L. ALBERTSON.

VALVE.

APPLICATION FILED JAN. 24, 1918.

1,343,490.

Patented June 15, 1920.

FIG. 1.

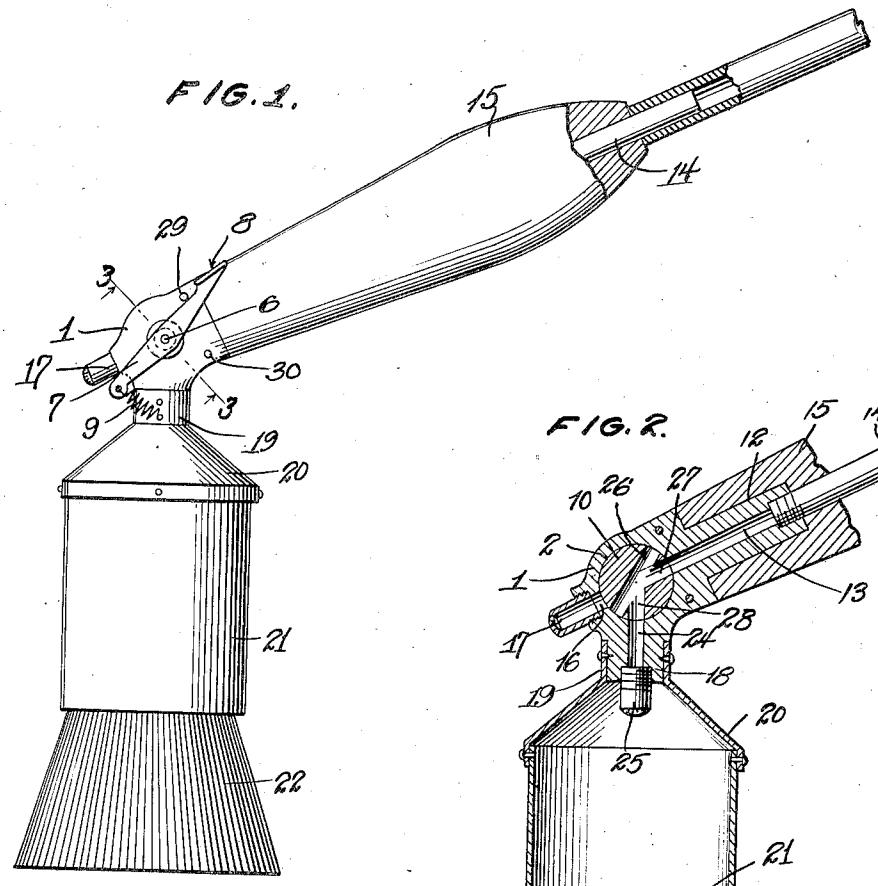
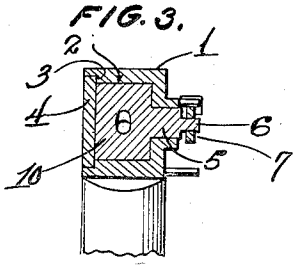



FIG. 2.




FIG. 3.




INVENTOR

Linden Albertson

WITNESSES

W. C. Fielding.

Wm. H. Mackeigan

BY

ATTORNEY

# UNITED STATES PATENT OFFICE.

LINDEN ALBERTSON, OF NEWARK, NEW JERSEY.

## VALVE.

1,343,490. Specification of Letters Patent. Patented June 15, 1920.

Application filed January 24, 1918. Serial No. 213,558.

*To all whom it may concern:*

Be it known that I, LINDEN ALBERTSON, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Valves, of which the following is a specification.

This invention relates to the class of brushing and scrubbing devices and more particularly to an improved washing device especially adapted for thoroughly washing and rinsing dishes, glassware and the like.

The primary object of the invention is to provide a dish washing device that may be readily held in the hand of the user and connected to a suitable source of water supply and adapted to be manipulated by the operator so that each dish may be thoroughly washed and rinsed and sprayed by jets of rinsing water after the washing operation has been completed.

The invention also aims at the provision of a device of this character which is adapted to be connected to a source of water supply and provided with a spraying and brushing element which is arranged so that the operator may readily cause the water to be supplied to either the washing element or the spraying element as desired, using the same hand with which he manipulates the device.

Further object of the invention is the provision of a device of this character which consists of comparatively few parts and is simple in construction, but durable and well adapted to withstand the rough usage to which devices of this character are ordinarily subjected.

For a full description of the invention and the advantages and merits thereof, reference is to be had to the following description and accompanying drawings wherein is illustrated the preferred form of my invention.

Figure 1 is a side elevation of the device constructed in accordance with my invention.

Fig. 2 is a transverse section through the same.

Fig. 3 is a detail section taken on the line 3—3 of Fig. 1.

Referring to the drawings, wherein is illustrated the preferred form of my invention in which, like numerals of reference indicate corresponding parts throughout the several views, the valve casing 1 is provided with a cylindrical valve chamber 2 which has one end enlarged as indicated at 3 in Fig. 3 of the drawing for providing a recess to receive a valve cap 4 in the form of a disk for providing a water tight joint at this side of the valve.

The opposite side of the valve casing is provided with a restricted opening through which the valve stem 5 projects and beyond the valve stem, I have provided a stud 6 which carries an operating lever 7 one end of which is provided with a finger button 8 while the opposite end is connected to a coil tension spring 9 adapted to normally urge the valve 10 to a certain position as will presently appear.

The valve casing 1 is provided with a protuberance 12 having a central longitudinal passage-way 13 and fastened to this protuberance is the screw threaded end of a supply pipe 14 which may be joined in any preferred manner to a suitable source of water supply. Surrounding this protuberance 12 and the pipe 14 is a handle 15 which the user grasps when he is manipulating the device. The valve casing 1 is also provided at a point in longitudinal alinement with the center of the passage-way 13 with an opening 16 and this portion of the valve is adapted to receive the screw threaded end of a nozzle 17 which has its end provided with a series of perforations for spraying the water in jets when it is ejected through the nozzle. Integrally formed with the valve casing 1 is a neck to which is attached a fastening sleeve 19 carried by the restricted end of a frusto-conical head 20 the same being attached to the end of a hollow cylindrical container 21 which receives a quantity of soap in any preferred form. Attached to the opposite end of the soap receptacle 21 is a brush element 22 which includes a plurality of bristles attached to a disk 23 the latter being fixed in the end of the receptacle 21 as shown to advantage in Fig. 2 of the drawing. This disk is perforated with a series of apertures whereby the water passing through the receptacle 21 may be employed to saturate the brush bristles during the washing operation. The soap receptacle 21 is detachably connected to the frusto-conical member 20 in any preferred manner.

The neck 18 is provided with a passageway 24 and mounted in the end of the passageway is an inner nozzle 25 having one end

extended into the top 20, its end being perforated for ejecting the water into the soap receptacle in the form of fine jets. In order that the passage-way of the water may be readily governed by the operator, I have provided the valve element 10 with a central diametrically extending passage-way 26 which, when alined with the passage-way 13 and 16 will cause the water to be ejected through the nozzle 17 for spraying the dishes with clean fresh water. This valve element is also provided, however, with radial passage-ways 27 and 28 and when the passage-way 27 is alined with the passage-way 13 and the passage-way 28 is alined with the passage-way 24 in the neck, the water is led through the passage-ways and is ejected through the nozzle 25 and into the soap receptacle from whence it is supplied to the brush bristiles for performing the washing operation. The movement of the lever 7 is limited by a stop pin 29 and movement of the lever in the opposite direction, which movement may be accomplished by pressing upon the finger plate 8, is limited by a similar stop pin 30 and when in this position, the passage-way 26 in the valve element is alined with the passage-ways 13 and 15 so that the water is ejected through the nozzle 17. When the lever is in the position shown in Fig. 1 of the drawing, that is in contact with the pin 29, the opening 26 in the valve is in alinement with the opening 24 in the neck and it will be apparent that when the valve is in this position the same will be closed and no water will be permitted to pass from the passage-way 13. A pressure of the thumb or finger on the button 8, however, will move the valve into the position shown in Fig. 2 and the water will then be permitted to pass through the nozzle 25 for supplying the soapy water to the brush bristles. A continued pressure on the finger button will cause the lever to move the valve in position whereby the opening 26 will be alined with the passage-way 13—16 to supply the fresh water to the nozzle from whence it may be ejected in a spray to rinse the dishes after being washed by the brush bristles. Immediately upon releasing the pressure from the lever the spring 9 will act to draw the lever back to normal position for immediately closing the valve.

From the foregoing it will be observed that a very simple and durable dish washer has been provided, the details of which embody the preferred form. I desire it to be understood, however, that slight changes may be made in the minor details of construction, without departing from the spirit of the invention or the scope of the claims hereunto appended.

I claim.

1. In a fountain brush, a valve comprising a casing bored transversely on three different diameters, a circular block workably fitting the two smaller diameters, a disk fitting the larger diameter and closing the said block in a chamber, the said casing being longitudinally channeled and channeled also at an acute angle to said longitudinal channel, the apex being at the center of said block, the said block mounting a hand grip surrounding said longitudinal channel and a soap chamber housing surrounding said angular channel, a diametrical conduit in said block to register with said longitudinal channel, a pair of radial conduits in said block having the same angle relative to each other as does the angular channel in the casing with the longitudinal chamber, and means for manually turning said block from the conduit registering with the port of said radial conduit to the conduit registering with the port of said diametrical conduit, and a spring means for urging the said block back to registry with said diametrical conduit.

2. In a fountain brush, a valve comprising a casing bored transversely on three different diameters, a circular block workably fitting the two smaller diameters, a disk fitting the larger diameter and closing the said block in a chamber, the said casing being longitudinally channeled and channeled also at an acute angle to said longitudinal channel, the apex being at the center of said block, the said block mounting a hand grip surrounding said longitudinal channel and a soap chamber housing said angular channel, a diametrical conduit in said block to register with said longitudinal channel, a pair of radial conduits in said block having the same angle relative to each other as does the angular channel in the casing with the longitudinal chamber, and means for manually turning said block from the conduit registering with the port of said radial conduit to the conduit registering with the port of said diametrical conduit, and a spring means for urging the said block back to registry with said diametrical conduit, said means including a lever mounted on the said smaller diameter of said block with a thumb piece juxtaposed to said handle seat and an eye on the opposed end of said lever, a coil spring in said eye and anchored to said casing.

In testimony whereof I affix my signature in presence of two witnesses.

LINDEN ALBERTSON.

Witnesses:
H. SAUNDERS,
GUSTAS TANNER.