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1,508,010

E. CIRCLE
ADJUSTABLE SHOWER NOZZLE

Filed June 13, 1922

Fig. 1.

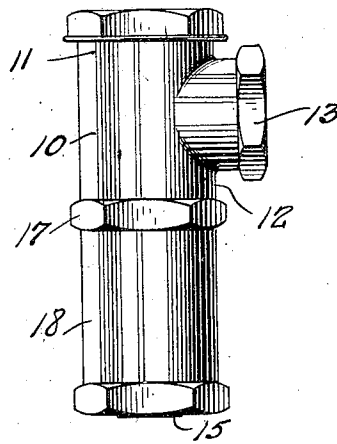


Fig. 2.

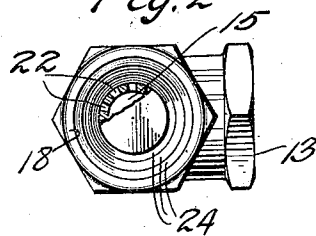
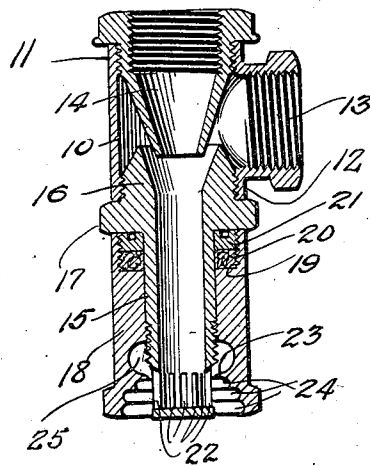


Fig. 3.



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UNITED STATES PATENT OFFICE.

EVERETT CIRCLE, OF COALTON, OKLAHOMA.

ADJUSTABLE SHOWER NOZZLE.

Application filed June 13, 1922. Serial No. 567,897.

To all whom it may concern:

Be it known that I, EVERETT CIRCLE, a citizen of the United States, residing at Coalton, in the county of Okmulgee, State of Oklahoma, have invented certain new and useful Improvements in Adjustable Shower Nozzles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in spraying devices and particularly to spraying used in connection with shower baths.

One object of the invention is to provide a nozzle for use as a bath spraying device which is arranged to heat the water by means of steam, as the water passes through the nozzle.

Another object is to provide a device of this character wherein the discharge end of the nozzle is provided with novel means for regulating the flow of water therefrom, and wherein the water is more finely broken, to form a spray, before issuing from the mouth of the nozzle.

Other objects and advantages will be apparent from the following description when taken in connection with the accompanying drawing.

In the drawing:

Figure 1 is an elevation of the bath spraying nozzle.

Figure 2 is an end view looking into the mouth of the nozzle.

Figure 3 is a longitudinal central sectional view through the nozzle.

Referring particularly to the accompanying drawing, 10 represents the body of the nozzle, which has the internally threaded ends 11 and 12, and the lateral internally threaded nipple 13. Screwed into the upper nipple or end 11 is the steam injector cone 14, and screwed upwardly, into the lower end 12, is the upper end of the tube 15. This upper end of the tube has its inner wall outwardly flared, as shown at 16, for the reception of the steam cone 14, the latter, however, being spaced from said flared wall, to permit passage of water into the tube, as it enters the body 10, through the nipple 13. The tube 15 has a wrench engaging flange 17 which engages against the lower face of the nipple or end 12, of the body 10, the portion

of the tube below the flange extending downwardly therefrom, as seen in the sectional view Figure 3. The lower end of the tube 15 is externally threaded to receive thereon the adjusting sleeve 18. This sleeve 18 has its upper end formed with a socket 19, in which is disposed the packing 20, held therein, and in firm engagement with the outer face of the tube, by the packing nut 21, which is screwed downwardly into the said socket or recess. The extreme lower end of the tube 15 is closed, and on the sides of the tube are formed the longitudinally extending circular series of slots 22, through which the water, heated by the steam, issues. The lower end of the sleeve 18 is open and has the inner wall downwardly and outwardly flared, with the resultant inwardly extending lip 23, which lies in close proximity to the outer face of the tube 18, and is arranged to move longitudinally of the slots 22, as the sleeve is threaded inwardly and outwardly on the tube. The flared face of the sleeve 18 is formed with a plurality of circumferentially extending grooves 24, against which the water strikes, as it issues from the slots 22, with the result that the water will be broken up into a fine spray.

By moving the sleeve 18 upwardly, the slots will be uncovered, so that more water will issue therefrom, and by turning the sleeve downwardly, the flow of water will be lessened, thereby providing for the control of the stream of water, and for the degree of fineness of the spray.

The inner face of the sleeve 18, inwardly of the lip 23, is formed with an outwardly bowed circumferential recess or groove, as shown at 25, of greater depth and width than the grooves 24, within which the water is caused to back, when the sleeve is adjusted outwardly, and whereby the flow of the water is retarded.

What is claimed is:

1. A spraying device including a body having a steam inlet, a water inlet, and a water outlet, a discharging tube having longitudinal slots in the sides of its discharge end and a flared mouth in its other end adjacent the steam inlet, a steam discharging cone in the steam inlet extending into and spaced from the flared mouth, and a sleeve adjustable longitudinally on the tube and having a flaring mouth and an inwardly directed circumferential lip traversing said

slots longitudinally to divide the water issuing from said slot, the sleeve having a circumferential groove inwardly of the lip and circumferential grooves outwardly of the lip.

2. A spraying device including a body having a steam inlet, a water inlet, and a water outlet, a tube engaged in the outlet and having a flared mouth, a steam discharging cone in the steam inlet extending into and spaced from the said flared mouth, a sleeve longitudinally adjustable on the tube and having its outer end formed with an outwardly flared wall formed with circumferential grooves and an inner lip disposed in close proximity to the end of the tube, the said end of the tube being formed with lon-

gitudinal laterally opening slots traversed longitudinally by said lip.

3. A spraying device including a discharge tube having longitudinal slots in the sides of its discharge end, and a sleeve adjustable longitudinally on the tube and having a flaring mouth and an inwardly directed circumferential lip traversing the slots longitudinally, the sleeve having a circumferential groove inwardly of the lip, and circumferential grooves outwardly of the lip.

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

EVERETT CIRCLE.

Witnesses:

WALTER BROWN,
J. T. DAVIS.