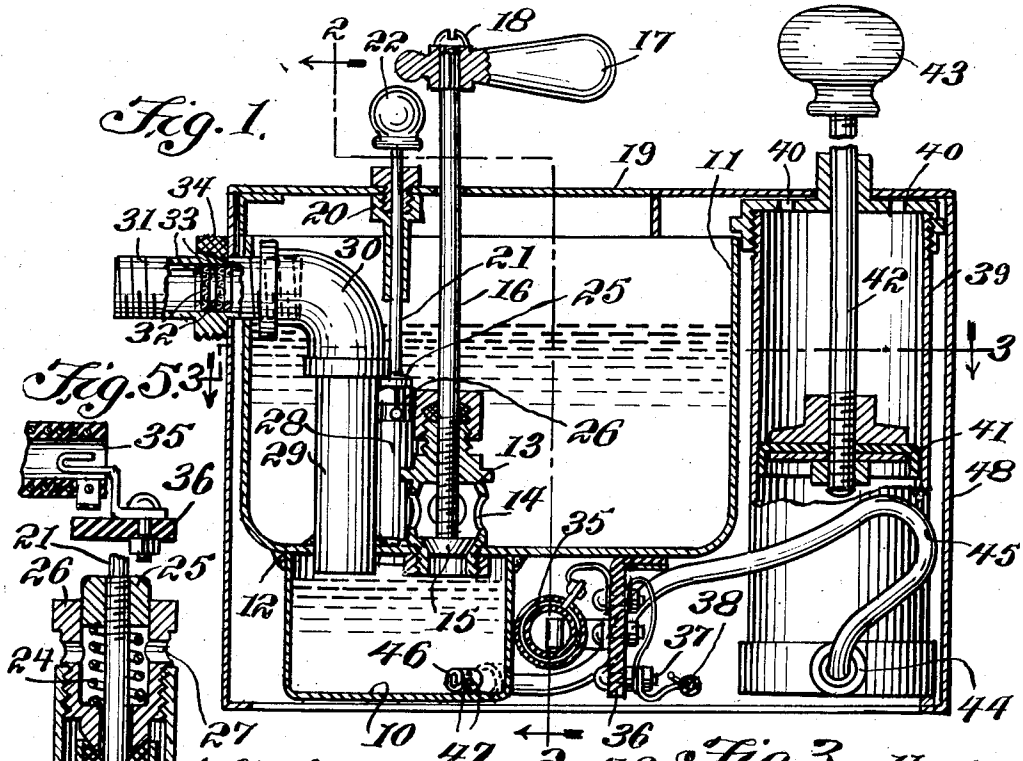
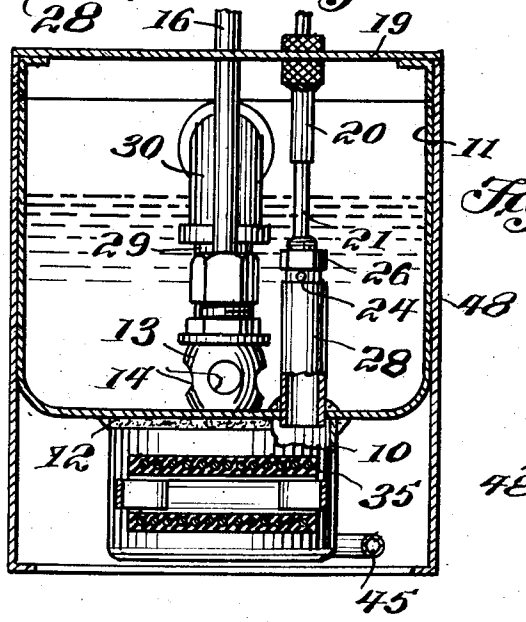
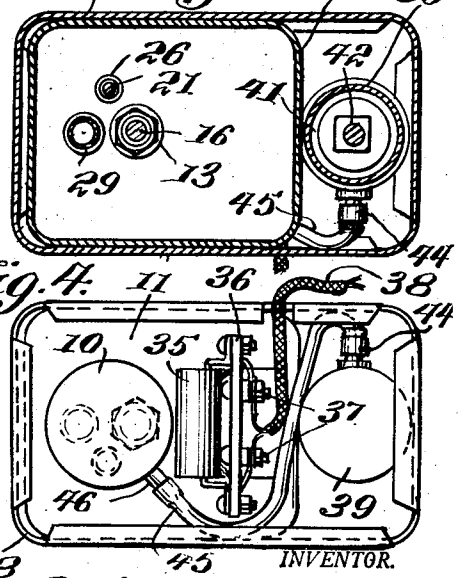
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TONSORIAL LATHER DISPENSERS

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TONSORIAL LATHER DISPENSERS

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3 Claims. (Cl. 299—83)

The object of the invention is to provide a lather dispenser using liquid soap, but provided with a manual means for aerating it and ejecting it, thereby avoiding the use of mechanical means, such as motors, with their likelihood of impairment; to provide a device of the kind indicated in which the liquid soap is stored above the aerating chamber and admitted to the lather periodically as depletion in the aerating chamber obtains; to provide a lather dispenser in which the aerating chamber is at a low level compared with the point of ejection of the lather, so that there may be no possibility of fluid soap following the lather in a dispensing operation; to provide, in a device of the kind stated, a heating means adjacent the aerating chamber and below the soap storage chamber, whereby the aerating chamber may be kept at a uniform temperature; to provide a hand pump serving the aerating chamber through a conductor which is so positioned that the likelihood of drawing soap into the pump is reduced to a minimum; to provide a strainer in the discharge means for the lather, so as to break up any hard particles in the same; to provide the discharge means in a form to be reversible in order that the screen, having become clogged at any time, may be reversed to be cleansed in a following ejecting operation; and generally, to provide a lather dispenser which is of simple form, composed of comparatively few parts, with the likelihood of failure at any time reduced to a minimum, and of such a character as to be susceptible of cheap manufacture and sale.

With this object in view, the invention consists in a construction and combination of parts of which a preferred embodiment is illustrated in the accompanying drawings, wherein:

Figure 1 is a vertical longitudinal sectional view of the invention;

Figure 2 is a sectional view on the plane indicated by the line 2—2 of Figure 1;

Figure 3 is a sectional view on the plane indicated by the line 3—3 of Figure 1;

Figure 4 is a bottom plan view of the structure illustrated in Figure 1;

Figure 5 is a detail sectional view of the heater; and

Figure 6 is a sectional view through the vent valve.

Lather is dispensed from the aerating chamber **10**, which is below the soap chamber **11**, to the bottom wall of which the aerating chamber is fixedly attached as by welding or soldering as indicated at **12**. In the bottom wall of the soap chamber (which is, of course, designed to contain liquid soap), is a valve **13**, having a lateral inlet port **14**, through which the soap enters the aerating chamber when the valve disc **15** is raised, as it may be by means of rotating the stem **16** through the instrumentality of the handle **17**, mounted on the upper end of the stem and secured in place thereon by the screw **18**. The stem projects through an opening in the cover **19** which closes the soap chamber and which is removed to permit charging the lather with liquid soap. The cover carries a tubular guide **20**, in

which is slidingly mounted a rod **21**, provided at its upper end with a knob **22**. This rod constitutes the operating means for the valve **23**, which is normally held in closed position by the compression spring **24**, bearing one end upon the head **25** and the other end in the bottom of the case **26**, which has lateral ports **27**. The valve is mounted in the upper end of a tube **28**, which communicates with the aerating chamber and, when the air pressure in the latter has reached a point where it may eject lather through the discharge support without operation of the pump, the excess air may be vented off into the soap chamber by the opening of the valve through the simple expedient of depressing the knob **22** of the rod **21**, the lower end of which bears upon the head or member **25**.

The lather is dispensed from the aerating chamber through a standpipe **29**, which is fixed at the bottom of the soap chamber and communicates with the aerating chamber and which, at its upper end is provided with an elbow **30**, in which a discharge nozzle **31** is threadingly engaged, this nozzle being interiorly provided with a plurality of screens **32**, set in the nozzle and separated by intervening spacers **33**, in the form of rings. The nozzle is threaded at opposite ends so that if the screens become clogged, the nozzle may be reversed and the large particles, clogging the screens, ejected through the open end of the nozzle. The nozzle is formed with a shoulder portion **34**, exteriorly knurled to provide for its being readily removed by hand and reversing position.

To provide for an aerating chamber at proper temperature, a heater **35** is employed, this heater being in the form of a porcelain-covered resistance, mounted on an insulating block **36**, with the terminals led to binding posts **37**, to which are connected the terminals of a flexible cord **38**, by which the resistance may be electrically excited.

The aerating means consists of a pump in the form of a cylinder **39** closed at its lower end but vented, as indicated at **40**, at its upper end, so that there will be comparatively no resistance to the upstroke of the piston **41**, to which is connected a piston rod **42**, terminally fitted with a hand knob **43**. On the upstroke, air will pass down below the piston and when the latter is depressed, it will be ejected through the check valve **44** and through the hose **45** into the aerating chamber, into which it enters through the fitting **46**, which is open-ended, but which is provided with a circumferential series of lateral ports **47**, so as to disperse the air as it enters the aerating chamber. The check valve **44** is of a form to preclude entrance into the pump thereat, but to provide for discharge therefrom. All of the parts heretofore described are enclosed in a case **48**, which is open at the bottom and also at the top, but only when the cover **19** is raised, which may be done by removing the handle **17** from the stem **16**.

In the operation of the invention, the soap chamber **11** is charged with liquid soap, after which the valve **15** is opened to admit a supply to the aerating chamber **10**. The valve **15** is then closed and, the resistance having been connected to an exciting source, the contents of the aerating chamber are heated and the device is ready for operation, the piston of the pump being raised by pulling up on the knob or handle **43**. Then to start the ejection of lather, the piston is depressed, the operation continuing until the desired amount of lather has been ejected through the discharge nozzle **31**. In use, each operation requires only part of the full piston movement, so that when the latter has once been raised, several periodic depressions of the piston rod take place before it must again be raised.

The tubular conductor connecting the pump with the fitting **46** is arranged in an upwardly forming curve so

as to preclude any possibility of soap finding its way into the pump, even though the check valve **44** might otherwise permit this condition in some instances.

Of course, there are times when the aerating chamber will be over-charged with air. That condition can easily be corrected by depression of the knob **22** to open the vent valve **23**.

The invention having been described, what is claimed as new and useful is:

1. A lather dispenser comprising a soap chamber, an aerating chamber directly below the soap chamber and in valved communication with the latter, a hand pump discharging air into the aerating chamber, a standpipe in the soap chamber and communicating with the aerating chamber, a discharge nozzle connected with the standpipe, the nozzle level being well above the level of the aerating chamber, a vent valve positioned in the soap chamber but in communication with the aerating chamber, and an exterior operating means for the vent valve to relieve the aerating chamber of excess air.

2. A lather dispenser comprising a soap container, an aerating container therebelow and in valved communication therewith, a lather discharging standpipe extending upwardly from said aerating container and provided with a discharge nozzle located above the liquid level of said soap container, and a pump in communication with said aerating container.

3. A lather dispenser comprising a soap container, an aerating container therebelow and in valved communication therewith, a lather discharging standpipe extending upwardly from said aerating container and provided with a discharge nozzle located above the liquid level of said soap container, and a pump in communication with said aerating container, the pump being adjacent to the soap container which extends laterally beyond the aerating container, so as to provide a space between the latter and the pump, and a heating resistance disposed in said space and operative to thermally affect the aerating container, the soap container and the pump.

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