

N. S. HILLYARD.
LIQUID SOAP FOUNTAIN.
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1,020,758.

Patented Mar. 19, 1912.

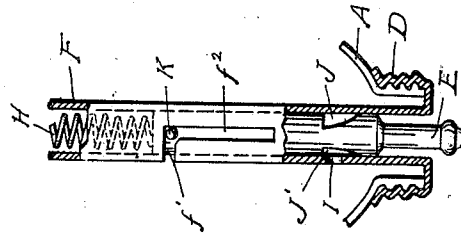


FIG. 2.

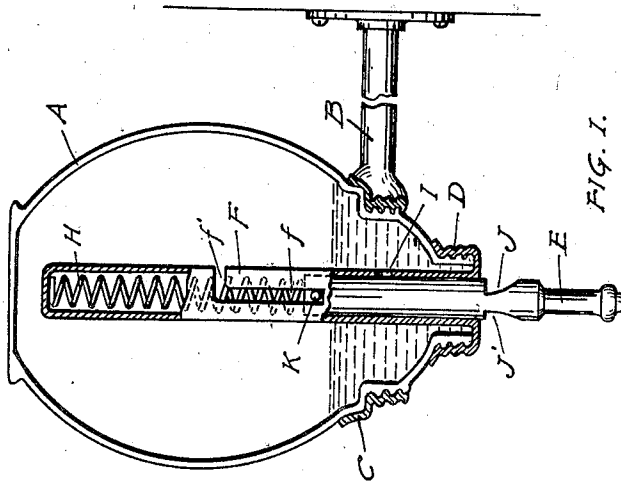


FIG. 1.

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LIQUID-SOAP FOUNTAIN

1,020,758.

Specification of Letters Patent.

Patented Mar. 19, 1912.

Application filed November 18, 1911. Serial No. 661,077.

To all whom it may concern:

Be it known that I, NEWTON S. HILLYARD, a citizen of the United States of America, residing at the city of St. Joseph, in the county of Buchanan and State of Missouri, have invented certain new and useful Improvements in Liquid-Soap Fountains, of which the following is a specification.

The object of my invention is to provide a fountain for liquid soap for use in public and private buildings in which by a simple and inexpensive mechanism the quantity of soap used and the consequent expense may be regulated.

I accomplish my object in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a sectional elevation of the fountain supported by a bracket attached to a wall, a conductor with a spring and piston therein, the piston shown in position for discharge of liquid soap, and Fig. 2 is a sectional elevation of said device showing the opposite side of the conductor, the piston pressed up into filling position.

Similar letters refer to similar parts in the several views, A being the fountain, preferably of glass that the supply of liquid soap therein may always be visible. In order to fill the fountain it is first unscrewed from bracket cap C, shown in Fig. 1; the fountain is then lifted out of said bracket cap and reversed from the position shown in Fig. 1; it is then opened by unscrewing a smaller cap, D, and by lifting the piston E and the piston conductor F, with which cap D is integral, out of the fountain. The top end of piston E carries a coil spring H in conductor F. The upper end of said conductor is preferably closed, the closure serving as a stop for the top end of the spring. But I reserve to myself the right to use a pin or any suitable means to form such stop. Said conductor F is provided with duplicate parallel vertical slots f and f^2 spaced apart, slot f being shown in Fig. 1 and slot f^2 in Fig. 2. A horizontal cross slot f' forms connection between the top ends of said slots f and f^2 . A plurality of vertical slots may be used, if desired, forming connection with said single horizontal slot f' .

I is a perforation near the lower end of conductor F.

J and J' are recesses in piston E through which to obtain the desired quantity of

liquid at one stroke of the piston. Said recess J is made larger than recess J', as shown in the figures. Either the large recess J or the small recess J' will fill when the piston is pushed up to the position shown in Fig. 2 and be discharged when the piston descends to the position shown in Fig. 1.

K is a pin in the piston; to regulate the supply of liquid soap at one operation the piston is pressed up carrying pin K upward through slot f or f^2 . When pin K has been carried to the top of slot f the larger recess J is filled with liquid soap through perforation I. If a smaller supply of soap is desired, the piston is pressed up until pin K is at the top of the slot on a line horizontal with cross slot f' . The piston is then revolved carrying pin K through said horizontal slot f' until the pin is at the top of the opposite slot f^2 , when, by release of upward pressure of the hand on the bottom of piston E the piston is instantly driven down by coil spring H until recess J' is lowered below cap D. All of the liquid in recess J' then flows down the lower part of said piston into the palm of the hand.

It will be seen that the device can be regulated in an instant to increase or decrease the amount of soap desired at a single operation of the piston by the use of one or the other of said recesses as hereinbefore described. Said pin K insures the retention of the piston in the conductor; also, when the pin is at the top of either slot, it insures the inflow of liquid soap through perforation I filling the recess which is then in use; and when said pin is at the bottom of either vertical slot it insures the release of the liquid soap from the recess in use at the time.

What I claim and desire to secure by Letters Patent, is,—

1. In a liquid soap fountain the combination with a supporting bracket, of a fountain having a threaded portion to engage with said bracket and a lower threaded portion at its base, an elongated vertical conductor open at its base and provided with vertical slots, a cross slot and a perforation, a spiral spring in said conductor, a threaded cap integral with the base of said conductor engaging with the lower threaded portion of the base of said fountain, a piston having incuts of different sizes forming recesses, a pin rigid therein and revoluble with said

piston through said cross slot, said recesses being adapted to receive liquid soap from the fountain through said perforation when the piston is elevated and a recess engages therewith and to discharge said soap when said piston is driven down by the spiral spring and a recess is below said cap.

2. In a device of the character described the combination with a fountain and a supporting bracket therefor, of a vertical elongated circular conductor forming a chamber having a stop at the top, open at the bottom and provided with vertical slots, a cross slot and a single perforation, a cap integral with the bottom of said conductor and engaging with the base of the fountain closing the same, a piston provided midway thereon with recesses of different sizes incut therein, a pin rigid at the periphery of the top end of said piston, a spiral spring seated on said piston permitting said piston to be pressed up said chamber to receive a supply of liquid soap through said perforation into a recess and to be driven down below said cap by said spring to permit said recess to discharge its supply.

3. In a liquid soap fountain the combination of a conductor having an open bottom and a perforation for the ingress of a liquid soap supply from the fountain, duplicate vertical spaced slots and a connecting cross slot in the sides thereof, a spiral spring member in the upper part of said conductor, a piston member in the lower part of said

conductor provided with duplicate recesses of different sizes, a stationary pin near the top of said conductor periphery, said pin being carried by said piston through said slots as the piston is operated regulating the stoppage of one of said recesses at said perforation as it is pressed up and preventing its escape from the conductor when the recesses in the piston are driven below said conductor.

4. In a liquid soap fountain, a conductor provided with a supply receiving aperture, vertical slots and a connecting cross slot in its sides, a piston having discharge recesses of differing sizes and a spiral spring to force the piston down when pressure from beneath has been removed.

5. In a device of the kind described, a cylindrical conductor member having in its sides a supply receiving aperture, vertically cut slots and a connecting horizontally cut slot, a piston member having recesses of different sizes adjustable to said aperture to receive a supply and discharge the same when the piston descends, and means to retain said piston member in said conductor member and operate the device.

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

NEWTON S. HILLYARD.

Witnesses:

MARIE MITCHELL,
EVERETT HILLYARD.