

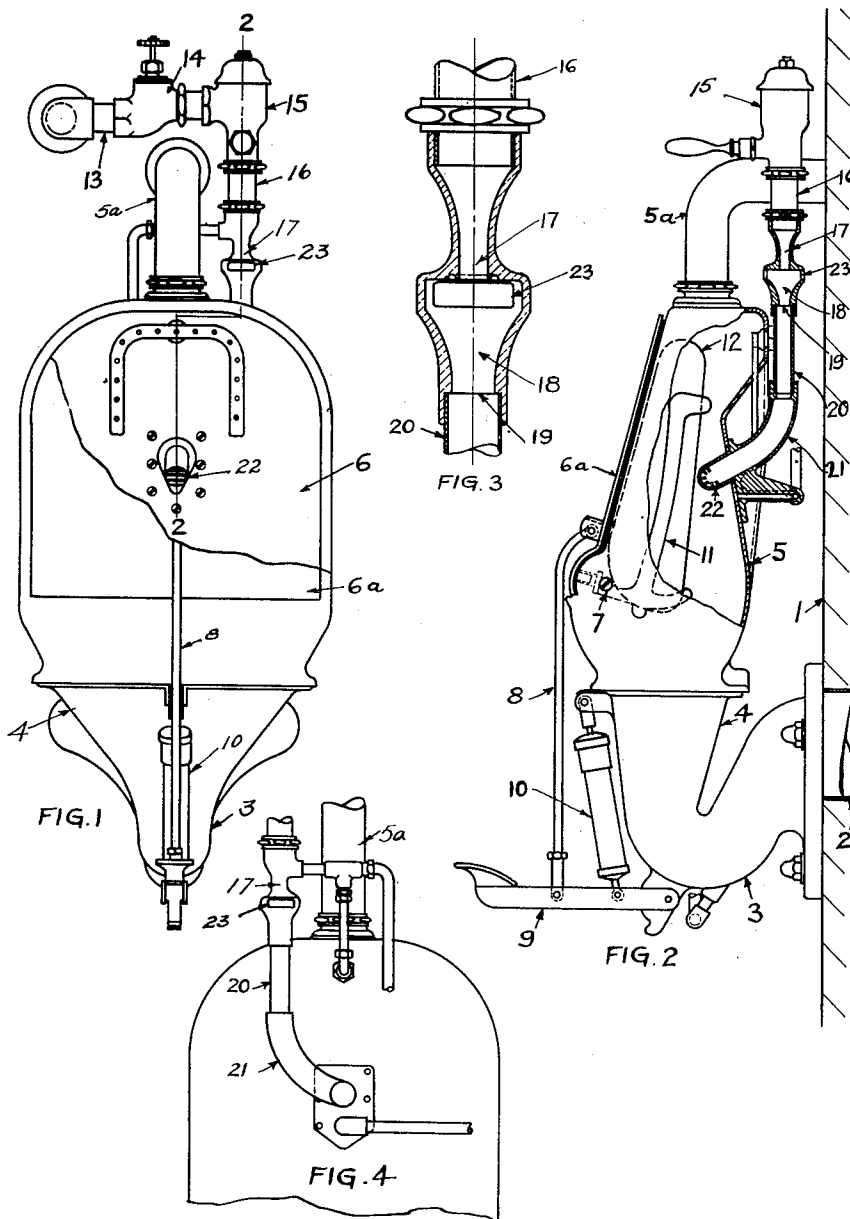
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WASHING DEVICE

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WASHING DEVICE

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2 Claims. (Cl. 141-1)

In washing many articles, as for instance, bed pans, the abrasive action of a jet of water is used, the jet not only acting abrasively, but the liquid carrying off the material removed by the abrasive action: Heretofore the common method of effecting the abrasive action has been to direct a solid jet of water, or liquid, against the article being washed. With the present invention the abrasive action is increased and made more effective by introducing to the water leading to the jet, air, this air breaking the water at the jet into globules so that the globules through the impact with the article being washed effects an abrasive action and the cleaning of the article. In the preferred form the means for introducing air is utilized as a vent for the jet supply pipe with which the washing is done. Features and details of the invention will appear from the specification and claims.

A preferred embodiment of the invention is illustrated in the accompanying drawing as follows:

Fig. 1 shows a front elevation of the device, a part being broken away to better show the construction,

Fig. 2 a side elevation, partly broken away to a section on the line 2-2 in Fig. 1,

Fig. 3 an enlarged view of the nozzle at the supply pipe, and

Fig. 4 a rear view of the washer.

1 marks the wall to which the apparatus is attached, 2 a sewer, 3 a trap connection leading from the sewer, the trap terminating in a hopper 4. A washing chamber 5 is mounted on the hopper 4. It is provided with a door opening 6 closed by a door 6a, the door being hinged at 7. The door is opened and closed through the action of a link 8 operated from a pedal 9, the operation being cushioned by a cushioning device 10.

Bed pan securing devices 11 are arranged on the inside of the door and a bed pan 12 is shown in place with the door closed ready for washing.

A water supply pipe 13 passes through a valve 14 through the timing valve 15 into a discharge pipe 16, the discharge pipe terminating in a nozzle 17. The nozzle discharges into a chamber 18 with

a restriction 19 at its lower end into which the jet from the nozzle 17 passes. The liquid passes from the chamber through a conduit 20 terminating in a fitting 21 in which there is a nozzle 22 arranged to direct the discharged liquid against the different portions of the pan.

Air nozzles 23 are arranged in the walls of the chamber 18 and the jet from the nozzle 17 induces a flow of air through the nozzles 23 which mingles with the water passing through the conduit 20 to the nozzle 22 so that in the discharge from the nozzle 22 the water is in the form of globules which act through their impact abrasively on the pan. This breaking up the jet into globules, as distinguished from a solid jet, or jets of water has a more effective cleaning action than the solid jets.

Where the apparatus is used with a closed chamber, such as a bed pan washer the nozzles 23 form vents which prevent the back-sucking of liquid from the bed pan chamber into the supply pipe.

What I claim as new is:—

1. In a washing device, the combination of a closed washing chamber; a water supply pipe; a conduit leading from the supply pipe to the washing chamber, said conduit having inlets open to the atmosphere positioned with relation to the discharge from the supply conduit to induce through the discharge of water a flow of air into the moving liquid in the conduit; and a nozzle on the conduit directed to discharge liquid against an article to be washed in the closed chamber, the inlets forming a vent for the washing chamber.

2. In a washing device, the combination of a closed washing chamber; a water supply pipe terminating in a solid jet nozzle; a chamber to which the supply pipe discharges, said chamber having a restriction and inlets open to the atmosphere leading thereto, the water discharge being directed to induce a flow of air with the water; and a conduit leading from the chamber and terminating in a nozzle directed to the interior of the chamber.

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