as in Fig. 1, but upon a larger scale;

Fig. 4, is a view like unto Fig. 3, showing the valve plug turned into position for the discharge of the contents of its measuring compartments;

Fig. 5, is a transverse section taken upon plane of line 5—5, Fig. 3;

Fig. 6, is an elevation of the valve plug, upon a smaller scale.

It is to be understood that my improved beverage dispensing apparatus may be adapted for use in the storing and measuring out of various liquid constituents or component parts of any desired mixture of concoction, as I do not limit myself in this respect. For convenience of illustrating a practical embodiment of my invention I herein describe it as arranged and used for the dispensing of an admixture of cacao and milk in a manner analogous to that set forth in my aforesaid Letters Patent and concurrent applications.

With this understanding, C, represents, generally, an urn or container of any desired or suitable construction and external configuration, designed for the reception and storage, temporarily of the constituents of the cacao beverage to be dispensed through the faucet D. The urn C, is divided into two compartments C′, $C^2$, by a medial partition $c$, the compartment C′, being for the reception and storage of milk, diluted or otherwise, and the compartment $C^2$, for the reception and storage of the cacao solution. The rear portion of the floor $c^x$, of the reservoir is preferably convergently inclined toward said dispensing faucet D, as shown particularly in Fig. 1, of the drawings, for the purpose of concentrating the sedimentary constituents of the concoction in suitable juxtaposition to the outlet $c'$, which communicates with the inlet $d$, in the upper side of the casing $d'$, in which latter the valve plug $p$, is mounted, said casing being attached rigidly and permanently to the under side of the urn C, by any suitable means.

The valve plug $p$, is slightly conical, tapering rearward, and is held to its concavo-conoidal seat in the casing $d'$, by a spring $s$, interposed between its forward extremity and a cap screwing onto the outer end of the valve casing $d'$, as shown more particularly in Figs. 1, 3 and 4. Near its forward extremity said casing $d'$, is formed with discharge spout $d^2$.

The valve plug $p$, is of course provided with the usual stem $p^4$ and handle $p^5$, to facilitate manipulation, a turn of said plug in either direction sufficing to open or close the faucet, as case may be.

The valve plug is formed with two measuring compartments $p'$, $p^2$, separated by the partition $p^3$, the inlet ports thereto being upon the same side of the plug. When the latter is in closed position, as in Figs. 1 and 3, the compartment $p^2$ coincides with the ports $d$, $c'$ communicating with the container $C^2$ in which the cacao constitutent is stored and the measuring compartment $p'$ coincides with the port $d^2$, in the valve casing $d$, and the port $c''$, communicating with the container C′, for the milk or

more fluent liquid constituent of the beverage.

The lower portion of the valve casing $d$ is formed with a longitudinal discharge duct $d^x$, extending parallel with the axis of the valve plug $p$ and communicating with the discharge spout $d^2$, so that when the valve plug $p$, is reversed by a half turn, assuming the position shown in Fig. 4, the contents of said measuring chambers $p'$ $p^2$ will flow through said duct $d^x$, and be discharged through the spout $d^2$.

$d^3$ is a vent hole in the top of the valve casing $d$, for the purpose of admitting air to the annular groove $p^x$ formed in the periphery of the valve plug in coincidence with the spout $d^2$ for the purpose of facilitating the discharge of the liquid constituents of the beverage.

I have herein shown my two container compartments C′, C², as incorporated in a single casing or urn structure C, although it is obvious that said compartments C′, C², may be separate, and independent of each other, except as connected by my duplex-functioning dispensing faucet D, so that I do not limit myself in this respect, the essential feature being the utilization of said dispensing faucet D, substantially as herein described:—i. e., for direct communication with both storage compartments C′, C², substantially and in the manner set forth.

I have herein shown and described my invention as utilized in the dispensing of two liquid constituents of a beverage, or the like, although it is obvious that the same method may be applied to any plural number of liquid containers connected with a dispensing faucet common to all, and having a separate measuring chamber for each liquid constituent.

What I claim as my invention and desire to secure by Letters Patent is,

In liquid-dispensing apparatus of the character designated, a plurality of liquid constituent containers with adjacent outlets, a valve plug casing beneath said outlets, a rotary valve plug in said casing and having adjacent measuring chambers disposed lengthwise of said plug and adapted for coincidence with said outlets by the semi-rotation of the plug, the bottom wall of the bore of said casing having in its upper face a longitudinal duct put into communication with the said measuring chambers and with a common discharge when the valve plug is given a semi-rotation, the plug having an annular groove and the casing a vent-hole communicating therewith.

HARRY C. LYONS.

Witnesses:
MARGARET HANSTEIN,
LILLIA MIATT CARTER.