No. 607,753. Patented July 19, 1898.

L. O. LAWRASON.

SANITARY EJECTOR.

(Application filed July 29, 1897.)

(No Model.)

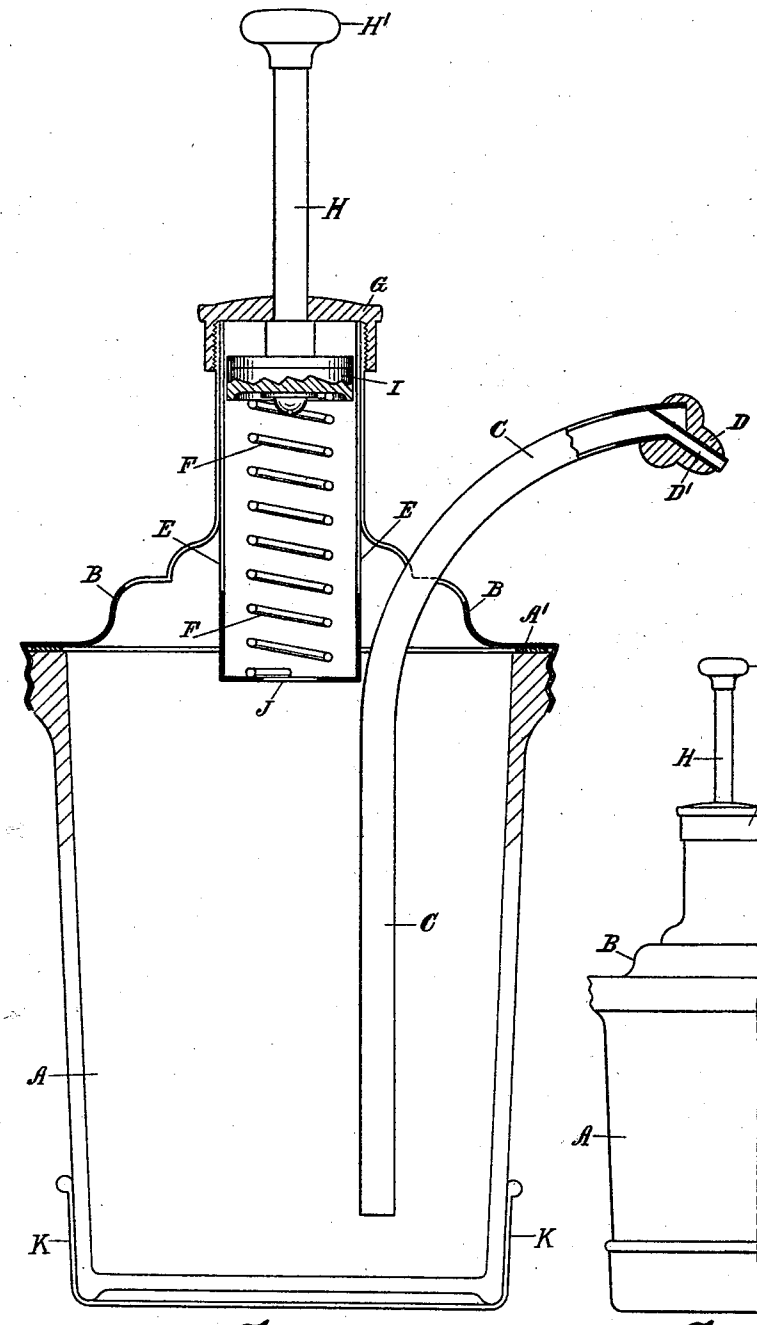

Fig. 1.

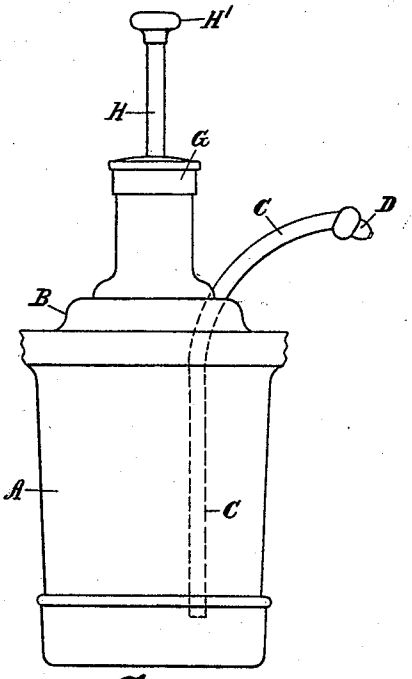

Fig. 2.

Witnesses
Jas. Edmunds
S. McBain.

Inventor
Louis O. Lawrason
By P. J. Edmunds
Attorney.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

LOUIS O. LAWRASON, OF LONDON, CANADA, ASSIGNOR OF ONE-HALF TO JAMES W. BUTLER, OF SAME PLACE.

SANITARY EJECTOR.

SPECIFICATION forming part of Letters Patent No. 607,753, dated July 19, 1898.

Application filed July 29, 1897. Serial No. 646,433. (No model.)

To all whom it may concern:

Be it known that I, LOUIS O. LAWRASON, a subject of the Queen of Great Britain, and a resident of the city of London, in the county of Middlesex, in the Province of Ontario, Canada, have invented a new and useful Sanitary Ejector, of which the following is a specification.

This invention relates to a device which is operated when required to eject or discharge a limited or sufficient quantity of liquid soap; but it may be used for discharging any other oil or liquid; and this invention consists of the improved construction and combination of parts of the same, as will be hereinafter first fully set forth and described, and then pointed out in the claims.

Reference being had to the accompanying drawings, Figure 1 is an enlarged detail central sectional view of my improved sanitary ejector. Fig. 2 is a side view of same, but on a reduced scale.

A designates the soap-reservoir, and B a cover which is screwed or otherwise secured thereto.

A′ is a gasket or packing of rubber or other suitable material interposed between the upper rim of the reservoir and the cover to avoid or completely prevent the escape of the contents at this point.

C designates an exit-tube which is secured to the cover B in any manner or by any means found most suitable or convenient. A portion of this tube extends into and within a short distance of the bottom of the reservoir. The other portion of this tube extends beyond the cap or cover and is provided with a terminal tip D, and this tip D is provided with a passage D′, which is at an abrupt angle to the passage in the exit-tube.

E designates a piston-chamber which is preferably secured centrally to the cover B in any manner or by any means found most suitable or convenient.

F is a spring loosely placed in this piston-chamber.

G designates a cap which is screwed on the upper end of the cover B or piston-chamber E, as preferred. This cap G is for the purpose of tightly closing the upper end of the piston-chamber E.

H designates a piston-rod which extends through the cap G, and to the end of this piston-rod H the piston I is secured. The latter when in proper position rests on the spring F in the piston-chamber E.

J designates a small opening in the bottom of the piston-chamber E.

K designates any suitable support for this device.

The reservoir may be filled by removing cap G and piston-rod H and piston I, connected therewith, and pouring the liquid soap into the piston-chamber, from which it passes through opening J into the reservoir A, after which by screwing the cap on again the ejector is ready for use.

If a person wishes to use this invention, the procedure is as follows: He holds one hand under the passage D′ of the tip D and with the other hand presses downward on the knob H′ of the piston-rod H. The result will be the discharge of a quantity of liquid soap into his hand from the passage D′. The downward pressure on the knob H′ adjusts the piston I toward the inner end of the chamber E and compresses the air in the chamber A on top of the liquid soap until the compression of the air is sufficient to overcome the resistance of said liquid soap. This forces the latter into and through the tube C and tip D. The result is that so long as the pressure is retained on the knob H′ and the air thus compressed in the reservoir A above the liquid soap the latter will discharge at the tip D, so that the quantity of liquid soap discharged is regulated by the length of time the pressure is retained on the knob H′. Consequently any quantity of the liquid soap desired may thus be obtained. When a sufficient quantity of liquid soap has been obtained, the discharge is instantly stopped by removing the pressure from the knob H′, because the spring F will expand and automatically raise the piston I to the position shown in Fig. 1. The result of the first part of this retracting movement will permit the air to expand and relieve the liquid soap from its

action, and the further action of this piston will be to suck and draw the liquid soap back through the tube C and tip D so completely that no liquid soap will remain on the outer end of the tip D.

This invention provides a durable, inexpensive, and efficient device for this purpose, a device that will be economical as to the cost of soap used and that will always present a handsome, clean, and neat appearance, a device that will provide a fresh supply of soap for each person, the advantages of which cannot be estimated, and, again, by using this device the process of washing will be done with greater despatch and with less labor.

Having thus described my invention, I claim—

1. A sanitary ejector, consisting of a reservoir, A, cover, B, piston-chamber, E, provided with the opening, J, the spring, F, contained within the piston-chamber, the piston, I, piston-rod, H, and cap, G, in combination with the tube, C, provided with the tip, D, having a passage, D′, formed therein at an angle to the passage in the tube, C, substantially as and for the purpose set forth.

2. A sanitary ejector, consisting of a reservoir, A, cover, B, piston-chamber, E, in which the opening, J, is formed, the piston, I, piston-rod, H, and cap, G, in combination with the tube, C, opening into and near the bottom of said reservoir; and said chamber, E, opening into said reservoir, A, above the liquid contained therein, and thus permitting the piston, I, to compress the air above the liquid, so that as long as the pressure is retained on the knob, H′, the liquid will discharge through said tube, C, substantially as and for the purpose set forth.

3. A sanitary ejector, consisting of a reservoir, A, cover, B, piston-chamber, E, in which the opening, J, is formed, the piston, I, piston-rod, H, and cap, G, in combination with the tube, C, provided with a tip, D, having a passage, D′, formed therein, said tube, C, opening into and near the bottom of said reservoir, and said chamber, E, opening into said reservoir, A, above the liquid contained therein, and thus permitting the piston, I, to compress the air above the liquid, so that as long as the pressure is retained on the knob, H′, the liquid will discharge through said tube, C, and tip, D, substantially as and for the purpose set forth.

In testimony whereof I have signed in the presence of the two undersigned witnesses.

LOUIS O. LAWRASON.

Witnesses:

P. J. EDMUNDS,

S. MCBAIN.