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2,080,264

SHOWER HEAD

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Fig. 1

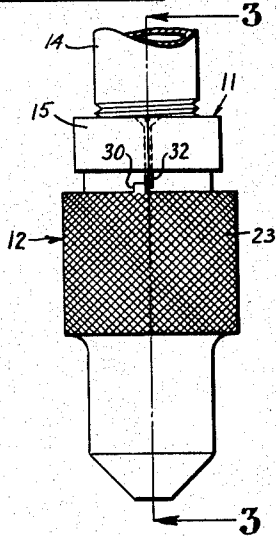


Fig. 2

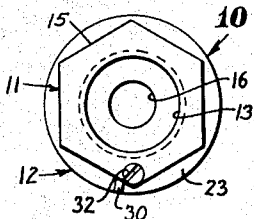


Fig. 4

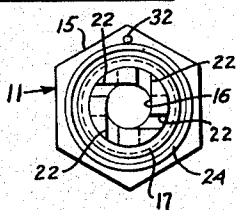
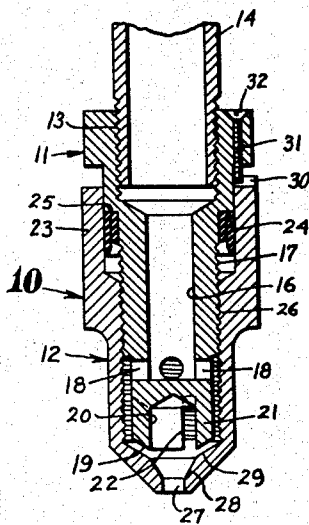


Fig. 3



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SHOWER HEAD

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3 Claims. (Cl. 299—119)

This invention relates to shower heads.

The general object of the invention is to provide a shower head which can be economically manufactured and which can be operated effectively with a minimum amount of water.

A more specific object of the invention is to provide a shower head including a body and a cap member so constructed and arranged that either control of the fluid or of the spraying effect may be secured.

A further object of the invention is to provide a shower head so arranged that the water passes in a novel manner through and from the shower head.

Other objects and the advantages of my invention will be apparent from the following description taken in connection with the accompanying drawing, wherein:

Fig. 1 is a side elevation showing my improved shower head;

Fig. 2 is a top plan view of the head;

Fig. 3 is a central section taken on line 3—3 of Fig. 1;

Fig. 4 is a bottom plan view of the inner member of the head.

Referring to the drawing by reference characters I have shown my invention as embodied in a shower head which is indicated generally at 10. As shown the shower head comprises a body 11 having a cap member 12 thereon.

The body 11 includes an upper portion which is internally threaded as at 13 to receive a supply pipe 14 by means of which water may be directed into the head. The exterior of the body adjacent the threads 13 is hexagonal as at 15 to receive a wrench. The intermediate portion of the body is provided with a central bore 16 and with an external threaded portion 17, while the lower portion of the body is substantially cylindrical and of less diameter than the threaded portion 17. The lower portion is provided with a plurality of intersecting apertures 18 which communicate with the central bore 16.

The lower end of the body is bevelled as at 19 and is provided with a central cylindrical recess 20 with the wall 21 defining the recess provided with a plurality of slots 22. These slots are directed tangentially with the outer wall of the slots substantially tangent to the cylindrical recess 20.

The cap member comprises an upper portion 23 which receives the upper portion 11 of the body. A gasket 24 is shown as engaging a shoulder 25 on the body. This gasket is U-shaped in cross-section so that any fluid entering the gasket cavity will press the outer portion of the

gasket outwardly and the inner portion inwardly, thus effecting a tight seal.

The intermediate portion of the cap is threaded as at 26 to receive the threads 17 on the body and the lower end of the cap is shown as frusto-conical in shape and is provided with a discharge aperture 27 which communicates with a flaring bore 28 and the latter communicates with a flaring wall 29 which is arranged at a bevel corresponding to the bevel 19 on the body 11.

The upper surface of the cap 12 is provided with a projecting lug 30 while the body is provided with an aperture 31 which is threaded to receive a screw 32. This screw projects below the hexagonal portion 15 when fully screwed in position so that when the screw is fully inserted rotation of the cap is limited to less than a complete revolution thereby preventing unauthorized removal of the cap.

In use the device is installed as shown and the cap is rotated until the bevel 19 on the body is engaged by the bevelled portion 29 of the cap. The screw 32 is then turned to position and the shower head is adjusted by backing off the cap until the correct spraying effect is secured.

The water passes from the pipe 14 through the bore 26 then through the apertures 18 and around the lower portion of the body whence it passes inwardly through the slots 22 into the recess 20 thus imparting a rotary action to the sprayed water. The water then passes through the flared portion 28 out of the aperture 27. As the cap is backed away from the body more of the water is free to pass around the lower end of the body so that this water is added to the stream passing through the apertures 22 so that in this manner the spray can be adjusted. The amount of water passing through the shower head may be controlled by suitable valve means on the pipe 14.

From the foregoing description it will be apparent that I have provided a novel shower head which can be economically manufactured and which is highly efficient in use.

Having thus described my invention I claim:

1. A shower head comprising a body having a cylindrical portion at one end of said body including an intermediate portion with a bore therein adapted to communicate with a pipe, the outer wall of said intermediate portion being of less diameter than said cylindrical portion, the outer wall of said intermediate portion being threaded, the other end of said body having a cylindrical outer surface of less diameter than that of the externally threaded portion, said bore terminating at said other end, said other

end having apertures therein, said body having a recess therein at the extreme end thereof forming a tubular end, said tubular end having a bevelled face, said recess including a cylindrical peripheral wall, said body having slots therein leading to said recess, and a hollow cap member including a cylindrical inner portion slidably engaging the first mentioned cylindrical portion of said body, said cap also including an internally threaded portion engaging said externally threaded portion of said body, said cap having a discharge orifice in its lower end, said cap including a bevelled portion adjacent to said orifice and having another bevel on its inner surface, the bevelled face of said body engaging the last mentioned bevel on said cap.

2. A shower head comprising a body having an exterior, cylindrical portion near one end of said body including an intermediate portion with a bore therein adapted to communicate with a pipe, the outer wall of said intermediate portion being of less diameter than said cylindrical portion, the outer wall of said intermediate portion being threaded, the other end of said body having a cylindrical outer surface of less diameter than that of the externally threaded portion, said bore terminating at said other end, said other end having intersecting apertures therein, said body having a recess therein at the extreme end thereof forming a tubular end, said tubular end having a bevelled face, said recess including a cylindrical peripheral wall, said body having slots therein leading to said recess, and a hollow cap member including a cylindrical inner portion slidably engaging the first mentioned cylindrical portion of said body, said cap also including an internally threaded portion engaging said externally threaded portion of said body, a gasket of U-shape and engaging said body and said cap, said cap having a cylindrical discharge orifice in its lower end, said cap including a bevelled portion adjacent to said orifice and having another bevel on its inner surface, the bevelled face of said body engaging the last mentioned

bevel on said cap and means to limit the rotary movement between said body and cap.

3. A shower head comprising a body having means at one end adapted to be connected to a supply pipe the exterior of said body adjacent said means being cylindrical, said body including an intermediate portion with a bore therein adapted to communicate with the pipe, the outer wall of said intermediate portion being of less diameter than said cylindrical portion to provide a shoulder at the juncture of said portions, the outer wall of said intermediate portion being threaded, the other end of said body having a cylindrical outer surface of less diameter than that of the externally threaded portion, said bore terminating at said other end, said other end having diametrically extending intersecting apertures therein, said apertures extending at right angles to the axis of said bore and having part of their walls disposed flush with the end of said bore, said body having a recess therein at the extreme end thereof forming a tubular end, said tubular end having a bevelled face, said recess including a cylindrical peripheral wall, said body having slots therein leading to said recess, said slots being straight and tangentially arranged with respect to the recess, each of said slots being parallel to but offset from one of said transverse apertures, and a hollow cap member including a cylindrical inner portion slidably engaging the first mentioned cylindrical portion of said body, said cap also including an internally threaded portion engaging said externally threaded portion of said body, a gasket on said shoulder, said gasket being U-shaped and engaging said body and said cap, said cap having a cylindrical discharge orifice in its lower end, said cap including a bevelled portion adjacent to said orifice and having another bevel on its inner surface, the bevelled face of said body engaging the last mentioned bevel on said cap and means to limit the rotary movement between said body and cap.

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