April 15, 1941. C. H. HAGOPIAN 2,238,588

SOAP SPRAY

Filed Nov. 5, 1937

FIG 1

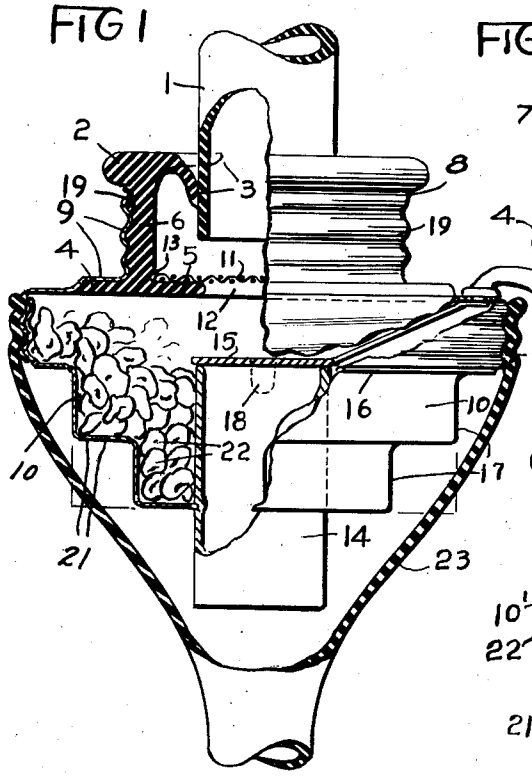


FIG 2

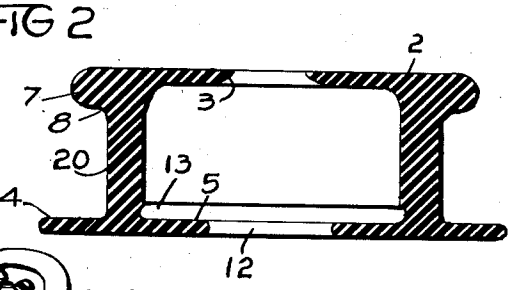


FIG 3

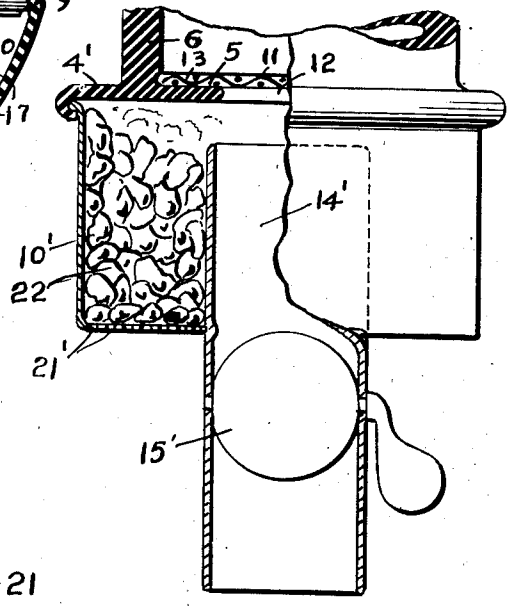
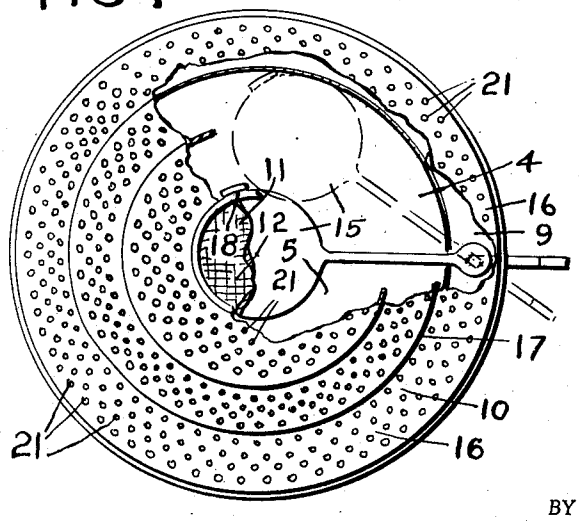


FIG 4



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UNITED STATES PATENT OFFICE

2,238,588

SOAP SPRAY

Charles H. Hagopian, New York, N. Y.

Application November 5, 1937, Serial No. 172,867

5 Claims. (Cl. 299—84)

My invention relates to a device for spraying soap water and water without soap either directly from the faucet or water supply, or without a spray and has among its objects to provide:

A simple device for supplying soapy or plain water.

A soap chamber and means for directing water through it or by it.

A valving device for directing water through pieces of soap to deliver soapy water and to also by moving the valve to bypass the water so that it will not pass through the pieces of soap.

A simple faucet connection and soap chamber with means for directing and delivering water either with or without soap.

I accomplish these and other objects by the construction herein described and shown in the accompanying drawing forming a part hereof in which:

Fig. 1 is a partial section and elevation of my device.

Fig. 2 is a section of the faucet connection.

Fig. 3 is a partial section and elevation of a modification of my device.

Fig. 4 is a bottom view of my device.

Similar reference characters refer to similar parts throughout the several views of the drawing and in the specification to follow.

Warm or hot soapy water for washing dishes and in general kitchen use is desirable when it can be quickly provided and plain hot or cold water delivered for rinsing immediately afterward.

My invention is also useful for shower baths and for many new uses which are made possible because a quick convenient supply of hot or cold water with or without soap is now possible at a small cost without installing special plumbing as my device is easily attached or removed from any faucet or water supply by any one as it may be either connected directly to the faucet or to a rubber tube which connects it. A rubber tube or spray may also be attached to the plain water outlet or to the soap spray providing soap or plain water to a distance from the water supply.

Referring to the drawing, the source of water 1 such as a faucet or hose is attached to the connecting member 2 which is provided with a flexible lip 3 at its top which grips the tube or faucet 1 holding my device in place and against leakage. At the bottom of the member 2 are the outwardly projecting flange 4 and inwardly projecting flange 5 disposed at substantially 90 degrees to the cylindrical body 6. At the top of the cylindrical body and projecting outwardly, I have provided the heavy flange 7 which serves as a handle to force the lip 3 over the faucet or water supply 1 as well as a shoulder 8 on its under surface which engages the upper end of the cover 9 of the soap chamber 10.

The flange 5 holds the strainer 11 in place and is sufficiently flexible to permit the strainer to be forced through the aperture 12 of said flange to the interior of the body 6 and the strainer is prevented from free movement within said body by the groove 13 which engages its periphery.

The aperture 12 is of a size and so positioned as to direct the flow of water into the valve tube 14 when the valve 15 is open and through the soap chamber 10 when the valve is closed.

The valve 15 is preferably swingingly mounted in the cover 9 or the under surface 16 of the offset 17 of the soap chamber 10. A stop 18 is provided to limit the travel of the valve so that it will be restricted in its motion between the full open and the full closed position as may be seen by the full and broken lines of Figure 4 of the drawing.

The shape of the soap chamber and the type of valve may be modified in numerous ways and in Figure 3 one of the modifications shows a different shape of soap chamber 10 as well as a butterfly or damper valve 15 mounted in the valve tube 14 instead of above it. The flange 4' of the member 2' is modified to receive the upper end of the soap chamber 10' which is provided with the perforations 21'.

The inverted T section of the member 2 forming the flanges 4 and 5 is important in providing a means of holding the strainer 11 in place as well as directing the flow of water to the valve tube due to the aperture 12 which is the termination of the flange 5. The flange 4 is of importance in serving as a pressure tight lip as well as a means of holding the cover 9 between said flange 4 and the flange 7.

The cover 9 and its upper portion engage the cylindrical body 6 of the member 2 and is further held in place by the threads or annular projections 19 which are imbedded into its pliable outer surface 20 of said member.

Spray perforations 21 are provided in the bottom or under surfaces of the offsets of the soap chamber which retain the pieces of soap 22 as well as spray the soapy water when the discharge tube 23 is not in place such as is often the case

when using my device for washing dishes in the kitchen sink.

I have herein described in detail the construction of my device so that it may be more easily understood and to illustrate its operation. I do not wish, however, to be limited to this detailed construction as it may be modified in many ways as will be apparent to one skilled in the art and manufacture to which it pertains, and I may wish to depart from the details within the scope of the appended claims which set forth my invention.

I claim:

1. In a device for delivering plain and soapy water, a soap chamber, a connecting member secured thereto having a tube or faucet connecting means at its top end and outwardly and inwardly projecting flanges at its lower end, said inwardly projecting flange terminating in an aperture, a valve tube in alignment with said aperture, a valve closing said valve tube to direct water through the soap in said soap chamber, said soap chamber having perforations in its bottom surface for spraying soapy water and a discharge tube secured to said valve tube whereby a single stream of plain water may be delivered from said valve tube.

2. In a device for delivering pure and soapy water, a soap chamber having perforations on its bottom surface to spray soapy water, a discharge tube projecting through and beyond said perforated bottom and means controlling the flow of pure and soapy water whereby said soapy water may be sprayed and said pure water may be delivered in a stream independent of said spray of soapy water and a connecting member having a faucet connecting means at the top thereof and inwardly and outwardly projecting flanges at the bottom of said member, said outwardly projecting flange supporting said soap chamber.

3. In a device for delivering pure and soapy water, a soap chamber having perforations on its bottom surface to spray soapy water, a discharge tube projecting through and beyond said perforated bottom and means controlling the flow of pure and soapy water whereby said soapy water may be sprayed and said pure water may be delivered in a stream independent of said spray of soapy water and a connecting member having a faucet connecting means at the top thereof and inwardly and outwardly projecting flanges at the bottom of said member, said outwardly projecting flange supporting said soap chamber, and a strainer supported by said inwardly projecting flange.

4. In a soap spraying device, a soap chamber having apertures for spraying soapy water, a valve tube and a connecting member having an outwardly projecting flange connected to said soap chamber and an inwardly projecting flange and a strainer supported thereby.

5. In a soap spraying device, a soap chamber having apertures for spraying soapy water, a valve tube and a connecting member having an outwardly projecting flange connected to said soap chamber and an inwardly projecting flange and a strainer supported thereby said connecting member having an annular groove adjacent said inwardly projecting flange receiving the edge of said strainer.

CHARLES H. HAGOPIAN.