July 8, 1952 M. J. WYCKOFF 2,602,698

DISHWASHER PRESSURE SPRAY

Filed Feb. 17, 1950

Fig. 1

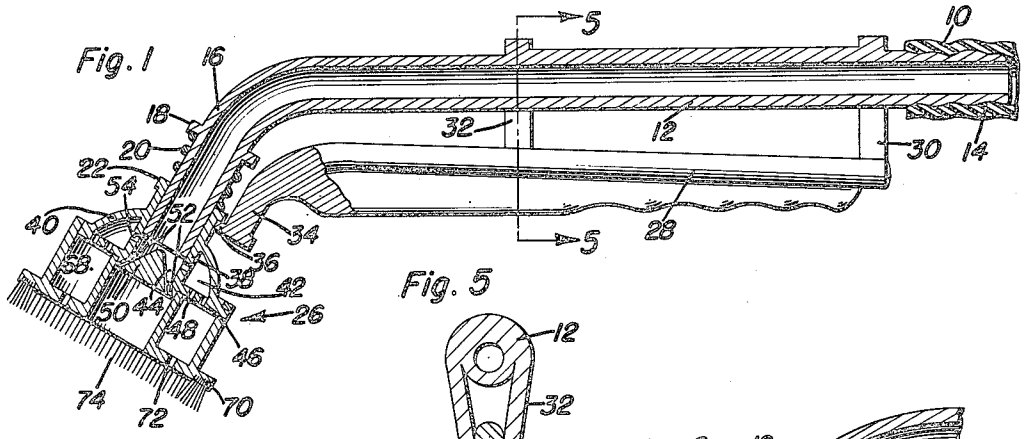


Fig. 5

Fig. 2

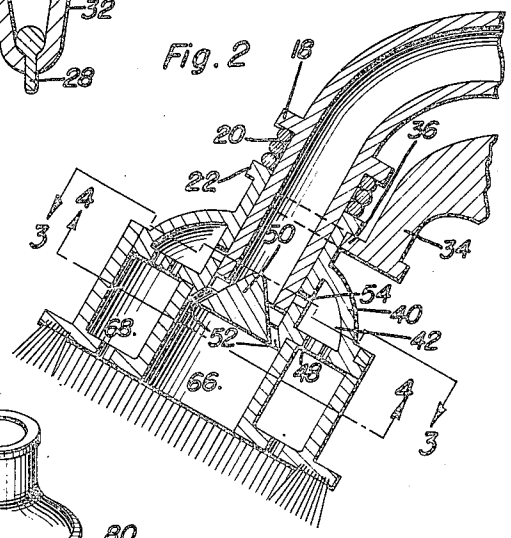


Fig. 3

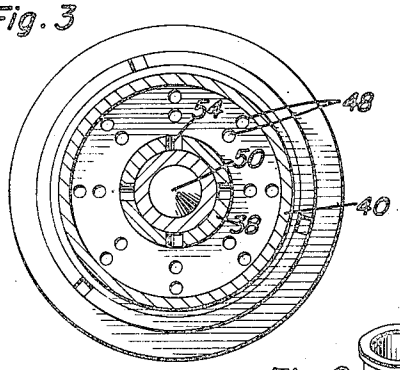


Fig. 8

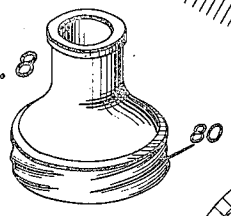


Fig. 6

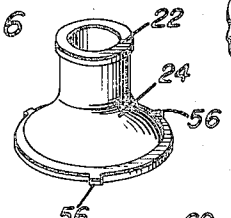


Fig. 4

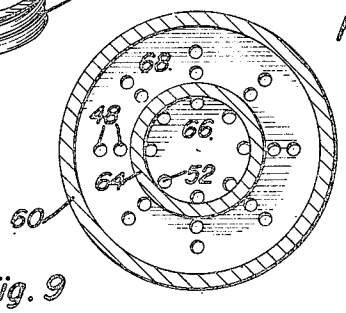


Fig. 7

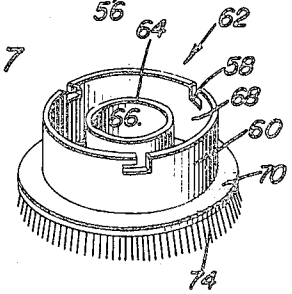
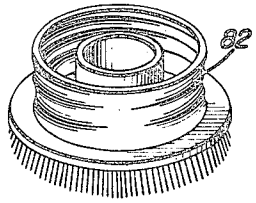


Fig. 9



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DISHWASHER PRESSURE SPRAY

Max J. Wyckoff, Pittsburgh, Pa.

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8 Claims. (Cl. 299—84)

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This invention relates to the class of brushes, and more particularly to a fountain brush which is adapted for use in the washing of dishes, but which can be readily used for a great variety of cleaning purposes.

An object of the invention is to provide a combined brush and pressure spray that is particularly adapted for use in scrubbing and cleaning floors, walls, ceilings, automobiles, and is particularly adaptable for use in washing dishes.

A further object of the invention resides in the provision of a combined brush and pressure spray that includes means to be selectively operated so as to provide a spray of soapy water or of substantially clear water as desired.

Yet another object of the invention is the provision of novel actuating means associated with a handle adapted to be attached to this combined dishwasher pressure spray for selectively directing fluid to a soap, detergent, or other cleaning compound container for providing soapsuds or the like for cleaning dishes or other objects on which the device is adapted to be used.

Still further objects of the invention reside in the provision of a dishwasher pressure spray that is strong, durable, highly efficient in operation, simple in construction and manufacture, readily and easily used, capable of being attached to a variety of fluid outlets, and which is relatively inexpensive.

These, together with the various ancillary objects of the invention which will become apparent as the following description proceeds, are attained by this dishwasher pressure spray, a preferred embodiment of which has been illustrated in the accompanying drawings which additionally illustrate a further modification of means for connecting the elements of the invention, the drawings to be considered to be by way of example only, wherein:

Figure 1 is a vertical sectional view of the dishwasher pressure spray shown in operative emplacement upon a flexible fluid outlet;

Figure 2 is a vertical sectional view similar to that shown in Figure 1, and being enlarged to show certain details thereof in greater specificity;

Figure 3 is a sectional view as taken along line 3—3 in Figure 2;

Figure 4 is a sectional view as taken along line 4—4 in Figure 2;

Figure 5 is a vertical sectional view as taken along line 5—5 in Figure 1;

Figure 6 is a perspective view of a first element of the casing used in the present invention;

Figure 7 is a perspective view of the second

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element of the casing used in a preferred form of the invention;

Figure 8 is another perspective view of a modified form of first element of the casing; and

Figure 9 is a perspective view of the complementary form of second element used in the casing in cooperation with the element shown in Figure 8.

With continuing reference to the accompanying drawings, wherein like reference numerals designate similar parts throughout the various views, the reference numeral 10 generally designates a flexible hose or the like on which a tubular element 12 is adapted to be rigidly and securely held by means of convoluted surfaces 14 formed on one end thereof. The other end of the tubing 12 is preferably angularly disposed as at 16 relative to the major portion of the tubular member 12.

A collar 18 is formed on the tubular member 12 and a spring 20 coaxial with the tubular member biases the collar 18 and an annular flange 22 forms with the upper edge a first element 24 of a casing generally indicated by reference numeral 26. A contoured handle member 28 is held by brackets 30 and 32 in a vertically movable and loosely mounted position relative to the tubular member 12. However, the handle 28 is provided with an extension 34 having a lip or flange 36 which engages the annular flange 22 on the casing element 24.

The first element 24 comprises an inner cylindrical wall 38 to which is secured an outer wall 40 forming an annular compartment 42 and a first inner passageway 44. A plate 46 having a plurality of apertures 48 therein is secured to the outer ends of the walls 38 and 40 and a conical member 50 is attached to the plate 46. A plurality of apertures 52 are formed in the conical valve member 50. Additionally, openings 54 are formed in the wall 38 to provide passageway from the passageway 44 to the outer annular compartment 42.

The element 24 is provided with a plurality of lugs 56 which are adapted to engage within L-shaped slots 58 formed in the outer cylindrical wall 60 of the second element 62 which, together with element 24, forms the casing. An inner cylindrical wall 64 divides the second element into a second inner passageway 66 and an outer compartment 68. An outer plate 70 having a plurality of apertures 72 therethrough additionally has bristles 74 forming a brush extending outwardly from the outer surface thereof. Bars of soap, or soap chips, powder detergents, or

any other similar cleaning material may be placed within the outer container 68. Then the element 62 is secured to the element 24 by means of the lugs 56 and slots 58. By means of a control valve, fluid is permitted to pass through the outlet 10 and through the tubular member 12 into the first inner passageway 44 in the inner element. When the handle 28 is permitted to be biased by spring 20 into its normal position, passageways 54 remain open and the fluid is permitted to pass through apertures 48 and through passageway 68 flowing about the soap chips or the like to form soapsuds which are then discharged onto the work piece to be cleaned. However, when the handle 28 is pulled upwardly toward the tubular element 12, the spring 20 is compressed and the inner cylindrical wall 38 closes the openings 54, thus preventing passage of fluid through openings 54. This will direct the fluid through apertures 52, permitting only clear water to be discharged. Thus, when desired, this pressure dishwasher spray provides soapy water for cleaning dishes or the like and can also provide clear water for rinsing the dishes or other object to be cleaned.

Referring now to Figures 8 and 9, there will be seen a first and second element forming a modified casing, which elements are formed with threaded cylinders 80 and 82 for interengagement therebetween in lieu of the lugs 56 and slots 58. It is to be understood that any other suitable means may be used to secure the first and second elements of the casing together.

Since, from the foregoing, the construction and advantages of this pressure dishwasher spray are readily apparent, further description is believed to be unnecessary.

However, since numerous modifications will readily occur to those skilled in the art after a consideration of the foregoing specification and accompanying drawing, it is not intended to limit the invention to the precise embodiment shown and described, but all suitable modifications and equivalents may be resorted to which fall within the scope of the appended claims.

Having described the invention, what is claimed as new is:

1. A scrubbing device comprising a tubular member adapted to be secured at one end to a fluid outlet, a casing slidably mounted on the other end of said member, said casing comprising a first element having an inner cylindrical wall defining an annular compartment about a first inner passageway, a second element secured to said first element comprising substantially concentric inner and outer cylindrical walls defining an outer compartment and a second inner passageway, said first inner passageway in said first element communicating with said second inner passageway in said second element, means in said casing permitting communication between said tubular member and said second inner passageway, and single valve means in said casing selectively preventing and permitting communication between said tubular member and said outer compartment of said second element, and outlet means in said outer compartment, a collar on said tubular member, a coil spring concentric with said tubular member continuously urging said casing away from said collar, and handle means secured to said member engaging said casing for selectively urging said casing toward said collar and selectively effecting opening and closing movement of said valve means.

2. The structure recited in claim 1, said tubular member having an angularly disposed portion, said collar being formed on said angularly disposed portion.

3. The structure recited in claim 2, said casing having an annular flange operatively connected with said handle means, said coil spring being disposed between said collar and said annular flange.

4. The structure recited in claim 3, said means in said casing being a plurality of apertures, said handle means having a lip engaged with said annular flange.

5. The structure recited in claim 4, said outlet means in said outer compartment being a plurality of apertures.

6. The structure recited in claim 5, said handle means being disposed beneath said tubular member.

7. A scrubbing device comprising a tubular member adapted to be secured at one end to a fluid outlet, a casing slidably mounted on the other end of said member, said casing comprising a first element having an inner cylindrical wall defining an annular compartment about a first inner passageway, said first element having a plurality of locking lugs, a second element comprising substantially concentric inner and outer cylindrical walls defining an outer compartment and a second inner passageway, said outer cylindrical wall having a plurality of L-shaped slots, said locking lugs being removably fitted in said slots, said first inner passageway communicating with said second inner passageway, means in said casing permitting communication between said tubular member and said second inner passageway, single valve means in said casing selectively preventing and permitting communication between said tubular member and said outer compartment, outlet means in said outer compartment, a collar on said tubular member, a coil spring concentric with said tubular member continuously urging said casing away from said collar, and handle means secured to said member engaging said casing for selectively urging said casing toward said collar and for selectively effecting opening and closing movement of said valve means.

8. The structure specified in claim 7, said tubular member having an angularly disposed portion, said collar being formed on said angularly disposed portion, said casing having an annular flange, said handle means being disposed beneath said tubular member and having a lip engaged with said annular flange, said means in said casing being a plurality of apertures, said outlet means being a plurality of apertures.

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