Dec. 6, 1949 H. JACOBS 2,490,440

BRUSH FOR CLEANING TYPE

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Fig. 1.

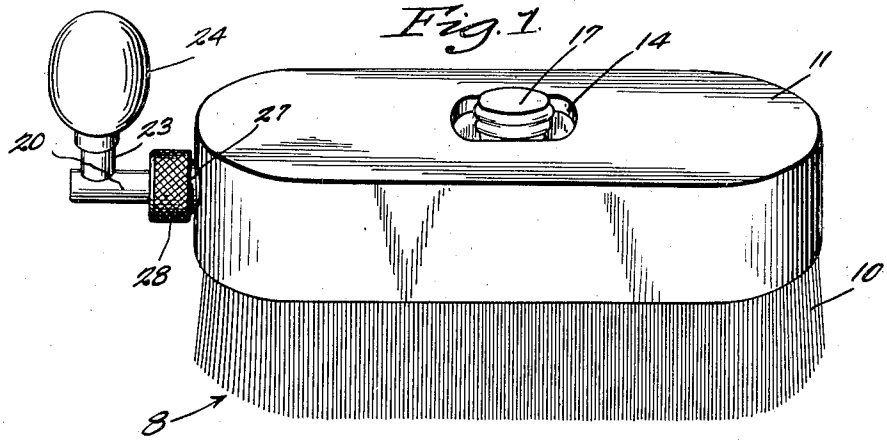



Fig. 2.

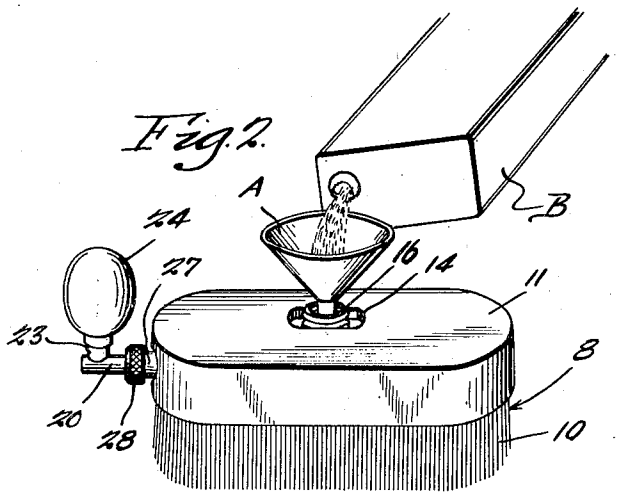
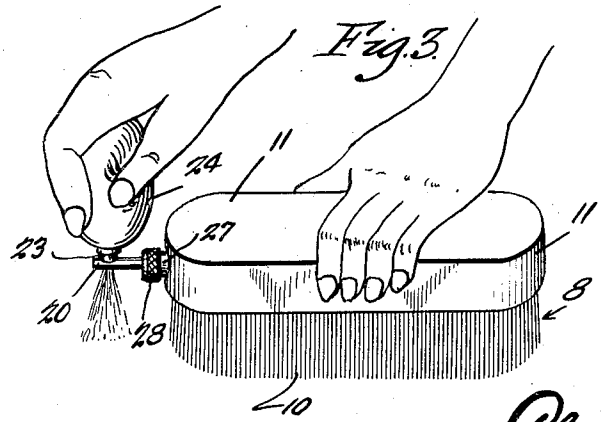



Fig. 3.




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Fig. 4.

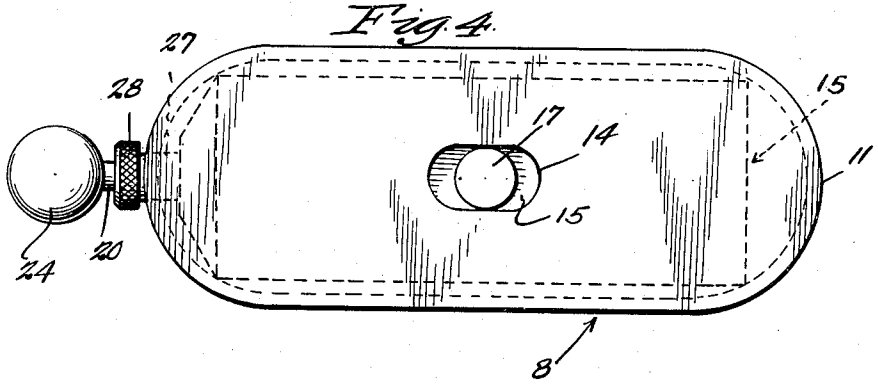



Fig. 5.

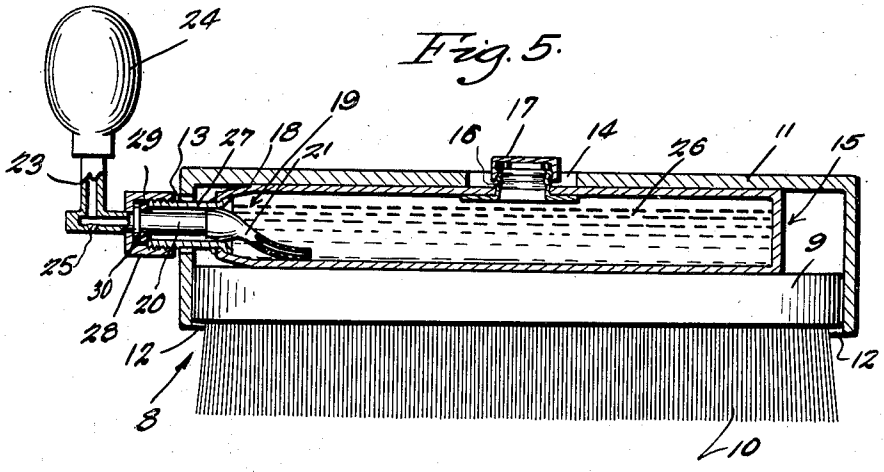
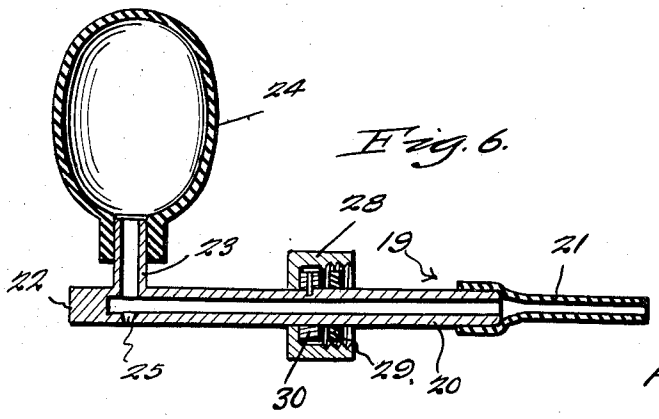



Fig. 6.




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2,490,440

# UNITED STATES PATENT OFFICE

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## BRUSH FOR CLEANING TYPE

Hyman Jacobs, Allston, Mass.

Application May 22, 1946, Serial No. 671,639

3 Claims. (Cl. 15—124)

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The present invention relates to a brush provided with spraying means so constructed as to provide a means for adequately and satisfactorily cleaning type or the like.

More specifically, the invention pertains to a bristle brush equipped with a chemical solution container, the latter provided with a bulb equipped spray nozzle conveniently arranged for applying the solution to the surface to be cleaned, the latter result being accomplished through proper use of the bristles.

In carrying out the preferred principles of construction a solution containing tank, equipped with a bulb and spray nozzle, is mounted on the back of the brush by way of a simple housing, the complete construction serving to provide appropriate means for expeditiously applying the chemicals and thereafter brushing and removing same to accomplish the desired results.

Novelty is predicated upon the simple housing which is attached to the back of the brush and which encloses the solution container, the latter being accessible for convenient replenishment of the solution and being provided at one end with a bulb equipped spray nozzle.

Needless to say I am aware that solution applying bristle brushes are not new. It follows, therefore, that in devising the present invention I provide a structure which is believed to be possessed of refinements and improvements not heretofore utilized in prior devices.

Other objects, features and advantages of the invention will become more readily apparent from the following description and the accompanying illustrative drawings.

In the drawings, wherein like numerals are employed to designate like parts throughout the views:

Figure 1 is a perspective view of a type scrubbing and cleaning brush constructed in accordance with the principles of the present invention.

Figure 2 is a perspective view, this on a smaller scale showing the structure seen in Figure 1 with the filler neck cap removed and further showing the step of filling the tank or container from a reserve supply can and utilizing a funnel for such purpose.

Figure 3 is a perspective view showing the manner in which the brush is used and also the manner in which the spray nozzle is brought into play.

Figure 4 is a top plan view of the construction seen in Figure 1.

Figure 5 is a view with the brush in elevation

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and the other parts primarily in vertical section.

Figure 6 is a sectional view of the hand bulb equipped nozzle means.

Referring now to the drawings by distinguishing reference numerals, it will be seen that the brush, which is somewhat conventional, is denoted by the numeral 8. The back of the brush is denoted at 9 and the bristles at 10. The casing corresponds in outline to the back of the brush, and is denoted by the numeral 11, and this fits over and around the back of the brush, being held in place by lugs or equivalent detents 12. This casing, which constitutes the aforementioned housing, is provided with an opening 13 at one end and another opening 14 at the central portion of the top.

The casing 11 is such as to accommodate and satisfactorily maintain in place a container or reservoir 15. This part is in the form of a so-called rectangular tank and is confined in the position shown in Figure 5. Reference being had to the latter figure, it will be noted that the filler neck 16 projects through and beyond the hole or opening 14 to expose the removable screw-cap 17. The discharge end 18 of the tank is constructed to accommodate the spray nozzle means, generally denoted by the reference numeral 19 (see Figure 6). Reference being had to the latter figure, it will be seen that said means comprises an elongated suction-type solution withdrawal and discharge tube 20, the latter having a rubber intake nipple 21 on the inner or intake end thereof. The outer end 22 of the tube is closed and inwardly of this is a lateral branch 23 provided with a squeeze-type bulb 24. In line with the branch 23 and formed in the body of the tube is a restricted discharge orifice 25 through which the chemical solution or other liquid 26 is forcibly sprayed in the manner illustrated in Figure 3. The discharge end 18 of the tank is provided with a sleeve-like fitting or neck 27 which extends through and beyond the aforementioned opening 13 (see Figure 5), said fitting being screw-threaded to accommodate a screw-cap 28. The screw-cap 28 is mounted on the aforementioned tube 20 and screws on the neck 27, said cap containing appropriate piping elements 29 and 30 affording the desired fluid tight connection between the fitting, cap, and tube.

In practice, the brush is employed as illustrated in Figure 3. That is to say, the brush is operated in one hand and the bulb 24 is pressed with the other hand, thus spraying the chemical cleaning solution, or other liquid preparation on

the surface to be cleaned. By applying or depositing the solution on the surface as wanted, the brush may be conveniently manipulated according to custom and the needs and requirements of the user.

In Figure 2, I have shown the manner of replenishing the supply of liquid in the tank whenever necessary or desired. To accomplish this, the screw-cap **17** is removed, the funnel is placed in the filler neck and the needed fluid is poured from a can B into the funnel for delivery into the tank **15**.

The essence of the invention, it is believed, resides in the provision of a tank, constituting a liquid containing reservoir, the same being so made that it may be installed between the back of a brush and a casing carried by the back, said tank having, at any suitable point, a filler neck and a closing gap for the filler neck. Primarily, however, novelty resides in the provision of the spigot or pump equipped nozzle means on the left hand end of the tank protruding beyond the tank and also adapted to protrude beyond the casing on the brush. The means is novel in that the tube **20** is fastened in the discharge neck **27** and has its inner end projecting to a point within the vicinity of the liquid in the tank, said inner end carrying the flexible piece of hose **21** which provides an economical type of a nipple. This nipple, incidentally, prevents liquid from running out under normal circumstances but affords sufficient of a passage, like the opening in a nursing nipple, that when suction is applied by the bulb **24**, liquid is drawn through the nipple and into the discharge tube **20**. Sufficient liquid is trapped in this tube and also a certain amount of it is drawn up into the bulb **24**. It follows that when the bulb **24** is squeezed there is sufficient liquid in the bulb and tube combined to force and spray some of the liquid out through the orifice **25**. Of course, a certain amount of liquid will be forced back through the tube **20** to the right and out through the nipple and into the container again. However, and as a general proposition sufficient liquid is thus loaded in the tube to provide the desired alternate intake and discharge results.

While in the foregoing there has been shown and described the preferred embodiment of this invention it is to be understood that minor changes in the details of construction, combination and arrangement of the parts may be resorted to without departing from the spirit and scope of the invention as claimed.

What I claim is:

1. In a structure of the class described, a liquid container provided with a discharge fitting at one end, a screw-cap on said fitting, a liquid dispensing tube mounted in said fitting and held removably in place by said screw-cap, a nipple on the inner end of said tube and located in the body of the container, said tube being provided with a discharge orifice and a squeeze-type bulb



mounted on said tube in a manner to force liquid through the orifice when squeezed and to suck liquid from the container into said tube when it is released and consequently inflated.

2. A liquid container and dispenser unit for use in connection with a type scrubbing brush wherein the brush embodies a bristle equipped back and a casing carried by the back; a tank adapted to be situated in the space between the brush back and casing, said tank being provided with a filler neck and a screw cap for closing same, said tank being further provided at one end with a discharge neck, a dispensing tube having its intermediate portion disposed in said discharge neck, a closing cap on the intermediate portion of said tube for attaching same detachably to the discharge neck, a short length of flexible hose attached to the intake end of said tube and providing a nipple, said nipple being adapted to operate in liquid within the confines of said tank, the opposite outer end of said tube being provided with a liquid discharge opening, and a hand operated suction bulb on the outer end of the tube in approximate alignment with said discharge opening.

3. As a new article of manufacture and as a component part of spray nozzle means of the class described, an elongated rigid tube open at one end and closed at the opposite end, the last named end being provided with a liquid discharge orifice for liquid spraying and being further provided with a branch pipe laterally disposed and lined up with said orifice, a hand squeezed suction bulb on said branch, a screw cap carried by the intermediate portion of said tube for attaching same to a discharge neck carried by a liquid containing tank, and a short length of rubber hose connected to the inner open end of said tube, said hose constituting a flexible nipple.

HYMAN JACOBS.


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