(No Model.) 2 Sheets—Sheet 1.

E. LEE.

APPARATUS FOR DISPENSING LIQUID SOAP FOR TOILET PURPOSES.

No. 517,978. Patented Apr. 10, 1894.

Fig. 1.

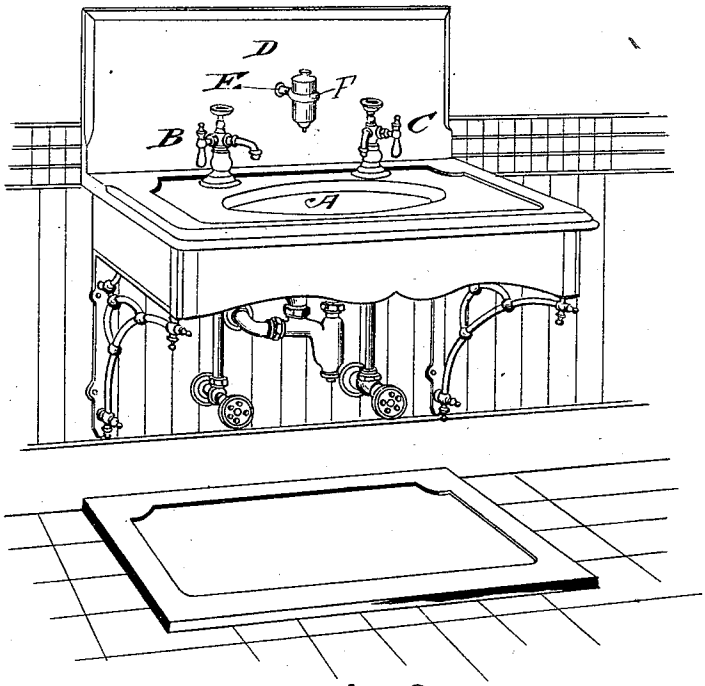
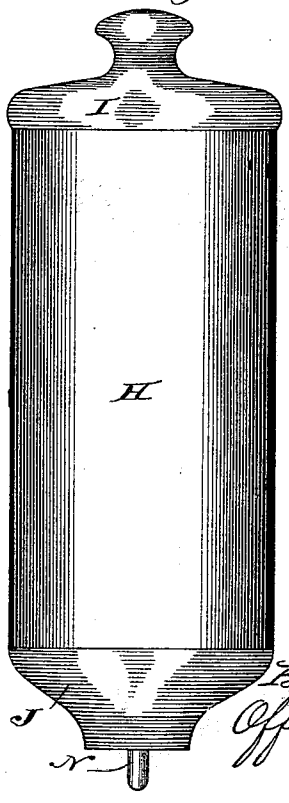


Fig. 2.



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(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

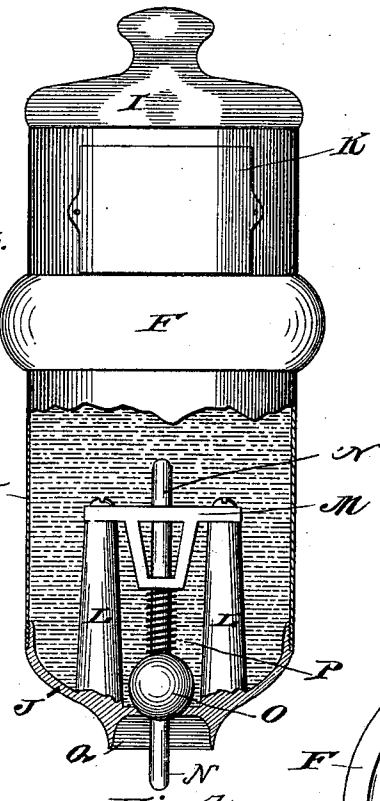


Fig. 6.

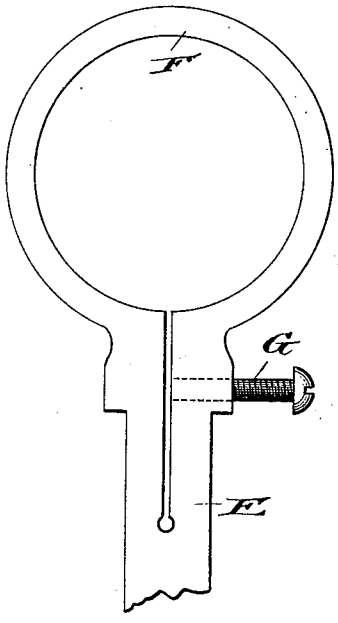


Fig. 5.

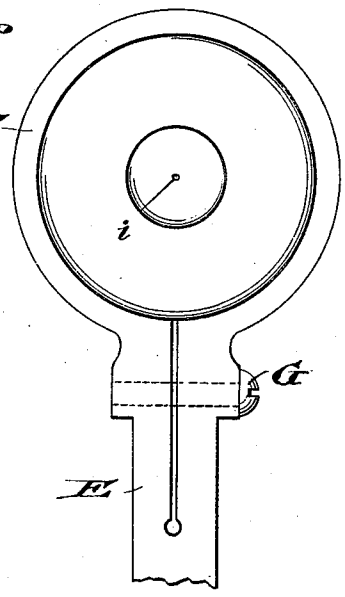
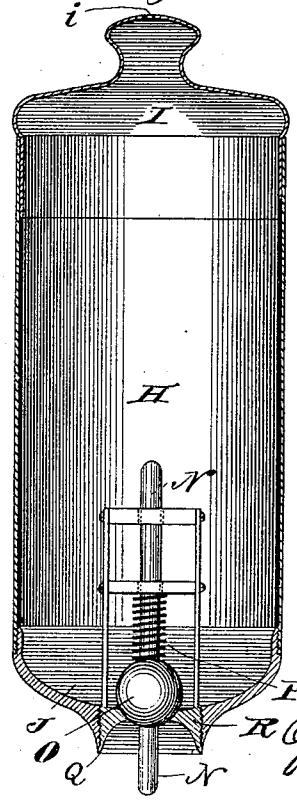


Fig. 4.



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UNITED STATES PATENT OFFICE.

ELMER LEE, OF CHICAGO, ILLINOIS.

APPARATUS FOR DISPENSING LIQUID SOAP FOR TOILET PURPOSES.

SPECIFICATION forming part of Letters Patent No. 517,978, dated April 10, 1894.

Application filed February 20, 1893. Serial No. 463,029. (No model.)

To all whom it may concern:

Be it known that I, ELMER LEE, of Chicago, Illinois, have invented certain new and useful Improvements in Apparatus for Dispensing Liquid Soap for Toilet Purposes, of which the following is a specification.

The object of this invention is to provide a practicable apparatus for dispensing liquid soap for use for toilet purposes.

It has long been known that toilet soap in the form of a solid furnishes a vehicle for the transmission of disease, and particularly of diseases of the skin, and this fact is so well recognized that in most European countries toilet soap is not supplied to guests at houses of public entertainment; but on the contrary, the guest carries soap as one of the articles pertaining to the toilet; and to further prevent contagion and the uncleanliness resulting from the repeated handling and carrying about of toilet soap there has come into use to some extent in this country and in Europe soap in a liquid form. The quality and nature of soap vary greatly and its effect upon the human body is benign or hurtful, according as the soap used is pure or impure. Soap in the liquid form has long been known and its excellence as a cleansing agent, its healthful influence upon the skin, and its superiority over solid soaps in point of purity has been pointed out by chemists and physicians and generally acknowledged. The general adoption and use of liquid soap has been prevented by the lack of some suitable method of dispensing it. Heretofore the only means for carrying and dispensing liquid soap has been a common glass bottle. To carry liquid soap about in bottles is not only inconvenient but the breaking of the bottles and the frequent annoyance involved in forgetting them has prevented the general adoption and use of this otherwise desirable article.

It is the object of this invention to provide for dispensing liquid soap in a convenient and economical manner. To this end there is provided by the invention a device which can be readily applied as a fixture to a stationary wash bowl or lavatory, and by means of which desired quantities of liquid soap can be withdrawn for toilet purposes without waste and without personal contact with the soap, each user withdrawing only such quantity as may be desired for himself and without opportunity to place his hands in contact with the store of soap.

In carrying out my invention there is provided a suitable reservoir which is permanently attached to the wash bowl and becomes a fixture therewith. Said reservoir is provided with a suitable filling aperture and with a valve controlled discharge aperture. The valve is self-closing and is located in the bottom of the reservoir, its stem protruding below the same so that by simple upward pressure or a light blow on the protruding stem the valve is unseated and a quantity of liquid soap is discharged into the palm of the hand which operates the valve.

In the accompanying drawings, Figure 1 is a perspective view of a stationary wash bowl having the liquid soap dispensing apparatus applied as a fixture thereto. Fig. 2 is an enlarged elevation of the reservoir showing a removable cap or cover and a valve stem protruding below the delivery end of the reservoir. Fig. 3 is a broken sectional elevation of the same showing the preferred form of construction of the reservoir and valve. Fig. 4 is a longitudinal sectional elevation showing a modification. Fig. 5 is a plan view showing the reservoir and a supporting clamp, the latter broken away. Fig. 6 is a similar view of the clamp, the reservoir withdrawn.

In the drawings, A represents a stationary wash bowl having as fixtures the faucets B, C for supplying hot and cold water to the bowl.

D represents a slab at the back of the bowl to which is fixed the bracket arm E having the annular clamping ring F. The clamping ring and the bracket arm are preferably formed integrally, and in order to tighten the clamping ring upon the reservoir the shank may be slit or divided longitudinally and the clamping screw G may be employed.

H represents the cylindrical body of a suitable reservoir which is preferably formed of some non-corrosive material, as nickel plated brass or aluminum, and may be a section of metal tubing.

I represents a slip cover which may be formed by spinning or stamping, and J represents a bottom cap which is preferably cast, as shown in Fig. 3, and provided with short pillars or supports L having a bridge M clamped on the pillars by screws and having upper and lower cross heads apertured to provide guides for the valve stem N, which latter is provided with the globe valve O, normally held to its seat by the spring P. The cap J is centrally apertured and the lower end of the valve stem protrudes through said aperture, while the upper surface of the cap is suitably constructed to provide a valve seat. The aperture is surrounded by the annular flange Q whose inner walls are concave and terminate at the bottom in a sharp edge so as to prevent the adhesion of the liquid soap thereto and cause it to run down to the last drop into the hand when the valve is manipulated.

In Fig. 4 the form of the support and bridge for the valve stem is of slightly modified construction, the uprights or pillars in this case being formed with a removable screw plug R which has a threaded connection with a threaded aperture in the bottom plate and is constructed to provide upon its upper surface the valve seat and upon its lower side the sharp annular flange.

The cover has a minute perforation as at *i*, (Figs. 4 and 5) to permit air to enter above the liquid to cause its discharge when the valve is opened.

K represents a plate secured on the reservoir which plate provides a vertical support for the reservoir and which plate will receive the name of the manufacturer or other matter of information or advertisement.

The manner of use will be readily understood. The liquid soap is charged into the reservoir by removing the cap or cover. A person desiring to withdraw a quantity of the liquid soap for toilet use places the palm of the hand beneath the reservoir and by a slight upward pressure or blow upon the protruding end of the valve stem the valve is raised and the liquid soap flows down into the palm of the hand. The amount withdrawn at a single actuation will be determined by the extent to which the valve is raised above and the length of time it is held off its seat. If the valve stem be raised to the greatest extent possible by pressure from the palm of the hand, the latter will close over the margin of the annular flange, thus permitting a measured quantity of the liquid to escape, *i. e.*, such a quantity as the chamber formed by the flange will contain.

From the above description it will be seen that there is provided a convenient means for dispensing a liquid soap which can be furnished as an appurtenance to every lavatory, and the device may form one of the fixtures of a stationary wash bowl. It can be so arranged that it will not take up any room required for other purposes. It takes the place of the unsightly soap dish and furnishes a superior form of soap in an economical manner and without any liability of spreading contagion by personal contact.

The particular construction of the clamp bracket may be varied and a suitable tray having holders therein may be provided for collecting the several reservoirs when it is desired to remove them from the brackets—as, for example, when they are used on railway cars.

I claim—

1. As a new article of manufacture, a toilet or lavatory fixture for dispensing liquid soap for individual use, comprising a reservoir and a fixed support therefor, said reservoir having a filling opening and having a suitable discharge aperture in its bottom, a valve within the reservoir and normally pressed against and closing said discharge aperture, and means extending outside the reservoir whereby the valve may be moved away from the discharge aperture, substantially as described.

2. As a new article of manufacture, a toilet fixture for dispensing liquid soap for individual use, which comprises a reservoir, a support therefor adapted to be permanently attached, and said reservoir having a filling opening and a suitable discharge aperture in its bottom and a valve normally closing said discharge aperture and having its stem projected therethrough and external to the reservoir and adapted to be raised by the upward pressure of the palm of the hand thereon, whereby a quantity of the liquid soap may be received in the same hand which manipulates the valve, substantially as described.

3. In an apparatus for dispensing liquid soap for toilet purposes, the combination with a bracket arm having an integral clamping ring and means for compressing the clamping ring, a cylindrical reservoir supported by the clamping ring, a valve controlled aperture in the bottom of said reservoir, a valve stem projected through said aperture and a tapered annular flange surrounding said valve stem, substantially as described.

4. In an apparatus for dispensing liquid soap for toilet purposes, the combination with a supporting bracket clamp, of a cylindrical reservoir having a removable cover, a bottom cap having a connection with the cylindrical body, said bottom cap having rising from its interior surface integral posts or pillars, a bridge or guide having a cross head supported upon the tops of said pillars, a second cross head depending between, a valve stem adapted to slide through apertures in said cross heads, a valve carried by said stem, a spring interposed between the lower cross head and the valve, said valve stem being projected

through an aperture in the bottom plate and adapted to be unseated by an upward pressure or blow, substantially as described.

5. In an apparatus for dispensing liquid soap, the combination with a reservoir having a suitable filling aperture at its top, a valve controlled discharge aperture at its bottom, and an annular flange surrounding the discharge aperture, said flange having concave inner walls terminating at its margin in a sharp edge, substantially as described.

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Witnesses:
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