

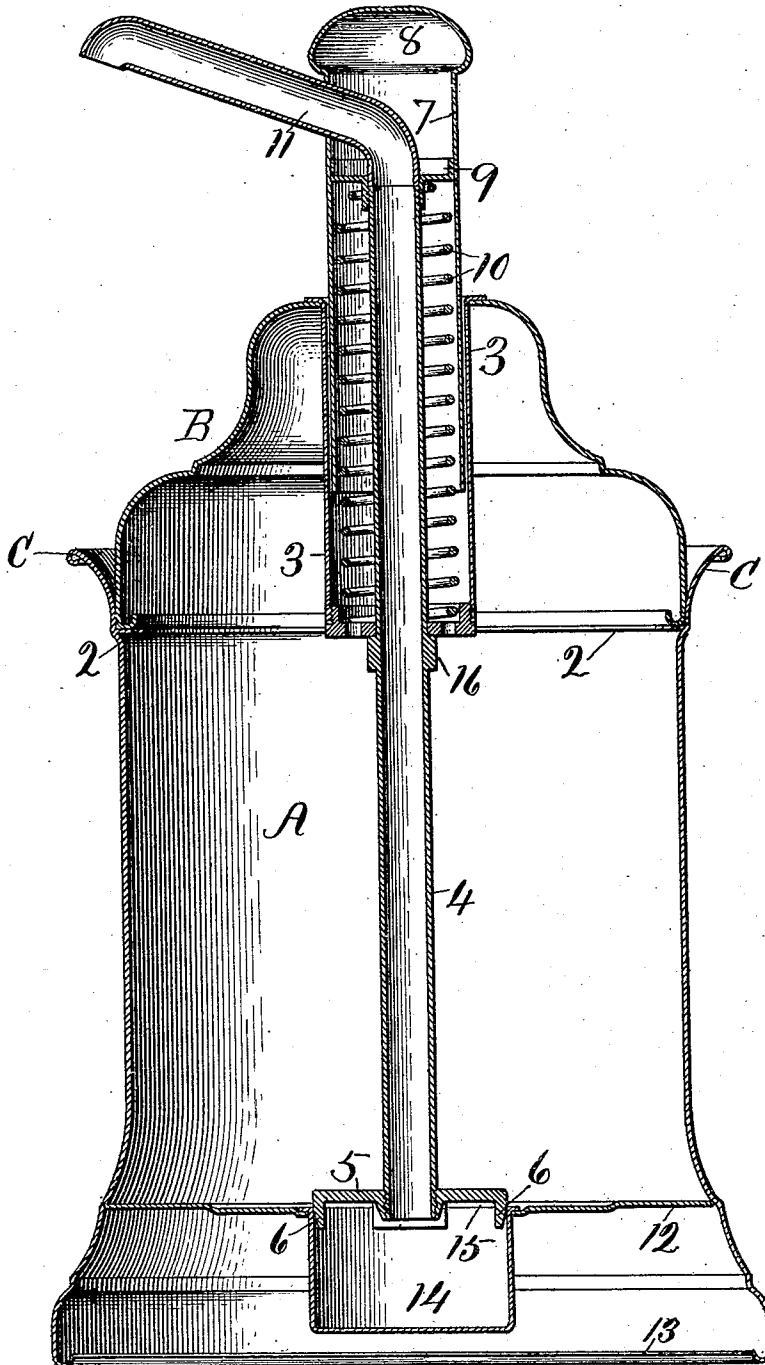
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APPARATUS FOR DISPENSING BEVERAGES.

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987,970.

Patented Mar. 28, 1911.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN H. EARL, OF CHICAGO, ILLINOIS.

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Specification of Letters Patent.

Patented Mar. 28, 1911.

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To all whom it may concern:

Be it known that I, JOHN H. EARL, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Apparatus for Dispensing Beverages, of which the following is a specification.

This invention relates to an apparatus used in dispensing beverages; and has for its object to provide a device of this character that is simple, convenient and easy of manipulation, as will be hereinafter set forth.

The figure in the drawing shows a vertical section of an apparatus embodying the improved features.

A represents a receptacle and B the cover therefor. The receptacle is provided with a flaring rim edge C. An annular ledge 2 is formed interiorly at the junction of the flaring rim and the body of the receptacle and provides a seat for the cover in its closing position. The cover B is retained loosely in place and by having its seat below the rim edge is not liable to be accidentally displaced in practical working.

A tube 3 is fixed in the cover B and has the lower end closed which is perforated for the passage of a tubular plunger-rod 4 having a piston-disk 5 mounted on the lower end thereof and which is provided with a number of guide lugs 6 spaced apart at intervals.

The lower part of an operating sleeve 7 loosely telescopes inside of the tube 3 and has the upper exterior end closed by a cap-part 8. A diaphragm 9 is located in the sleeve 7 and is rigidly secured in place. The upper end of the plunger-rod opens up through the diaphragm 9 and is rigidly secured therein. A spring 10 is located in the tube and sleeve and surrounds the plunger-rod. This spring is compressible between the closed lower end of the tube 3 and the diaphragm 9 in storing up power to automatically return the working parts to the normal position shown after each operation.

A bent discharge tube 11 is inserted in through the wall of the sleeve 7 and ends on the upper end of the tubular plunger-rod and forms a continuation thereof. The outer part of the discharge tube 11 is inclined so that there will be no drip outwardly therefrom.

The bottom 12 of the receptacle is located far enough above the rim base 13, on which the receptacle stands, to provide space for a charge cup or cavity 14 extending below the bottom proper, so that the liquid charge will gravitate thereinto.

The receptacle is intended to hold a liquid substance for making a beverage, and the piston 5 is in line with the cup-cavity 14 and capable of a reciprocating movement in connection with the same. When the piston is in its upper or normal position it is out of the cup far enough to provide a space 15 through which the liquid charge, to be dispensed, will flow into the cup 14. It will be noted that in this position of the piston, the guide lugs projecting downward therefrom remain within the walls of the cup-cavity and serve to retain the piston in alinement and always insure positive working conditions. These conditions permit of the tube 3 and sleeve 7 to have a loose engagement to insure free working, as the piston cannot have a lateral movement and get out of place. A shoulder 16 limits the up movement of the plunger-rod. The capacity of the cup-cavity will be in accordance with the kind of beverage being dispensed and may be greater or less to hold the measured quantity, for the making of one drink. The same apparatus may be used for dispensing different kinds of drinks by having the charging cup detachable and using larger or smaller ones accordingly.

In practical operation, assuming the charge cup to be filled, the operator presses down on the sleeve 7, which has the effect of forcing the piston into the cup 14 and forces the liquid contents stored therein up into the tubular plunger and out through the tubular continuation thereof and discharges into a glass held to receive the same. When the pressure on the operating sleeve is relaxed, the moving parts will return to their normal position and the cup-cavity again filled, and so on in continuous order.

This form of construction and arrangement provides an apparatus that is easily cleaned and kept in a good sanitary condition. All valves are dispensed with, and when the cover is removed all the parts go with it.

Having thus described my invention, what I claim is—

1. In a device of the kind described, a receptacle having a cup-cavity in the bottom

thereof, a tubular plunger-rod, a piston
mounted on the lower end of said tubular
rod and positioned to have a reciprocating
movement in said cup-cavity, a movable
5 sleeve, with which the upper end of said tu-
bular rod has an operative connection, and
a discharge tube extending out through said
sleeve and forming a continuation of said
tubular rod.
10 2. In an apparatus of the kind described.
a receptacle having a cup-cavity extending
below the bottom thereof, a tubular plun-
ger-rod, a piston mounted on the lower end
thereof and provided with guide-lugs for re-
taining the same in alinement with said cup- 15
cavity and at the same time allow the piston
to rise out of said cavity far enough to per-
mit liquid to flow into the same, and the
operative connection with said plunger-rod.
In testimony whereof I affix my signature 20
in presence of two witnesses.

JOHN H. EARL.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
