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J. H. EARL.

AUTOMATIC GINGER ALE DISPENSER.

APPLICATION FILED AUG. 22, 1906.

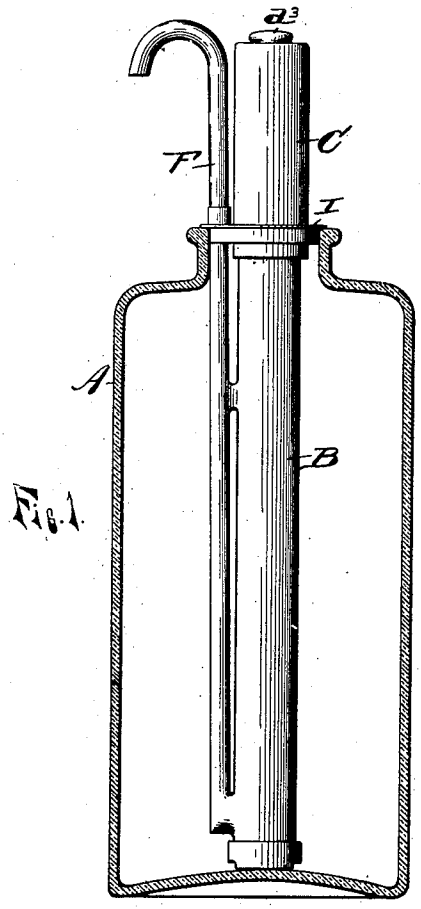


Fig. 1.

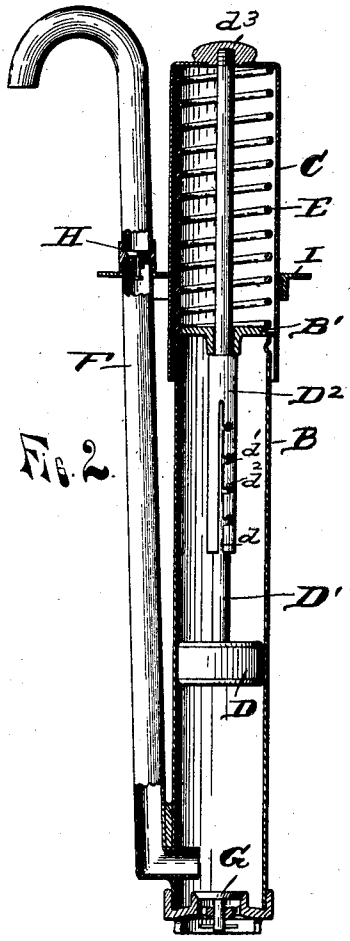


Fig. 2.

WITNESSES:

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AUTOMATIC GINGER-ALE DISPENSER.

No. 880,370. Specification of Letters Patent. Patented Feb. 25, 1908.

Application filed August 22, 1906. Serial No. 331,574.

To all whom it may concern:

Be it known that I, JOHN H. EARL, citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Automatic Ginger-Ale Dispensers, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improvement in appliances for dispensing ginger ale and like beverages, shown in the accompanying drawings and more particularly set forth in the following specification and claims.

In the drawings: Figure 1 is a side elevation of my invention, showing it in position in a bottle. Fig. 2 is a central vertical section through the appliance, showing parts in elevation.

It is a well known fact that in dispensing ginger ale and similar beverages considerable time is wasted for the "foam" to disappear, in order to fill the glass with a "solid" drink;—thus, one of the objects of my invention is to place upon the market an appliance capable of filling a glass by one operation, the construction being such that it may be readily adjusted to discharge a large or small quantity, as required. Other advantages will hereafter appear.

Referring to the letters of reference shown in the drawings, A represents a bottle or other container for ginger ale.

B is a cylinder preferably of a length equal to the height of the bottle.

C is a telescopic sleeve inclosed at the top, into which the upper end of the cylinder B projects.

D is a piston traveling in the cylinder B, its piston-rod D′ projecting up through the end of the sleeve C, when it is secured by the nut d^3.

E is a spring housed within the sleeve C, one end of which bears against the top of the sleeve, while the other rests upon a plate B′ mounted on top of the cylinder B.

D^2 is a relatively short tube sleeved on the piston-rod D′, in which is cut an elongated slot d with notched recesses d' opening into the same.

d^2 is a pin secured in the piston-rod D′, adapted to travel the length of the slot d and to enter the notches d'; the object being to adjust the throw or travel of the piston, as will be hereafter explained.

F is a discharge pipe entering the cylinder B near the bottom of the bottle and terminating at the top in a downwardly projecting neck or discharge orifice.

G is a check valve located in the bottom of the cylinder B, and H is a check valve in the discharge pipe F.

I is a plate designed to rest on the neck of the bottle to seal the opening, through which the cylinder B and the discharge pipe F project.

Having indicated the several parts, the operation of the appliance will be readily understood. The device being in position in a bottle filled with ginger ale, or other beverage, the sleeve C is forced down, carrying the piston with it. On being released the spring forces the piston back to its initial position, as shown in the drawings, the suction lifting the valve G and drawing up into the tube the beverage. Therefore, so long as the bottle contains a fluid, whenever the sleeve is forced down a given quantity of the beverage will be forced out of the discharge pipe F, the check valve H closing against the entry of air as the piston returns to its initial position.

In order that a predetermined amount may be discharged at each operation, the sleeve D^2 is adjusted along the piston rod and locked by means of the pin d^2. It will be thus seen that the travel of the piston is limited by the end of the sleeve D^2 contacting with the plate B′, the spring E being thus adjusted so that it may be compressed to a greater or less extent as required.

Having thus described my invention, what I claim is:—

In an appliance for dispensing liquids, a valved cylinder, a sleeve embracing the cylinder and slidable thereon, a spring actuated piston disposed within the cylinder with its

stem projecting through the sleeve, the piston carrying a projection upon its stem, a valved discharge pipe communicating with the cylinder, and a second sleeve embracing the stem of the piston and provided with a slot having communicating notches for interchangeable engagement with said projection to vary the stroke of the piston.

In testimony whereof, I sign this specification in the presence of two witnesses.

JOHN H. EARL.

Witnesses:
HENRY E. VILLEROT,
CHAS. H. FISK.