A. F. HEINE.

BATH DEVICE.

APPLICATION FILED JULY 31, 1920.

1,407,030. **Patented Feb. 21, 1922.**

Fig. 1.

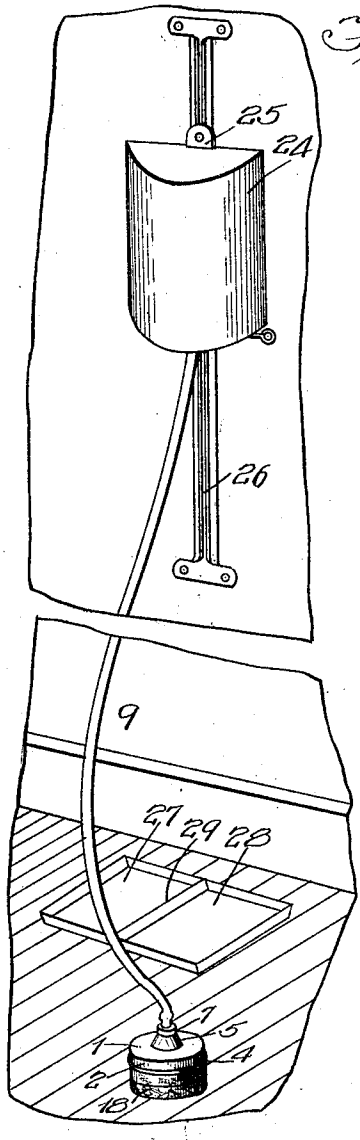


Fig. 2.

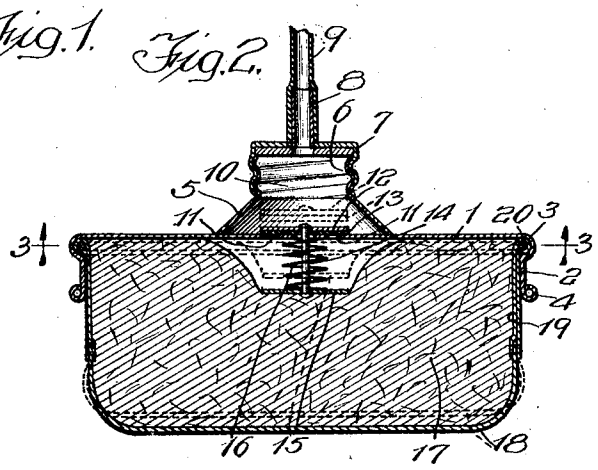


Fig. 3.

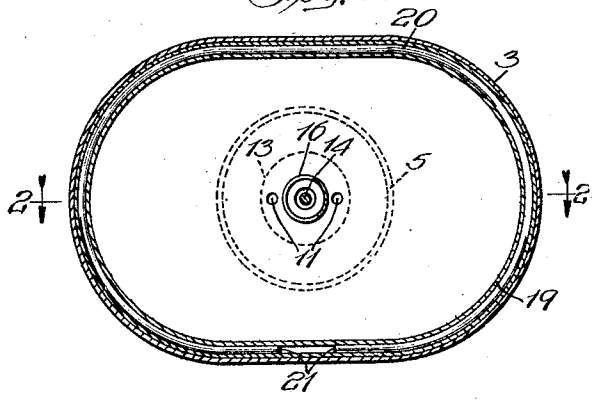


Fig. 4.

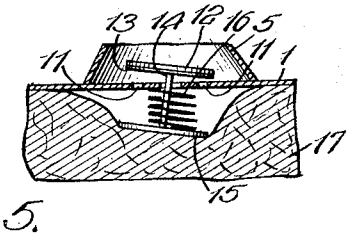
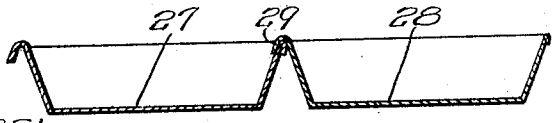


Fig. 5.



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UNITED STATES PATENT OFFICE.

ALBERT F. HEINE, OF QUINCY, ILLINOIS.

BATH DEVICE.

1,407,030. Specification of Letters Patent. Patented Feb. 21, 1922.

Application filed July 31, 1920. Serial No. 400,440.

To all whom it may concern:

Be it known that I, ALBERT F. HEINE, a subject of the King of England, residing at Quincy, in the county of Adams and State of Illinois, have invented certain new and useful Improvements in a Bath Device, of which the following is a description.

My invention belongs to that general class of devices known as bath or bathing devices or fixtures, and relates particularly to a device for use in rural communities where the usual facilities for bathing generally do not include running water, bath tubs and other conveniences. The device is particularly designed to provide a convenient apparatus which will be sanitary, convenient, and efficient, and use only a minimum amount of water. The invention has among its objects the production of an apparatus of the kind described that is simple, convenient, durable, efficient, sanitary, attractive, inexpensive and satisfactory for use wherever found applicable. Many other objects and advantages of the construction herein shown and described will be obvious to those skilled in the art from the disclosures herein given. The present device is in the nature of an improvement of the apparatus shown in my pending application, Serial No. 303,652, filed June 12, 1919.

To this end my invention consists in the novel construction, arrangement and combination of parts herein shown and described, and more particularly pointed out in the claims.

In the drawings, wherein like reference characters indicate like or corresponding parts,

Fig. 1 is a perspective view of my complete device;

Fig. 2 is a sectional view through the sponge pad taken substantially on line 2—2 of Fig. 3;

Fig. 3 is a sectional view taken substantially on line 3—3 of Fig. 2;

Fig. 4 is a sectional view illustrating a portion of the sponge pad casing and sponge, and with the valve in open position; and

Fig. 5 is a sectional view through the pans or receptacles for receiving the water discharged through the sponge pad.

Referring to the drawings, 1 represents a casing part which is preferably flanged about the periphery thereof as indicated at 2, the same, however, being formed in the preferred construction as at 3 to provide a groove or recess at the interior with the extreme edge turned over as at 4 to provide a finished appearance and avoid a sharp edge. A part 5 is preferably provided on the outer face of part 1, the same being shown with a thread portion 6 arranged for threaded engagement with a cap 7 having an extending part 8 to which a hose or the equivalent 9 may be secured. There is thus provided a water chamber 10, the part 1 being provided with ports or openings 11 through which the water may be discharged as desired from the chamber into the sponge pad. As shown, however, the discharge of water is normally prevented by a valve member 12, which I prefer to provide with a gasket or seat portion 13 of rubber or equivalent material, which will closely seat on the portion 5 and prevent the escape of water through the openings 11 when the valve is closed. I have shown a valve stem 14 extending from the valve through the part 1 and having an enlarged end or plate 15 carried thereby, 16 being a spring for normally maintaining the valve in its closed position.

Carried by the casing is a sponge pad 17, preferably of rubber or any other suitable material, porous or sponge rubber being preferred. I have provided a container for the sponge pad, which in the construction shown, consists of the part 18 extending over the exposed face of the pad and which I prefer to make of the material generally used for wash cloths or the like, for example, Turkish toweling. This may extend up and be attached to the casing, but ordinarily I prefer to use an extending part 19 of canvas or other material, which is provided with a resilient ring 20, or its equivalent, at its edge. The ring 20 shown is of spring wire of a length to extend around the casing part and expand into the groove formed by the turned over portions 3. As most clearly shown in Fig. 3, the ends 21 of wire or retaining member, are spaced so as to allow the ring to be contracted when seating the same in place.

Referring to Fig. 1, I have illustrated a receptacle 24 for containing water, the outlet of which communicates with the tube or hose 9. The water receptacle may be provided with a part 25 by means of which the

same may be hung up or adjustably mounted on a guide or support 26 secured to the side wall.

In Fig. 5 I have illustrated suitable receptacles in which the user of the device may stand, these being of the desired size and shape, and as many employed as found necessary. In the illustrated construction, receptacle or pan 28 is provided with an overhanging portion 29 which engages with the edge of the receptacle 27, not only securing the two parts against displacement but also bridging the same and preventing the leakage of water.

In use, the receptacle or pail 24 may be filled and hung at the desired point, this depending upon the pressure and flow of water desired. Ordinarily the valve 12 will be maintained closed, thereby preventing the escape and wastage of water through the sponge pad. The user may stand in the receptacle as illustrated, or a tub, pail or the like, so as to prevent the excess water flowing on the floor. The sponge pad may be used in the usual manner. However, as soon as sufficient pressure is put on the pad to overcome the spring 16, the pad bearing against the plate 15, and actuating the stem 14, causes the valve 12 to be opened so that water may flow down from the receptacle 24 through the hose 9 and the chamber 10 through the ports 11 into and through the sponge. The instant, however, the pressure is relieved on the sponge to any extent, the valve will be closed, preventing the waste of water. It will be particularly noted by referring to Fig. 4 that pressure need not be applied on the pad at a particular point, for even if it is irregularly applied, a slight tilting of the plate 15 will cause the opening of the valve and discharge of the water. Upon relieving the pressure on the pad, the valve will be immediately closed, preventing the waste of water. It will be noted from the preceding that the desired amount of water may be used at all times, and that by so regulating and controlling the flow, a comparatively small amount of water will be sufficient for the bath. The advantages of shower baths are so well known that the same need not be elaborated or be more particularly described herein. With my apparatus it is possible for every home, at a nominal expense, to have all the advantages afforded by modern bathing facilities. The construction is sanitary, simple and durable, and consists of a small number of parts. It is not necessary to apply pressure to the pad in any particular manner, as the device is always operative. It will also be noted that not only may the sponge and cover be removed for cleaning, but that the sponge and cover may be both separated and each cleansed separately. Any equivalent covering material for the sponge pad may be employed, that shown, however, having the advantage of securely retaining the sponge in place as well as being particularly efficient and easy to keep clean.

Having thus described my invention, it is obvious that various immaterial modifications may be made in the same without departing from the spirit of my invention; hence I do not wish to be understood as limiting myself to the exact form, construction, arrangement and combination of parts herein shown and described, or uses mentioned.

What I claim as new and desire to secure by Letters Patent is:

1. A device of the character described, comprising a casing having a water chamber provided with a water inlet and a water outlet, a cleaning pad arranged within the casing and mounted for a yielding movement, said pad in its upper surface having a pocket therein, a slidable valve for controlling the passage of water from the water chamber operable by the pressure of the water in said chamber to close the valve, said valve being mounted for an oscillatory movement, and a spring normally maintaining the same closed, the valve being opened by a movement of said pad when any portion of the surface of the pad encounters resistance.

2. A device of the kind described, comprising a casing having a water chamber arranged therein, a cleaning pad disposed within the casing and mounted for a yielding movement relative to said casing, the covering plate of said casing having a slot therein, a slidable valve for controlling the passage of water from the water chamber having a shank portion of a diameter less than the diameter of said slot passing therethrough, a spring surrounding said shank and engaging the surface of the casing, an enlarged head connected with said shank at its lower end, the valve being normally maintained closed by water pressure and by the resilient action of said spring, and adapted to be opened upon the pad encountering resistance sufficient to move the same inwardly.

3. A device of the kind described, comprising a casing having a water chamber arranged therein, a cleaning pad disposed within the casing and mounted for a yielding movement relative to said casing, the covering plate of said casing having a slot therein, a slidable valve for controlling the passage of water from the water chamber having a shank portion of a diameter less than the diameter of said slot passing therethrough, a spring surrounding said shank and engaging the surface of the casing, an enlarged head connected with said shank at its lower end, the valve being normally maintained closed by water pressure and by the resilient action of said spring, and

adapted to be opened upon the pad encountering resistance sufficient to move the same inwardly, said valve being capable of an oscillatory movement whereby the same is shifted if any portion of the cleaning surface of the pad is engaged.

In testimony whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

ALBERT F. HEINE.

Witnesses:
IRENE DICKHUT,
EDWIN HORNER.