N. S. HILLYARD.

LIQUID SOAP DISPENSER.

APPLICATION FILED MAY 18, 1914.

1,152,178.

Patented Aug. 31, 1915.

2 SHEETS—SHEET 1.

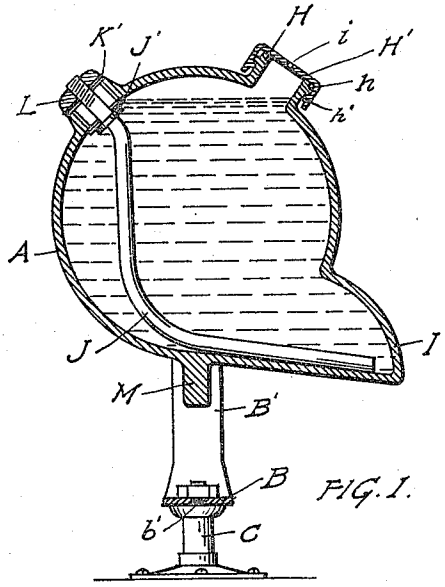



FIG. 1.

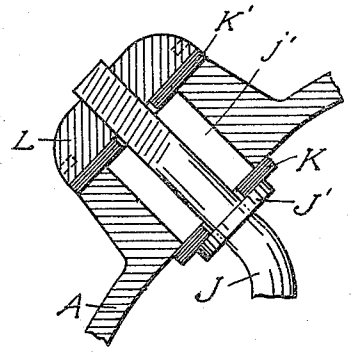



FIG. 3.

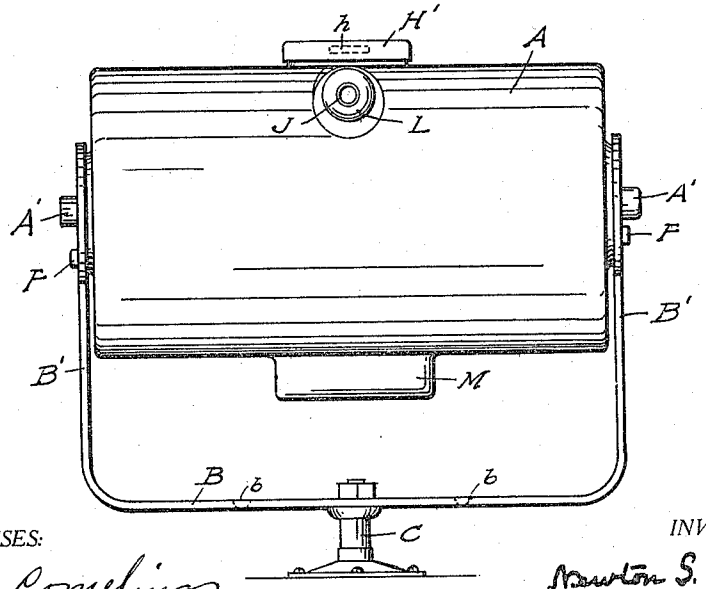



FIG. 2.

WITNESSES:

A. B. Comeftins

W. E. Hillyard.

INVENTOR:

Newton S. Hillyard

BY Eugene Ayres,

ATTORNEY.

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C

N. S. HILLYARD.

LIQUID SOAP DISPENSER.

APPLICATION FILED MAY 18, 1914.

1,152,178.

Patented Aug. 31, 1915.

2 SHEETS—SHEET 2.

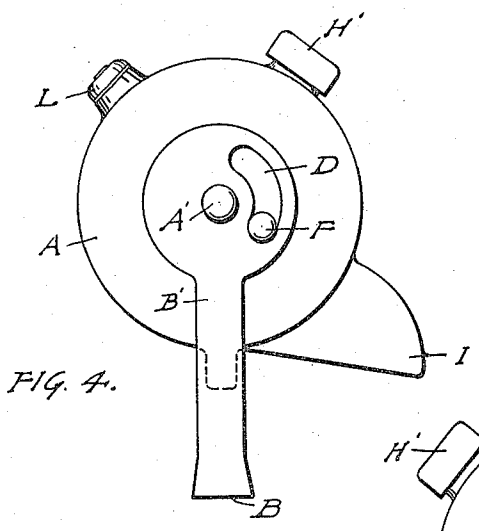



FIG. 4.

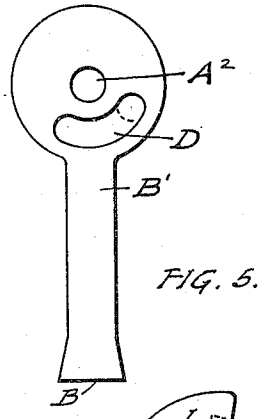



FIG. 5.

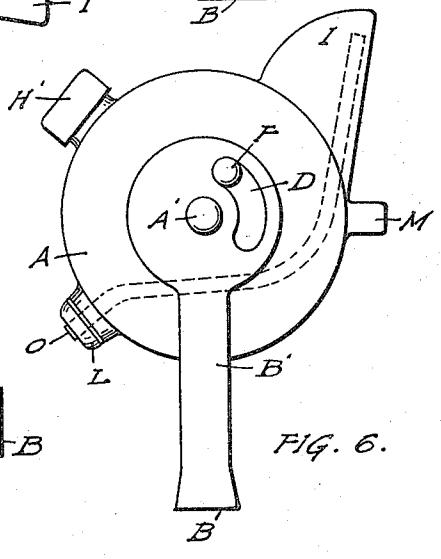



FIG. 6.

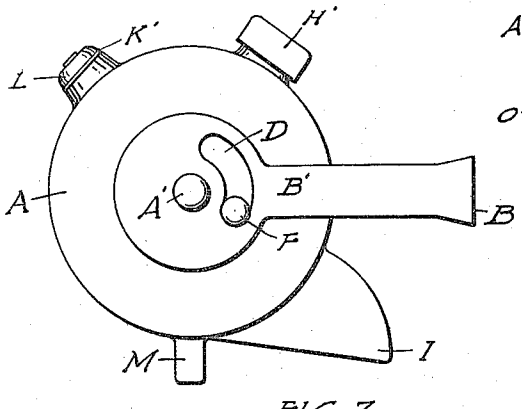



FIG. 7.

WITNESSES:

A. B. Cornelius

W. E. Hillyard.

INVENTOR.:

Newton S. Hillyard

BY Eugene Ayres.

ATTORNEY.

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

NEWTON S. HILLYARD, OF ST. JOSEPH, MISSOURI.

## LIQUID-SOAP DISPENSER.

1,152,178. Specification of Letters Patent. Patented Aug. 31, 1915.

Application filed May 13, 1914. Serial No. 839,214.

*To all whom it may concern:*

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

By the invention hereinafter described I provide a liquid soap dispenser adapted for use in dwellings, business houses, offices, and in all other places where lavatories are installed that will by an inexpensive mechanism permit the discharge of liquid soap into the palm of a hand instantly and yet so limiting the quantity at each discharge as to absolutely preclude the possibility of waste.

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

Figure 1 is a cross sectional elevation of the device in normal position; Fig. 2 is a front elevation of Fig. 1; Fig. 3 is an enlarged detail of the outer end of a dispensing tube showing the manner of securing the same; Fig. 4 is an end view of the device in normal position with frame in vertical position; Fig. 5 is an opposite end of the frame from that shown in Fig. 4; Fig. 6 is the same view as shown in Fig. 4 with the device in dispensing position, and Fig. 7 is the same view of the device as shown in Fig. 4 with the frame reversed for setting the frame in horizontal position.

Similar letters refer to corresponding parts throughout the several views.

In the drawings A indicates the body of a liquid soap dispenser which is constructed of either glass or metal said dispenser being provided with an axle A′ on each end. Said dispenser is supported by a bracket B the central part of which is provided with holes *b b* to permit the bracket to be rigidly attached to a base board, wall or other support in proximity to a lavatory. Between said holes *b b* there is a larger hole *b′* to receive an extension rod C of any desired length for the purpose of meeting the requirements where lavatories are spaced from the wall or where purchasers desire the soap dispensers to be placed in elevated positions. Said rod may be ornamental to correspond with the finish of the lavatory or building. Said frame is preferably of spring metal its ends B′ B′ bent at corresponding right angles, each end having a circular opening $A^2$ to carry said axle A′. Said ends B′ B′ being of spring metal said openings $A^2$ $A^2$ are readily spread and adjusted on axles A′ A′. Said frame is reversible each end having a segment of a circle D cut thereout. One segment is horizontal and the other vertical when the frame is horizontal or vertical. When the frame is used in either horizontal or vertical position the segments and lugs are engaged in a manner that insures the fountain remaining in normal position only when the operator uses it for dispensing after which the fountain automatically returns to normal position. Lugs F F operating in each segment prevent the fountain traveling beyond its dispensing position and when the hand of the operator is released prevents the fountain returning automatically beyond its normal position. The top of the body of said fountain is provided with a neck H cast integral with the fountain having a head *h* on the upper edge of the front and back. A metal cap H′ of corresponding form with said neck has a cavity *h′* on the inside of both front and back to engage with said bead when the cap is pressed down in position over said neck. A small perforation *i* is made in the top of said cap to permit the entrance of air into the fountain to insure perfect dispensing of the liquid. Said cap, as shown in Figs. 1, 4, 6 and 7, is so positioned that the opening therein is always above the horizontal of the liquid in the dispenser.

Projection I is a liquid pocket that is always in the position shown in Figs. 1, 4 and 7, except during the instants during which the device is dispensing the liquid soap into the palm of a hand, as shown in Fig. 6.

J is a receiving and dispensing tube the inner end of which rests on the lowest inclined part of the bottom of said pocket being thereby in position to drain or take up liquid soap in the device. The receiving and dispensing tube is provided with a metal washer J′ rigidly attached near the dispensing end of the tube. Said washer is just small enough to permit the same to be inserted through a circular opening *j′* in the fountain. Said tube is also equipped with a larger washer K which is flexible and adapted to be pressed into and through the opening in the fountain down against said rigidly attached metal washer, said

metal washer serving as an adjuster for the large flexible washer. The outer end of said dispensing tube is threaded and is also provided with a flexible washer K′ which is seated and remains on the fountain at all times. The outer dispensing end of the tube is provided with a metal screw tap L preferably having an ornamental head; said tap engages with said threaded end of the dispensing tube. The purpose of said screw tap is to press the flexible washers rigidly against the internal and external shoulders of the opening in the fountain thereby tightening the flexible washers and absolutely preventing any seepage of the liquid.

M is a finger push piece integral with the body of the fountain; this is spaced from the dispensing end of said tube a distance slightly greater than the length of the fingers of an ordinary hand.

It will be readily understood from the foregoing description that to make use of the fountain the user simply extends the palm of one hand to a position underneath the discharge end of the dispensing tube at the same instant allowing one or more fingers to touch and slightly press finger piece M; this pressure instantly revolves the fountain, lowers the dispensing end O of the tube, as shown in Fig. 6, the liquid that was in the tube at the time of said pressure passing into the palm of the hand. Instantly, upon withdrawal of the finger pressure, the fountain revolves automatically back to its normal position, as shown in Figs. 1, 2, 4 and 7, by reason of the weight of pocket I, aided by the weight of finger piece M; as the pocket revolves, said receiving and dispensing tube takes in another supply of the liquid soap and is instantly ready, upon touch of the finger piece, to furnish another supply of the liquid soap.

It will be readily understood that, if preferred, the members B and B may be reversed from a horizontal position to a vertical supporting or a vertical suspending position by simply reversing the frame arms B′ B′ to engage lugs A′ and F.

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

A liquid soap dispenser comprising a tiltable body and a reversible frame adjustable to a vertical or horizontal position said body having a central axle on each end and a lug spaced at a different angle from each axle, said frame being punctured centrally at each end to receive the axle and having a segment of a circle at each end, said frame being set vertically one segment is vertically and the opposite horizontally disposed, the frame being set horizontally the segment that was vertical horizontally disposed and the segment that was horizontal vertically disposed, the variations in the change of the frame being a one quarter revolution and the variation of the position of the segments a one quarter revolution regardless of the position of the frame, the lugs when traveling in said segments limiting the throw of the body to normal position.

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

NEWTON S. HILLYARD.

Witnesses:
W. E. Hillyard,
A. H. Mitchell.

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