Dec. 20, 1932. G. R. McCURDY ET AL 1,891,720

SHOWER HEAD

Filed March 23, 1931

Fig. 1.

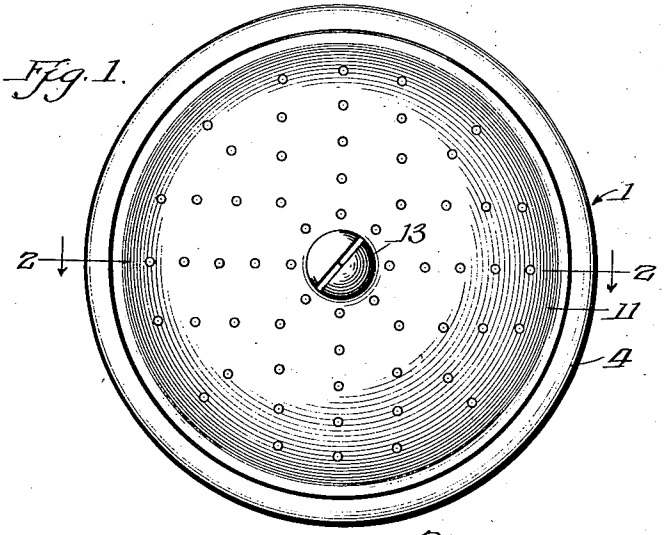


Fig. 2.

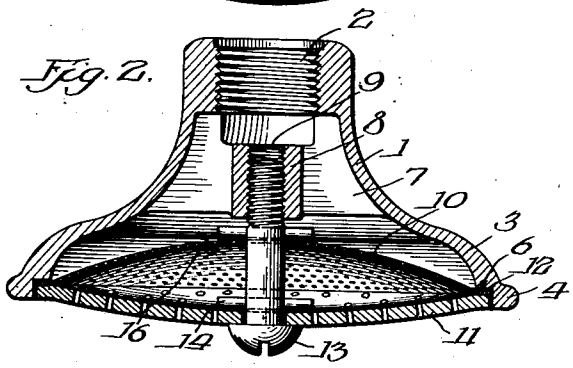
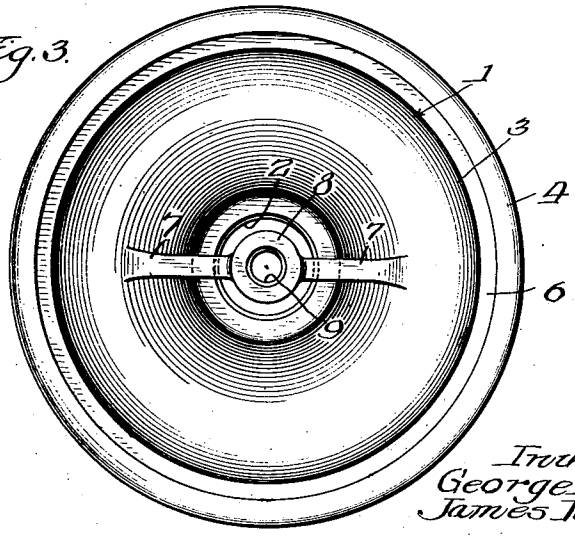


Fig. 3.



Witness
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Patented Dec. 20, 1932

1,891,720

UNITED STATES PATENT OFFICE

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SHOWER HEAD

Application filed March 23, 1931. Serial No. 524,482.

This invention relates to shower heads and its purpose is to provide a shower head which may be cheaply manufactured and readily repaired, if necessary.

Heretofore difficulty has been encountered in assembling the face plate of the shower and in removing the same for cleaning or repairing. These difficulties were increased where two perforated plates, such as a strainer and a face plate, were utilized.

In accordance with this invention the shower head may be and preferably is constructed with inner and outer perforated plates secured thereto, which are removable as a unit, which are retained in their relative positions as a unit when removed, and which may be removed and reassembled as a unit. The two plates are preferably secured to the head or body as a unit by a single means, such as a screw.

A better understanding of this invention will be obtained from the following description given in connection with the drawing in which:

Fig. 1 is a plan view of a shower head constructed in accordance with this invention,

Fig. 2 is a section on line 2—2 of Fig. 1, and

Fig. 3 is a plan view of the head member with the plate members removed.

Referring particularly to the drawing, it will be seen that the shower head comprises a head member or body 1 of usual bell shape, threaded at one end as at 2 to provide an inlet to receive a pipe or tube connection and enlarged at the other end as at 3 to provide a water chamber. The outer or enlarged end terminates in a flange 4 which is counterbored to provide an annular seating ledge 6 to receive perforated plates, later to be described. Intermediate its ends the body is provided with a pair of diametrically opposite webs 7 which support a central boss 8 in spaced relation to the inlet, the boss being provided with a central threaded aperture 9 for purposes later to be described.

Seated upon the ledge 6 is an inner perforated plate or strainer member 10, the latter being dished inwardly, is convex on its inner surface. Also seated upon the ledge 6 in opposed relation to screen 10 is a convexed outer perforated face plate 11. In order to seal and cushion the peripheral rim portions a gasket 12 may be inserted between ledge 6 and the inner plate 10, if desired. The two plates are securely fastened to the body by a screw 13 which passes through central apertures in the plate members and threadedly engages in the threaded aperture 9 of boss 8.

In order to retain either or both of the two plate members together as a removable unit with screw 13, the shank of screw 13 is drilled transversely at a point spaced from the head approximately the thickness of the outer plate to receive a pin 14 which will retain the outer plate against the head of the bolt. The shank of screw 13 is also drilled at a point farther along its shank to receive a pin 16 which engages the inner surface of strainer 10 to retain this latter member upon the screw.

It will be seen that when screw 13 is removed, pin 14 will engage the inner surface of plate 11 and pin 16 will engage the inner surface of strainer 10, thus removing the two plates and the screw together as a unit from the body 1. In this manner the two plates or, if only a single plate is used, the single plate will be removed with the screw even though the gasket tends to hold the same in place. This eliminates the necessity of digging or prying the plates free in the event that it is desired to repair or clean the shower head. This manner of uniting the two plates or a single plate, if only one is used, to the securing means, also facilitates assembling the shower head.

The manner of securing the center screw also serves an additional purpose. Heretofore center screws were considered desirable but impracticable because of the tendency to become loose and fall into the drain. The present invention prevents such an occurrence.

Other novel features and their resulting advantages will be apparent to those skilled in the art as it will be seen that slight changes may be made in the details of construction without departing from the spirit and scope

of this invention as defined in the claims appended hereto.

We claim:

1. In a shower head, a body, a face plate seated thereon, a screw arranged to secure said plate to said body, and a pin passing through said screw upon the opposite side of the plate from the head of the screw for locking said plate to said screw and located so that disengagement of said screw from said body will remove the plate from said body.

2. In a shower head, a body, a pair of spaced plates seated on said body, a screw for securing said plates to said body, and means associated with said screw for locking said plates to said screw for removal therewith and located to engage the inner face of one of said plates whereby disengagement of said screw from said body will remove said plates from said body.

3. In a shower head, a body, a pair of spaced plates seated on said body, a screw passing through said plates and engaging said body for securing said plates to said body, and a pin passing through said screw at a point on said screw between said body and said plates for locking said plates to said screw and located so that disengagement of said screw from said body will remove said plates from said body.

4. In a shower head, a body, a face plate spanning the open end thereof, means extending through said plate rotatable relatively to said plate for removably securing the latter to said body, and means associated with and detachable from said securing means for locking said plate to said body, said associated means being arranged to engage the plate upon removal of said securing means whereby disengagement of said securing means from said body will forcibly remove the plate from said body.

5. In a shower head, a body, a face plate seated thereon, a screw extending through said plate and threaded into said body for securing the plate to said body, said screw being free to turn relatively to said plate, and means for locking said plate to said screw and located so that disengagement of said screw from said body will forcibly remove the plate from said body, said locking means being detachable from said screw and plate after said plate and screw are removed as a unit from said head.

In witness of the foregoing we affix our signatures.

GEORGE R. McCURDY.
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