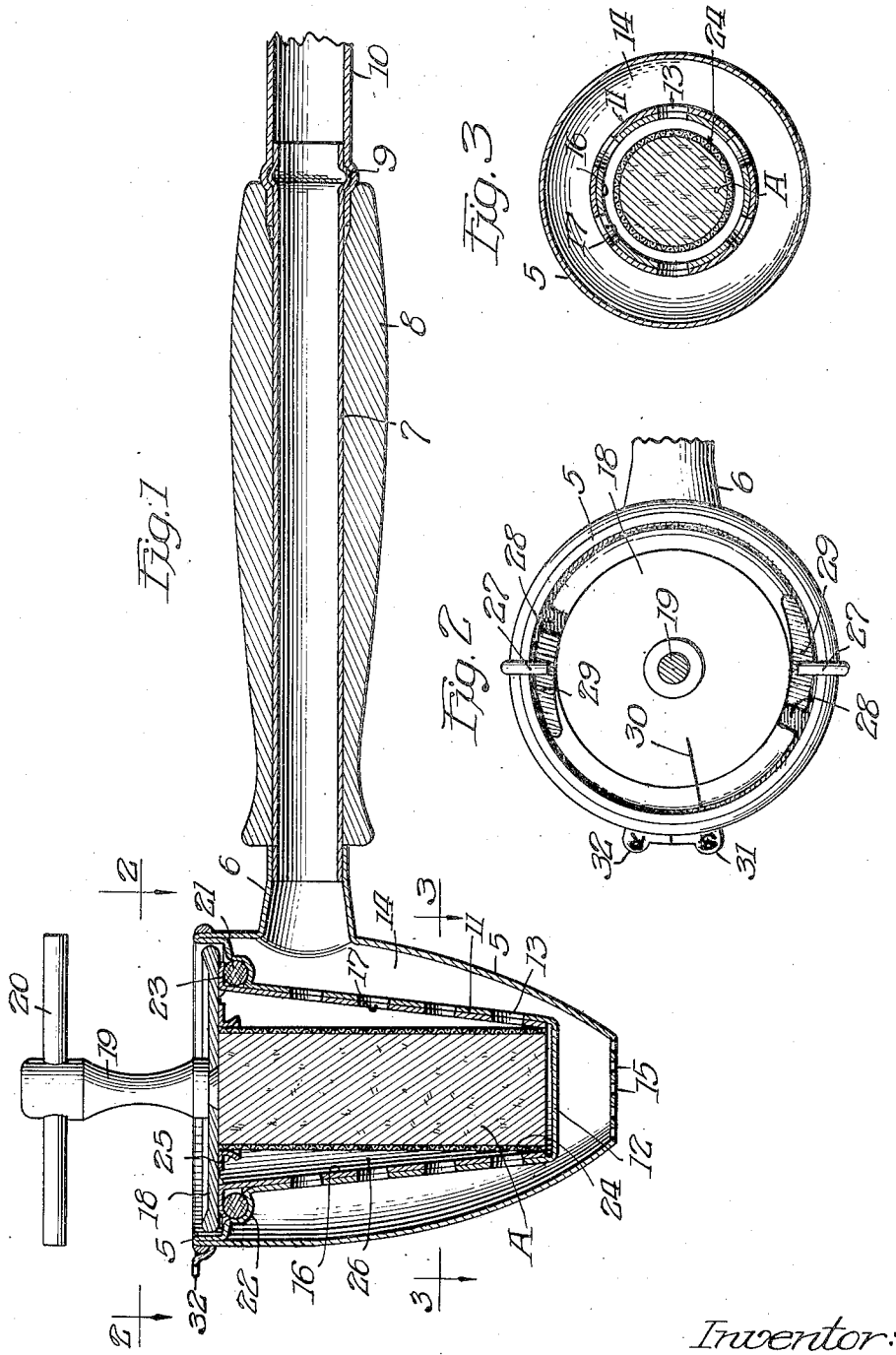
Sept. 30, 1924. 1,510,062

J. F. KENNEY

WASHING DEVICE

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UNITED STATES PATENT OFFICE.

JAMES F. KENNEY, OF MAYWOOD, ILLINOIS.

WASHING DEVICE.

Application filed September 20, 1922. Serial No. 589,437.

To all whom it may concern:

Be it known that I, JAMES F. KENNEY, a citizen of the United States, residing at Maywood, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Washing Devices, of which the following is a specification.

My invention relates to washing devices, more especially to those adapted to be held in the hand and controllable to deliver either rinsing water or soapy water, as, for example, in the washing of dishes. One object of the invention is to provide a simple and inexpensive structure which can be readily adjusted to deliver either clear water for rinsing purposes or to divert more or less of the water through a soap containing chamber to cause soap to be thoroughly mixed with the water before delivery from the device. Another object of the invention is to provide a soap-holding frame which will also act as a movable valve member for diverting the water to the soap or for causing it to flow directly from the nozzle structure. Another object of the invention is to provide improved and simplified means for charging soap into the soap holding frame.

The above features of my invention together with other features of construction, arrangement and operation are incorporated in the device shown on the accompanying drawing, in which—

Figure 1 is a longitudinal diametral sectional view of the complete device.

Figure 2 is a sectional view on plane 2—2, Figure 1, and

Figure 3 is a sectional view on plane 3—3 Figure 1.

Like numerals denote like parts throughout the several views.

As illustrated, the device has a casing 5, preferably of sheet metal and of inverted conoidal shape. Water is led into it through a port 6 at the side, which connects with a tube 7. A handle 8, preferably of wood, encloses tube 7. This handle affords means whereby the device may be manipulated, and it also serves to insulate the heat of tube 7 from the hand of the user. At the outer end the tube has a beading 9 to assist in retaining a flexible tubing or hose 10 through which the water is led from a faucet or other suitable source of water supply.

Mounted within the casing is a soap container, which consists of a stationary frusto conical receptacle 11, having a bottom 12 and ports 13. This container is spaced from the sides and bottom of the casing so as to leave a space 14 for the flow of water. The bottom of the casing is foraminated, having small apertures 15 through which water may issue in the form of comparatively fine jets, which under ordinary circumstances will issue with considerable force and assist mechanically in cleaning the dishes or other articles to be washed. The aggregate area of the apertures 15 is less than the area of the inlet port 6, the result being that a water pressure is created within the casing 5.

Fitting within the soap container is a chambered, frusto-conical valve 16 having ports 17 adapted to be brought into and out of register with the ports 13 when the valve is rotated. Said valve is rigidly secured to a cover 18, to which is fastened a post 19 carrying a cross bar 20 by which the cover and valve may be rotated. While the design may be varied, I have shown a gasket 21 seating in an annular channel 22 formed near the upper end of the soap container 11 and supporting an annular flange 23 extending laterally from the top of the valve 16. The gasket is preferably circular in cross section and when the flange 18 is pressed down on it, it prevents leakage. The soap A is contained within a cage 24, which consists of a cylindrical screen extending from top to bottom of valve 16 and co-axial therewith. It is fastened to cover plate 18 by means of a ring 25 or other appropriate means. It is open at the bottom so that, when it is lifted out with the cover, soap may be introduced. Cage 24 is here shown as being cylindrical and of a smaller diameter than the upper portion of valve 16, the result being that a space 26 is formed between the cage and the walls of the valve. The cage thus permits any water within chamber 26 to gain free access to it but prevents the soap from clogging the ports 13, 17 in the side of the soap container and valve.

The cover and valve are rotatable by means of handle 19, 20 to vary the port opening through the holes 13, 17. To hold the cover down in position lugs 27 are secured to the side of the casing and extend over the top of the cover for a short distance. In order that the cover may be removed, notches 28 are formed at the edges, the result being that when the cover is rotated to a position such that the notches

lie under the lugs the cover may be lifted out. It is desirable to form cam surfaces 29 at one side of the notches 28 so that when the cover is rotated in the proper direction from the neutral or unlocked position it will be automatically pressed down slightly upon the rubber gasket 21, thus preventing leakage and also preventing any looseness or rattling of the parts. The lugs also tend to hold the cover securely in whatever angular position it may be set. A pointer 30 in the form of a notch or other indicating means is placed on top of the cover as shown in Figure 2, and this co-operates with two indices 31 and 32, which may be marked "R" and "S" respectively to indicate whether the ports 13, 17 are out of register or in register.

The operation will now be readily understood. Let it be assumed that the operator has attached the supply hose 10 to the faucet and turned on the faucet so that there is a flow of water into the casing 5. As the apertures 15 are comparatively small a considerable pressure will be created within the casing. If the operator wishes clear water for rinsing purposes to issue from the casing he turns the handle 20 so that the pointer 30 stands at "R" on lug 31 of the casing. When in this position the apertures 17 will be out of register with the apertures 13 and the water in the chamber 14 will be prevented from gaining access to the soap. Consequently nothing but clear water can issue from the device. If on the other hand the operator wishes soapy water to issue from the device he rotates the handle 20 until the pointer 30 comes opposite the index "S" on the lug 32. The ports 17 will then be in full register with the ports 13 and water may pass freely in and out through said ports. It will be noted that some of the ports are opposite or nearly opposite the main admission port 6 with the result that some of the water will flow directly into the space 26, and of course the momentum of the water will cause it to issue from some of the other ports, but some of the water will be deflected and merely flow into the space 14. I have found that where very hot water is used the soap will waste away too rapidly if exposed to the full stream of the incoming water. This is especially true if soft soap is employed. With my device, as the entire casing is under pressure, water will at all times be in contact with the soap and the soap will be dissolved and if the ports are open there will be sufficient circulation to bring as much soap as is necessary into the main stream issuing from the apertures 15. In other words, in my device even when the ports are open the soap will be partially protected from the stream of water flowing through the device and hence will last much longer than if subjected to the mechanical action of a stream of water. Of course any intermediate degree of soapiness may be obtained by rotating the valve 16 to an intermediate position with the pointer part way between the two indexes "R", "S".

It will be evident that the device is simple and convenient and of relatively few parts. It can be readily kept clean for the moving parts may all be lifted out if the cover is rotated a few degrees to bring the notches opposite to the lugs 27. The wood on the handle 8 will at all times keep the device cool to the touch and on account of the conoidal form, the device may be inserted into comparatively small spaces.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A portable washing device for domestic use and the like having a casing open at the bottom and having an induction passage at the side, said passage being extended to form a handle for manipulating the device, a soap container within the casing spaced from the sides and bottom whereby clear water may flow down through the casing and out through the bottom, the soap container being located opposite to the induction passage, and the entering liquid consequently being deflected approximately through a right angle between its entrance and exit, the soap container comprising a receptacle having holes in the side, and a rotatable member having holes adapted to register with the holes in the receptacle for varying the size of the openings, and a handle on top for regulating the position of the rotatable member.

2. In a washing device, the combination of a casing having an inlet and a restricted outlet, a frusto-conical soap container mounted within the casing and spaced from the sides thereof, a cover rotatably supported upon the casing and having secured thereto a frusto-conical valve fitting into the soap container, the soap container and valve being ported, and means for rotating the cover to thereby rotate the valve and control the ports in the soap container.

3. In a washing device, the combination of a casing having an inlet and an outlet, a ported soap container mounted therein and spaced from the sides thereof, a gasket supported by the casing near the top thereof, a rotatable cover adapted to seat upon said gasket, a valve fitting into the soap container for controlling the ports therein, said valve being secured to the cover, and cam mechanism for forcing the cover down on to the gasket when rotated from a neutral position.

4. In a washing device, the combination of a casing having an inlet and an outlet, a ported soap container mounted therein and

spaced from the sides thereof, a rotatable cover having notches in the sides, a valve for controlling the ports in the container, said valve being fastened to the cover, and lugs projecting radially inward from the container for retaining the cover except when the latter is rotated to a position where the notches are under the lugs.

5. In a washing device, a casing having an inlet and outlet, a soap container within the inlet, said soap container having ports in the sides, a rotatable cover mounted on the casing, a valve fastened to the cover and adapted to be rotated thereby for controlling the ports in the soap container, and indicating means partly on the cover and partly on the casing for enabling the user to determine the extent to which the ports are open or closed.

In witness whereof, I have hereunto subscribed my name.

JAMES F. KENNEY.