Sept. 29, 1925. 1,555,393

F. A. VON HERMANN

BATH SPRAY

Filed Feb. 19, 1924

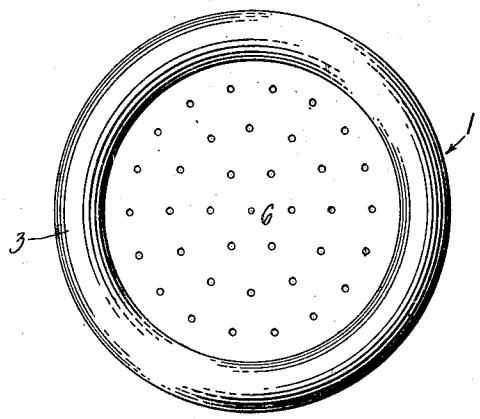


Fig. 1.

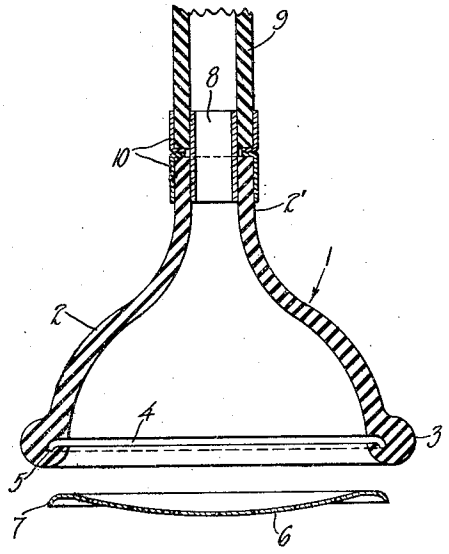


Fig. 2.

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By his Attorney
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UNITED STATES PATENT OFFICE.

FERDINAND A. VON HERMANN, OF CLEVELAND, OHIO, ASSIGNOR TO THE MECHANICAL RUBBER COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF NEW JERSEY.

BATH SPRAY.

Application filed February 19, 1924. Serial No. 693,737.

To all whom it may concern:

Be it known that I, FERDINAND A. VON HERMANN, a citizen of the United States, residing at Cleveland, county of Cuyahoga, and State of Ohio, have invented a certain new and useful Improvement in a Bath Spray, of which the following is a full, clear, and exact description.

This invention relates to a bath spray, more particularly to a bath spray formed largely of rubber.

Bath sprays of the type at present on the market are usually made with an all metal sprayer element, the parts of which are permanently united, so that the spray cannot be readily cleaned and in case of wear or damage, or for any other reason, its parts cannot be replaced. The present invention aims to provide a bath spray which avoids these objections and has further advantages as will be hereinafter pointed out.

An object of my invention is to provide an economical and improved bath spray formed principally of rubber.

Another object is to provide an easily cleaned bath spray and to provide one with spray orifices, the size and arrangement of which may be varied at little expense.

For a detailed disclosure of the nature and objects of the invention reference is had to the accompanying specification and drawing in which latter:

Figure 1 is a front view, and

Figure 2 is a transverse sectional view showing the parts disassembled.

Referring to the drawing the numeral 1 designates the sprayer element generally, which latter comprises a cup shaped rubber body 2 provided at its rear end with a relatively thin walled reduced supply nipple 2′, and it will be noted that the wall of the cup both flares outwardly in a forward direction and also gradually increases in thickness. At its forward end the cup is provided with a relatively heavy or thick bead 3, which on its inner circumference is formed with a groove 4 the walls of which do not extend straight inwardly for their entire depth but adjacent the bottom are forwardly curved as shown at 5 in the drawing. A perforated sprayer disc 6, preferably formed of metal, is provided, which at its periphery is formed with a forwardly directed flange 7 adapted to be forced into the groove 4 and be detachably and resiliently held therein.

While any suitable connection may be used for attaching the supply tube, either permanently or detachably, such sprays are usually sold as a unit with the supply tube permanently attached. As one example of a suitable connection there is shown in the present embodiment an interior connecting sleeve 8, preferably of metal, over which the flexible supply nipple 2′ and the supply tube 9 are telescoped, these parts being permanently held in place by the metallic flanged collars 10 contracted around the respective ends of the spray element and supply tube.

It will be seen that by the construction disclosed a spray element has been provided, the cup portion of which is formed entirely of rubber and can be quickly and economically made in a single molding operation. The only metallic element required is the sprayer cap 6 which can be easily and quickly sprung into the groove 4, and by reason of the shape of the groove and the periphery of the disc the greater the water pressure the more firmly the disc is held, thereby preventing leakage of water around the periphery of the disc. By reason of the gradually thickened wall 2 of the cup and the enlarged bead 3 the assembled sprayer element is relatively rigid and therefore not easily collapsed when in use. Should the interior become clogged in any way, the sprayer cap 6 can be quickly removed for cleaning, or if desired another cap substituted with openings of a different size or arrangement. The enlarged bead 3 also acts as a buffer should the article be dropped, in the same manner as the rubber ring at present disposed on the all-metal sprayers. As rubber is a poor conductor of heat and the wall of the article is relatively thick there will be no discomfort when holding the article while spraying very hot water. Should the sprayer cap 6 become corroded, as when used with salt water, or damaged in any other way it can be easily and cheaply replaced. As the inlet nipple 2′ of the sprayer element is of rubber and relatively flexible, bending strains at the supply connection are distributed on each side of

the connection thereby lengthening its life.

It will be seen that by my invention a bath spray has been provided which is formed largely of rubber, is economical to make, which may be provided with different spray caps as desired to vary the spray, which is practically everlasting, and which can be easily disassembled for cleaning or interchange of the sprayer cap. While in the present instance a permanent connection with the supply tube has been disclosed, it is obvious that a detachable connection may be used if desired, and irrespective of the form of this connection the bending strains in use are distributed on each side of the connection.

While a specific embodiment of the invention has been described it is obvious that the present disclosure will suggest modifications and it is not desired to limit the invention otherwise than as set forth in the appended claim.

Having thus described my invention, what I claim and desire to protect by Letters Patent is:—

A bath spray comprising an all soft rubber cup having a flaring, gradually thickened wall terminating at its enlarged end in a relatively thick ring shaped bead, said bead being interiorly provided with a circumferential groove adapted to resiliently retain a sprayer cap, the walls of said groove being forwardly directed at the bottom, and the wall of said cup terminating at its inlet end in a relatively flexible attaching nipple.

Signed at New York, county of New York, and State of New York, this 16th day of February, 1924.

FERDINAND A. VON HERMANN.