

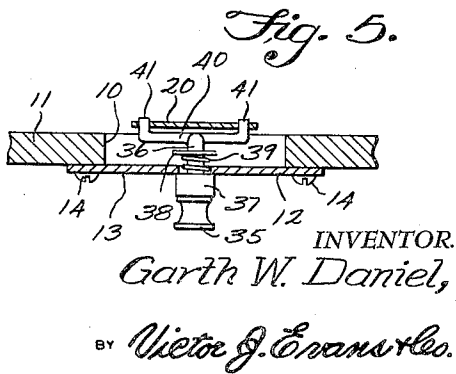
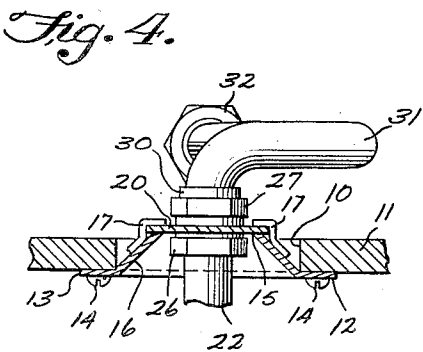
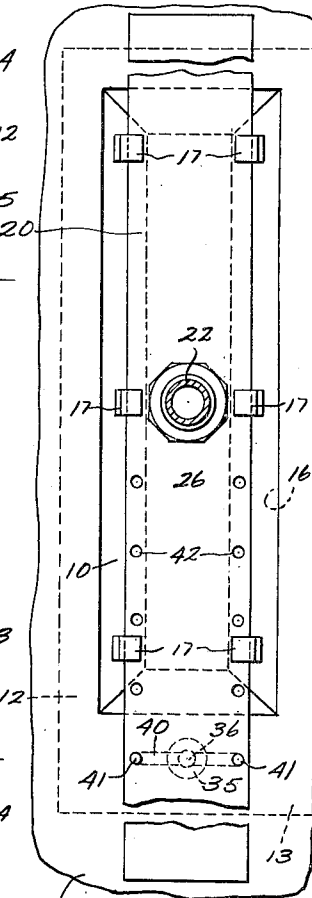
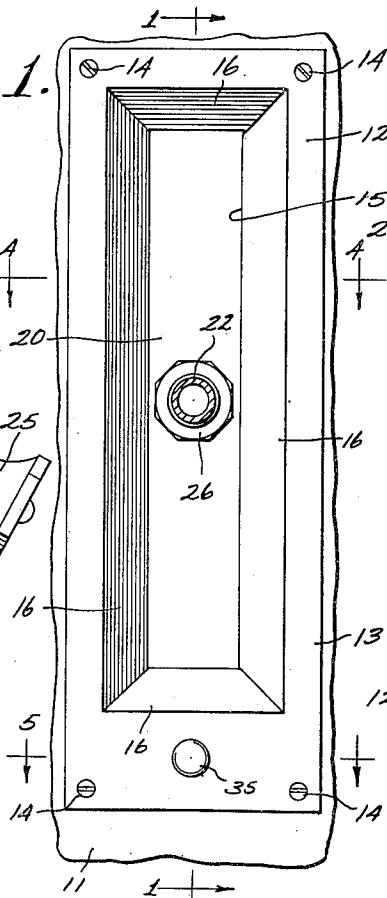
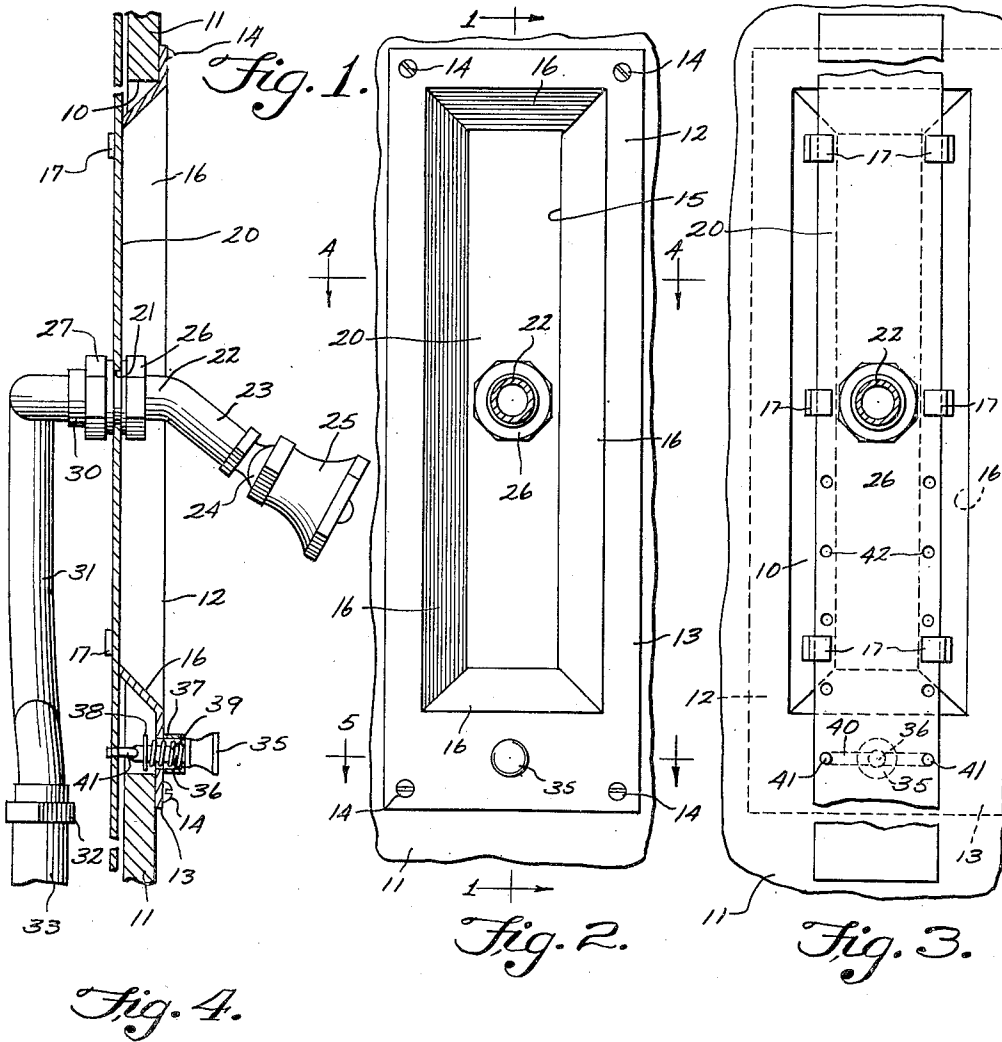
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ADJUSTABLE SHOWER

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ADJUSTABLE SHOWER

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3 Claims. (Cl. 4-145)

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This invention relates to an adjustable shower head, and more particularly to a vertically adjustable shower head whereby a shower bath may be expeditiously utilized by individuals of varying height.

The primary object of the invention is the provision of an improved adjustable shower head characterized by means permitting vertical lineal movement thereof in such manner that a bather may adjust the shower head to a desired height, in accordance with his own height, to obviate the possibility of wetting the hair or the like.

An additional object of the invention resides in the provision of such a device including a sliding plate, carrying a shower head which may be readily secured in adjusted position, and released for further adjustment with a minimum of effort and difficulty.

Still another object of the invention resides in the provision of such device which is sturdy and durable in construction, reliable and efficient in operation, and relatively simple and inexpensive to manufacture, install, and operate.

Still other objects will in part be obvious and in part be pointed out as the description of the invention proceeds, and shown in the accompanying drawing wherein there is disclosed a preferred embodiment of the inventive concept.

In the drawing:

Figure 1 is a side view, partially in section, and partially in elevation, disclosing one form of the instant invention, taken substantially along the line 1-1 of Figure 2 as viewed in the direction indicated by the arrows.

Figure 2 is a front plan view of the device disclosed in Figure 1, the shower head being removed.

Figure 3 is a rear elevational view of the device of Figures 1 and 2, certain concealed portions thereof being indicated by dotted lines.

Figure 4 is a sectional view taken substantially along the line 4-4 of Figure 2 as viewed in the direction indicated by the arrows, and

Figure 5 is a fragmentary sectional view taken substantially along the line 5-5 of Figure 1 as viewed in the direction indicated by the arrows.

Similar reference characters refer to similar parts throughout the several views of the drawing.

Referring now to the drawing in detail the device of the instant invention is adapted to be positioned in an aperture 10 in a wall 11, forming a wall of a shower stall or the like. The device includes a facing or front plate 12, including a flanged portion 13, secured to the outer face of

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the wall 11 in any desired manner as by screws 14, or the like. The facing plate 12 includes a central elongated rectangular aperture 15, surrounded by bevelled sides 16, merging into the flanges 13. As best shown in Figures 3 and 4 guide flanges 17 are suitably secured in alignment at spaced intervals to the rear faces of the bevelled portions 16, and serve to retain a rear plate 20 in vertically slidable relation with the face plate 12. The rear plate 20 is provided with a centrally positioned aperture 21 through which passes a pipe 22, terminating on the outer side of face plate 12 in an angularly disposed portion 23 to which is secured as by means of a ball joint 24, a shower head 25 of any desired conventional type. Lock nuts 26 and 27 respectively positioned on the outer and inner sides of plate 20 serve to secure the pipe 22 securely in related assembly therewith.

It will thus be seen that the plate 20, and its associated shower head 25 may be moved vertically, the alignment of the plate being assured by the guide flanges 17 and such movement limited by the engagement of the lock nut 26 with either the upper or lower bevel 16 defining the upper and lower limits of the central aperture 15. It may here be pointed out that the plate 20 is of sufficient length to insure complete closure of the aperture 15 regardless of the position of the adjustment of the shower head 25.

The lock nut 27 secures in position a fitting 30 secured to the end of a flexible connection 31, the opposite end of which is suitably secured as by means of a lock nut 32 to a water inlet 33. The flexible connecting tube is of sufficient length to permit the shower head 25 and its associated plate 20 to be moved upwardly to the extreme upper limits of the aperture 15, or downwardly to the lower limits thereof, and is provided with a loop of sufficient extent to prevent kinking of the flexible connection regardless of the position of adjustment of the shower head.

Means are provided for securing the shower head in any one of a plurality of positions of adjustment, and take the form, as best shown in Figures 1 and 5, of a button 35, provided with an operating stem 36, which extends through an aperture in a flanged bushing 37 secured to the lower portion of the flange 13 of front plate 12. Operating stem 36 is provided with a retaining collar 38, against which seats one end of a compression spring 39, the other end seating against the flange of member 37, in such manner as normally to bias the operating stem 36 inwardly with respect to plate 12. Secured to the operat-

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ing stem 36 at a point adjacent its inner extremities are a pair of transversely extending members 40, each terminating in an inwardly turned projection 41, adapted selectively to engage with any one of a plurality of pairs of aligned apertures 42 extending along the edges of the plate 20.

Thus it will be seen that when the button 35 is in the position disclosed in Figure 1, spring 39 will normally bias projections 41 into an associated pair of selected apertures on the plate 20, thus substantially precluding vertical disalignment of the plate 20 and its associated shower head. When it is desired to adjust the device however the button 35 may be drawn outwardly, against the bias of the spring 39, releasing the projections 41 from engagement with their associated pair of apertures 42, and the assembly moved upwardly or downwardly by grasping the shower head 25, or the pipe 22. When the desired height has been achieved, release of the button 35 will permit the spring 39 to bias projections 41 inwardly against plate 20, and slight movement of the plate upwardly or downwardly will permit the projections 41 to seat in the closest adjacent pair of apertures 42.

From the foregoing it will now be seen that there is herein provided an improved adjustable shower head which accomplishes all of the objects of this invention, and others, including many advantages of great practical utility and commercial importance.

As various embodiments may be made of the inventive concept, and various modifications may be made in the embodiment hereinbefore shown and described, it is to be understood that all matter herein is to be interpreted merely as illustrative, and not in a limiting sense.

I claim:

1. In an adjustable shower head, in combination, an apertured face plate, a rear plate slidably secured to said face plate, a water inlet pipe extending through the rear plate and through the face plate, a shower head carried by said inlet pipe on the outer side of the rear plate, a flexible connection between said inlet pipe and a source of water supply, and means for holding the rear plate against displacement, said flexible connection comprising a looped flexible tube of a length

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sufficient to permit movement of the shower head within the limits of the aperture in the face plate, the length of said face plate being sufficient to close said aperture regardless of the position of adjustment of said shower head.

2. In an adjustable shower head, in combination, an apertured face plate, a rear plate slidably secured to said face plate, a water inlet pipe extending through the rear plate and through the face plate, a shower head carried by said inlet pipe on the outer side of the rear plate, a flexible connection between said inlet pipe and a source of water supply, and means for holding the rear plate against displacement, said last mentioned means including spring biased projections engageable in apertures in said rear plate, and means operable through said face plates for retracting said projections from said apertures.

3. In an adjustable shower head, in combination, an apertured face plate having a bevelled portion surrounding the aperture and extending into a recess in a wall, guide flanges interiorly carried by the vertical sides of the bevelled portion, a rear plate having a plurality of aligned pairs of apertures in its edges slidable within said flanges, a water inlet pipe extending through the rear plate, a shower head carried by said inlet pipe on the outer side thereof, a flexible connection between said inlet pipe and a source of water supply, and means including spring biased projections engageable in said apertures in said rear plate and operable through said face plate, for precluding movement of said rear plate with respect to said face plate.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,327,428	Gregory	Jan. 6, 1920
1,982,509	Frank	Nov. 27, 1934
2,011,120	Searle	Aug. 13, 1935

FOREIGN PATENTS

Number	Country	Date
3,379	Great Britain	Mar. 3, 1890