B. M. DAWSON.

SOAP HOLDER.

APPLICATION FILED SEPT. 15, 1910.

1,036,463. Patented Aug. 20, 1912.

Fig. 1.

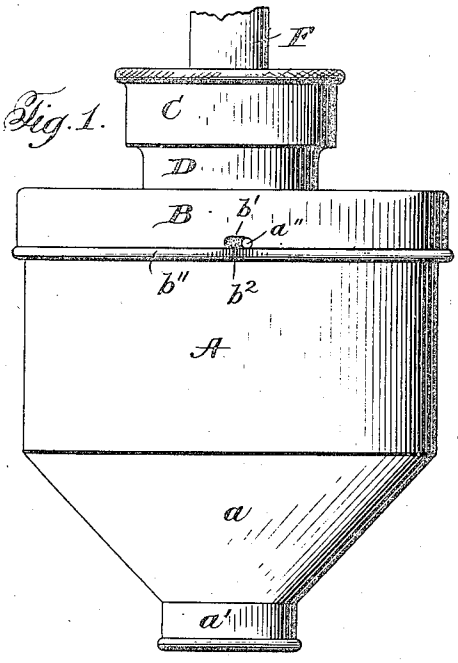



Fig. 2.

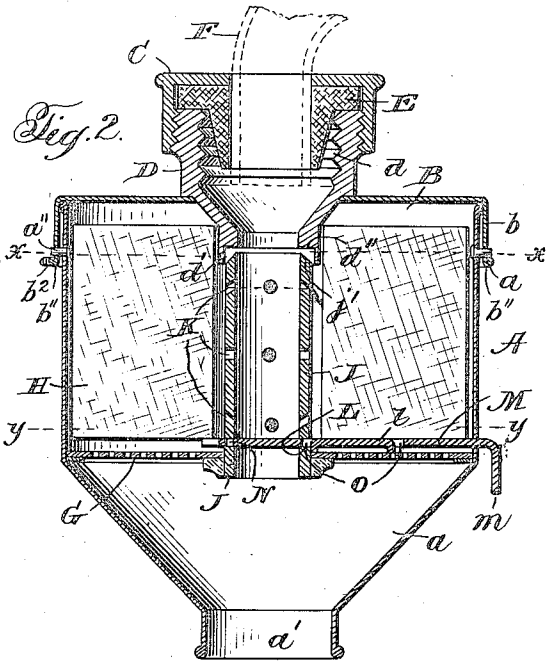



Fig. 3.

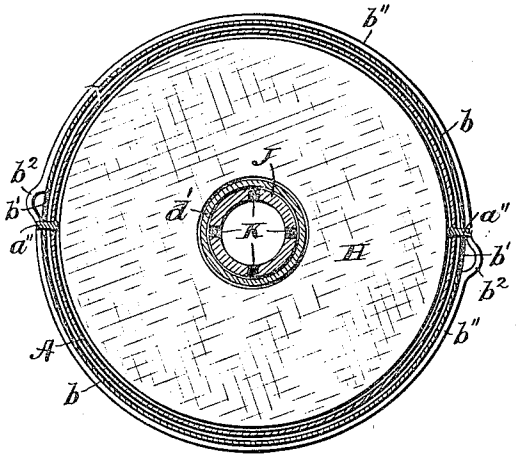
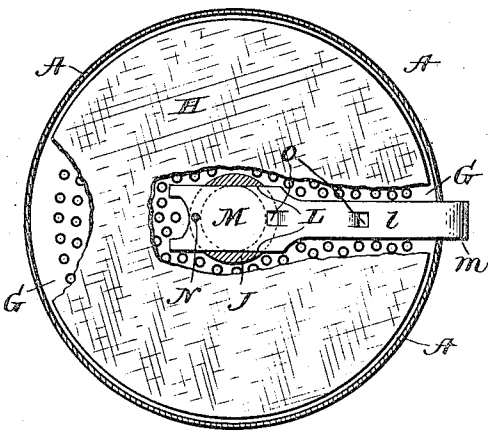



Fig. 4.




Witnesses:

Jas. E. Hutchinson.

Carrie A. Krey.

Inventor:

Baylis M. Dawson,

by Dawson & Wilson Attorneys.

# UNITED STATES PATENT OFFICE.

BAYLIS M. DAWSON, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO EDWIN R. CROOKER, OF LOS ANGELES, CALIFORNIA.

## SOAP-HOLDER.

1,036,463. Specification of Letters Patent. Patented Aug. 20, 1912.

Application filed September 15, 1910. Serial No. 582,263.

*To all whom it may concern:*

Be it known that I, BAYLIS M. DAWSON, citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Soap-Holders, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to soap holders and has for its primary object the provision of a device of this character adapted to be attached to a water supply pipe or faucet to enable the discharge, at the will of the operator, of either clean water, softened water, or suds.

The invention comprises structurally a receptacle for soap, means for connecting the same to a faucet or pipe, and means for permitting either the discharge of clean water directly through the device, or for compelling the water to be discharged in the desired quantities through the medium of fine forced jets against a soap cake to secure the desired resultant solution.

The invention further embraces a container of the character described provided with jet producing means adapted to cause the forced jets to impinge upon the soap cake in different directions to insure a greater contact of the water in small quantities with the soap.

The invention also embraces an improved valve construction enabling the water to escape from the container in volume and unobstructed, or for partially obstructing the discharge to create a forced jet of the escaping clean water, which will be found desirable in washing receptacles such as bottles and jars.

The invention still further includes the combination of a container provided with a perforated water inlet tube, and a cored soap cake adapted to fit over said tube whereby the jets of water will impinge against the bore of the cake as well as pass over and around the cake, and in this connection it will be obvious that the invention includes a cake of the character referred to *per se*.

Details in the construction and arrangement of the parts of a convenient embodiment of my invention will be apparent from the specific description hereinafter contained when read in connection with the accompanying drawings forming part hereof and wherein said embodiment of the invention is illustrated.

In the drawings: Figure 1 is an elevation of the attachment properly applied to a faucet, Fig. 2 is a vertical sectional view through the same, Fig. 3 is a horizontal sectional view on the line $x$—$x$ of Fig. 2, and Fig. 4 is a similar view on the line $y$—$y$ of the same figure.

Referring more specifically to the drawings, A represents a container preferably of sheet metal having a tapered lower end $a$ leading to a discharge spout $a'$.

B is a cap or closure for the receptacle adapted to receive and surround the upper end of the latter, the flange $b$ of the cap being horizontally slotted, as at $b'$, and the rim $b''$ of said flange being deflected outwardly slightly, as at $b^2$, at one end of the slot to constitute a vertical passage for an interlocking pin or projection $a''$ on the receptacle. A slight turning of the cap after the introduction of the projection will carry the rim $b^2$ adjoining the deflected portion thereof, beneath the projection and lock the parts together, as is obvious. There are two of these interlocks at opposite sides of the device.

The cap is open at its central portion and carries a coupling device comprising coöperating threaded members C and D having a packing E interposed therebetween adapted to be clamped by the coupling upon the end of a pipe or faucet F. In some instances the packing E and coupling member C may be dispensed with, the threaded interior $d$ of the coupling member D having threaded engagement with a correspondingly threaded pipe or faucet mouth. The lower end of the coupling member D is somewhat contracted, as shown, and extends downwardly into the space within the receptacle A as at $d'$, the extreme end thereof being provided with an annular shouldered portion $d''$ for a purpose presently to be pointed out.

G is a screen constituting a support, secured to the casing A at the lower end of its enlarged portion whereby to support a soap cake H. Centrally this partition is provided with an opening through which extends a water conducting tube J, the lower end of the tube being securely fastened by soldering or otherwise, as at J, to the screen. This conducting tube projects upwardly sub-

stantially through the upper portion of the receptacle A and has its end beveled as at *j'* to be readily centered within the shouldered portion *d''* of the member D, and to leave a downwardly and outwardly opening channel between said beveled end and shouldered portion, as illustrated in Fig. 2.

K represents a series of fine apertures formed in the tube J, said apertures, as best seen in Fig. 2, being arranged in series, each series extending in a different direction relative to the other series whereby to cause water to be emitted therefrom in forced jets, striking the soap at different angles to better insure an intimate mixture of the water and soap.

The bottom of the tube J is slotted horizontally, as at L to constitute a valve seat adapted to receive a corresponding horizontally arranged slidable valve M working directly above the screen G with its stem extending outside the casing A where it is provided with an operating handle *m*. It will be understood that by manipulating the valve the same may be retracted outwardly away from the seat to afford an unobstructed direct passage for clear water through the tube J and out of the spout of the device, while by closing the valve to constitute a barrier covering the entire lower end of the tube the water will be forced through the apertures of the latter into impingement with the soap and also through the channel between the top of the tube and the shouldered portion on the cover into the receptacle around the soap. By an adjustment of the valve to partially close or open the tube J the mixture may be varied to suit the whim or desire of the user or to meet the demands of the particular use in connection with which the device is employed at any time.

At times it is desirable to have the water discharged from the device in a jet of considerable force, as for example when washing bottles or deep tubular structures, and to that end the inner edge of the valve is provided with a small aperture N adapted to form and discharge such a jet.

Any convenient means may be employed to limit the reciprocation of the valve, but I find a simple and efficient method involved in the employment of sheet metal in the construction of the valve and the striking downwardly from the valve stem 1 or shank of a pair of oppositely disposed lugs O adapted respectively to contact the inside of the wall of the casing and outside of the tube J to confine the movement of the valve in two directions.

Of course the soap cake H is preferably formed of a size to fill the space provided therefor within the casing A, and the cake is cored axially to provide a free passage of the tube J therethrough and to permit the water jets to discharge from the tube to perform the function desired.

While I have herein disclosed one specific embodiment of the invention, it will be apparent to those skilled in the art that the invention is capable of being embodied in other forms and devices without departing from the spirit thereof.

I claim:—

1. A soap container of the character described comprising a receptacle provided with a foraminated support for the soap, a tubular member projecting upwardly from said support arranged to discharge therethrough, means for connecting the receptacle to a supply pipe to discharge directly into said tubular member, and a valve near the discharge end of said tubular member, the tubular member being provided with perforations through which water jets may be forced when the passage through the tubular member is obstructed by the valve.

2. A soap container of the character described comprising a receptacle provided with a foraminated support for the soap, a tubular member projecting upwardly from said support and arranged to discharge therethrough, means for connecting the receptacle to a supply pipe to discharge into said tubular member, a valve near the discharge end of said tubular member, the tubular member being provided with perforations through which water jets may be forced when the passage through the tubular member is obstructed by the valve, and the apertures in the tubular member being differently disposed to direct the jets against the soap at relatively different angles.

3. A soap container of the character described comprising a receptacle provided with a foraminated support for the soap, a tubular member projecting upwardly from said support and arranged to discharge therethrough, means for connecting the receptacle to a supply pipe to discharge into said tubular member, a valve near the discharge end of said tubular member, the tubular member being provided with perforations through which water jets may be forced when the passage through the tubular member is obstructed by the valve, and means at the top of the receptacle adapted to interfit with the upper end of the tubular member.

4. A soap container of the character described comprising a receptacle provided with a foraminated support for the soap, a tubular member projecting upwardly from said support and arranged to discharge therethrough, means for connecting the receptacle to a supply pipe to discharge into said tubular member, a valve near the discharge end of said tubular member, the tubular member being provided with perforations through which water jets may be

forced when the passage through the tubular member is obstructed by the valve, said valve comprising a slidable member engaging a seat in the tubular member, and means extending outside the receptacle for shifting the valve, in combination with stops for limiting the movement of the valve in both directions.

5. A soap container of the character described comprising a receptacle having a detachable cover and a foraminated support therein, water inlet and discharge portions, a tubular member within the receptacle for the unobstructed passage of water, said tubular member having small discharge apertures arranged between its inlet and outlet, a valve for the tubular member arranged near its outlet for obstructing the direct passage of water through the tubular member, and means extending outside the receptacle for operating the valve so that in the closing operation of the same water will be discharged in forced jets through the apertures in the tubular member against the soap.

6. A soap container of the character described comprising a receptacle having a detachable cover and a foraminated support therein, water inlet and discharge portions, a tubular member within the receptacle for the unobstructed passage of water, said tubular member having small discharge apertures arranged between its inlet and outlet, a valve for the tubular member arranged near its outlet for obstructing the direct passage of water through the tubular member, means extending outside the receptacle for operating the valve so that in the closing operation of the same water will be discharged in forced jets through the apertures in the tubular member against the soap, and the valve being provided with a small aperture for emitting a forced jet of water when the valve is shifted to expose said aperture.

7. A soap container of the character described comprising a casing for the soap provided with inlet and outlet portions, a conducting member within the casing permitting clear water to be discharged therethrough, said conducting member being provided with perforations adapted to discharge against the soap within the receptacle and adjoining said conducting member, a valve constituting an adjustable obstructing device in the conducting member arranged at a point below the perforations thereof to cause the water to be forced in jets through said perforations against the soap or to permit the unobstructed passage of the water as stated, and a foraminated support for the soap through which the soapy water may pass to the outlet.

8. A soap container of the character described comprising a casing for the soap provided with inlet and outlet portions, a conducting member within the casing permitting clear water to be discharged therethrough, said conducting member being provided with perforations adapted to discharge against the soap within the receptacle and adjoining said conducting member, a valve constituting an adjustable obstructing device in the conducting member arranged at a point below the perforations thereof to cause the water to be forced in jets through said perforations against the soap or to permit the unobstructed passage of the water as stated, and a foraminated support for the soap through which the soapy water may pass to the outlet, the valve being provided with a small passage therethrough adapted when exposed to permit a forced jet of water to be discharged therethrough and through the outlet.

9. A soap container of the character described comprising a foraminated support, a tubular member associated therewith having an inlet at one end and a valve at its opposite end, a casing surrounding the tubular member, said tubular member being provided with apertures arranged intermediate of the ends thereof and opposite to the casing for directing water jets outwardly therefrom toward the space between the tubular member and the casing when the valve is closed.

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

BAYLIS M. DAWSON.

Witnesses:
JULIA C. WOODMAN,
MARY C. O'BRIEN.