July 3, 1928. 1,676,116

E. G. SMITH

LAVATORY FIXTURE

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Fig. 1

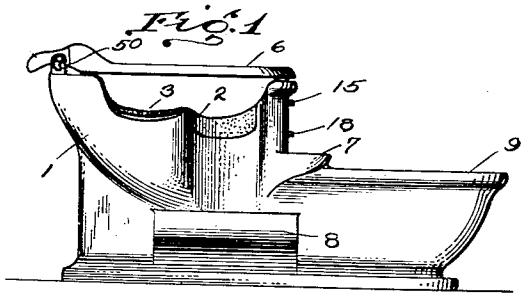

Fig. 2

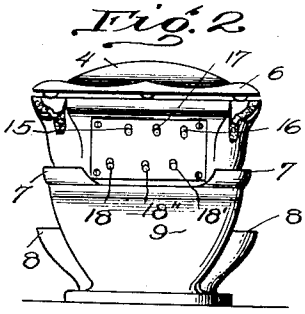

Fig. 3

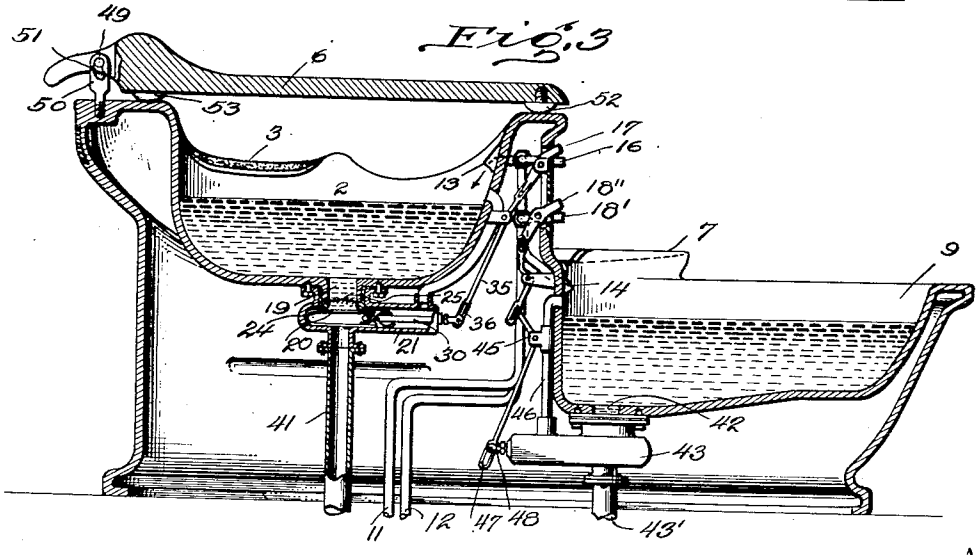

Fig. 4

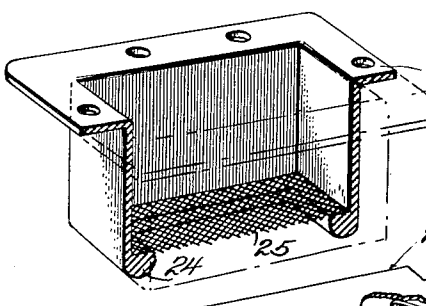

Fig. 5

INVENTOR.
Ernest G. Smith
BY
O'Neill & Brown
ATTORNEYS

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Fig. 6.

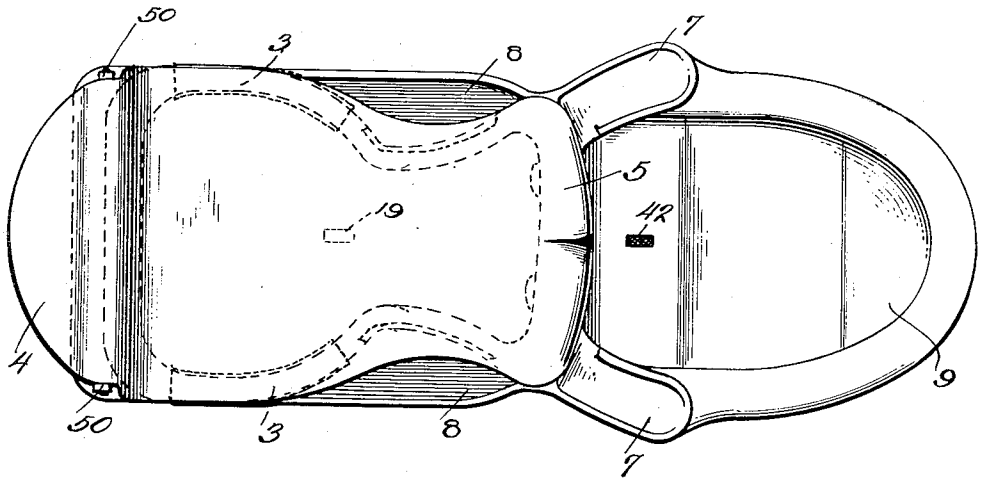
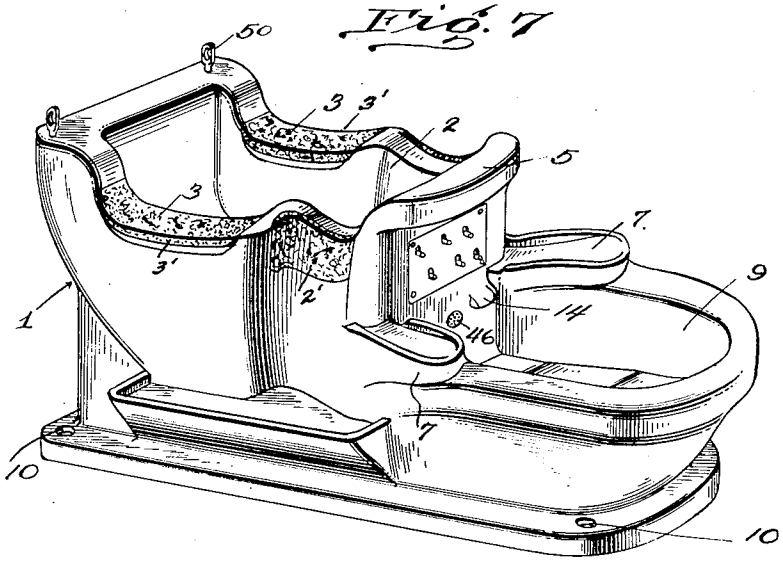


Fig. 7



INVENTOR.

Ernest G. Smith

BY

O'Neill & Burns

ATTORNEYS

Patented July 3, 1928. 1,676,116

UNITED STATES PATENT OFFICE.

ERRETT G. SMITH, OF WASHINGTON, DISTRICT OF COLUMBIA.

LAVATORY FIXTURE.

Application filed January 24, 1928. Serial No. 249,043.

This invention relates to lavatory fixtures, and more specifically to a structure in the nature of a bidet, so designed as to facilitate the application of vaginal douches, or in cleansing operations or treatments of the rectum or other private parts of the human body, or which may also be utilized as a foot bath, when desired.

One of the objects of the invention is the provision of an improved device of this character equipped with water inlets and waste outlets having controls within reach of the operator.

Another object of the invention is the provision of such a device constructed to provide foot rests for the user, so positioned that when the feet are on said rests, the portion of the body to be cleansed or treated is in the position best adapted for easy access.

Still another object of the invention is the provision of another set of foot rests so positioned that the user may stand on said rests while cleansing, treating or drying certain portions of the body.

Other objects of the invention will be made apparent in the accompanying specifications, when read in connection with the drawings forming a part thereof.

In said drawings:

Fig. 1 is a side elevation of the structure.

Fig. 2 is a front elevation thereof.

Fig. 3 is an enlarged longitudinal section taken centrally through the structure.

Fig. 4 is a longitudinal section taken through a packing box and strainer forming a part of the waste outlets.

Fig. 5 is an enlarged perspective view of the means for opening and closing the waste outlets.

Fig. 6 is a top plan view of the structure, and,

Fig. 7 is a perspective view thereof.

Now referring specifically to the drawings, in which like reference numerals denote like parts throughout the several views, 1 indicates the supporting structure or stand, made of porcelain covered metal or of earthenware or fire-clay, and provided with a receptacle or basin 2, and broad flat side rails 3, 3, a rear edge 4, and a front rim 5 around the top of said basin, as best illustrated in Fig. 7. As shown in Fig. 3, a folding top 6, shaped to the curvature of the buttocks of the user, is pivotally secured to the rear edge 4 of the stand 1.

The stand is also equipped with footrests 7, 7, located below and at each side of the rim 5. In administering vaginal douches, or in washing or treating diseases of the rectum or the generative organs, the user straddles the stand and rests the thighs upon the rails 3, 3, and the feet upon the foot rests 7, 7, or upon elongated foot rests 8, 8, arranged to extend longitudinally of the stand, below the rails 3, 3. Either set of foot rests may be used, dependent upon the portion of the body to be cleansed or treated, and the manner in which the treatment is to be applied, it being understood that the basin 2 contains an adequate supply of water mixed with medicants, if desired. After the cleansing operation or treatment is completed, the user places the feet upon the rests 8, 8, and stands astride the basin 2, while drying or bandaging the parts which have been cleansed or treated. As clearly illustrated in Figs. 1, 6 and 7, the seat rails 3 are concaved to the curvature of the thighs of the user, and, as specifically shown in Fig. 6, said side rails gradually approach each other to form a narrow space above the basin 2, at a point slightly in front of the center of said basin, the foot rests 8 being directly opposite this narrowed portion of the stand 1. Such convergence of the side rails renders the device more comfortable to the user, when standing on the foot rests 8, 8, as will be understood.

It is to be noted that the structure also includes a foot tub 9, located in front of and below the rim 5. In taking foot baths the user lowers the top 6 to the position shown in Figs. 1 and 3, and utilizes said top as a seat while the feet are in the tub 9, as will be readily understood. After the feet have been cleansed, they may be placed upon the rests 7, 7, for convenience in drying. The tub 9 is also equally useful as an infant's bath, as will be manifest.

The stand heretofore described may be secured in position in the bath room, or elsewhere if desired, by means of connecting elements (not shown) entered into the apertures 10, 10, and fastened to the floor. It is also connected to hot and cold water supply, and with the waste water discharge. As illustrated in Fig. 3, a hot water pipe 11, and a cold water pipe 12, extend upwardly under the stand 1, and each pipe communicates with valve controlled inlets 13, 14, entering the basin 2, and the tub 9, respectively. The

valve levers 15, 16 and 17, respectively, controlling the supply of hot and cold water to the basin 2, and the outlet therefrom, are of the ordinary bell-crank lever variety, as are also the valves 18, 18′ and 18″, controlling the supply of hot and cold water to the tub 9, and the drain outlet from the latter.

The basin 2 is equipped with a flanged waste-outlet 19, best shown in Fig. 3, under control of the valve 20, housed in a valve casing 21, located below the outlet 19. A rubber stuffing box 22 fits around the flanges of the outlet 19, and is bolted at 23, to the lower wall of the reservoir 2, the lower periphery of the box 22 being formed of soft rubber or leather 24, or other packing material adapted to co-operate in effecting a tight joint with the valve closure in contact therewith, a foraminated screen or strainer 25 extending across the bottom of the stuffing box 22.

Extending longitudinally within the casing 21, is the valve 20, preferably comprising a single sheet of spring metal, made up of two integral leaves 26, 27. The leaf 26 is provided at its front edge with two integral, rearwardly and downwardly-extending, curved guide fingers 28, 28, and the leaf 27 is similarly provided with similarly shaped but upwardly extending fingers 29, 29, the structure being best illustrated in Fig. 5.

Mounted for sliding movement in an aperture formed in the front end of the valve casing 21, is a bar 30, here shown as round in cross-section. The bar 30 extends into the valve casing 21, and is entered between the free ends 31, 32 of the leaves 26, 27 respectively. Adjacent the inner end the bar 30 carries two circular pins 33, 34, which extend therethrough and project on both sides to a point adjacent the wall of the valve casing 21, and the assembly is such that, on each side of the bar 30, a finger 28 and a finger 29, is entered between the pins 33 and 34, said fingers lying in substantial contact each to each, all as best shown in Fig. 5, in which the valve 20 is illustrated in its closed position.

The valve 20 is actuated by the bell-crank lever control 17, the inner end of said lever 17 being operatively connected to a rod 35, terminating in a connecting loop 36, operatively secured to the end 37 of the bar 30, outside of the valve casing 21. Obviously, when the exposed end of the lever 17, (as shown in Fig. 3) is depressed, a pull will be exerted tending to partially withdraw the bar 30 from the casing 21. In this movement, with the parts assembled as illustrated in Fig. 5, the pin 33, on each side of the bar 30, will slidably bear against the contacting curved edges of the fingers 28 and 29, and cause the leaves 26 and 27 to be drawn together, thereby moving the leaf 26 away from the material 24 on the periphery of the box 22, and simultaneously pulling the valve 20 to the right and out of contact with the exhaust of the water in the basin 2. Under such movement the pin 34 rides backwardly upon the ledge 38 formed upon flanges 39 provided on the fingers 29, 29, the rear edges of the fingers 28 remaining in constant contact with said pin 34. The valve 20 is now flexed, and the leaves thereof normally tend to return to normal position. Such return may be prevented however by continued pressure upon the lever 17, or by a spring connected to said lever to work upon the toggle principle. In any event movement of the lever 17 in a direction the reverse of that heretofore described, will obviously cause the bar 30 to be again projected to its original position within the casing 21, the pin 34 pressing on the contacting curved edges of the fingers 28, 28, 29, 29, and, assisted by the inherent resiliency of the leaves 26, and 27, returning the latter to normal position, and simultaneously restoring the valve 20 to the closed position shown in Fig. 3.

The basin 2 is also equipped with an overflow vent from which extends a pipe 40, leading to the valve casing 21. An outlet drain pipe 41 leads to the sewer.

The tube 9 is also equipped with a waste outlet 42, and with valve mechanism in all respects similar to that described in connection with the basin 2, the valve casing being indicated at 43. The valve lever 18″ is operatively connected to a rod 44, pivotally connected at 45 to a bracket secured to the overflow pipe 46, the lower end of said rod terminating in a loop 47 secured to a bar 48 entering the casing 43, in the manner described in connection with the operation of the valve 20, the casing 43 containing a similar valve. A waste pipe 43′ is also provided for the casing 43.

The top 6 carries at its rear end two pivot pins 49, adapted to be received in supporting studs 50, provided with vertically elongated arcuate trunnions 51. At the front the top 6 carries the usual stop button 52 for contact with the rim 5, and it also carries a similar button 53 on the lower face of the rear end, for abutment against the edge 4 of the stand 1. As the buttons 52 and 53 become worn in service the pivot pins 49 become automatically adjusted to position within the trunnions 51.

From the foregoing it will be apparent that I have provided a combined lavatory fixture and bidet so designed as to greatly facilitate the application of vaginal douches, or the operations of cleansing or treatment of the rectum or generative organs of the body, and also carrying a tub adapted for use in taking foot baths, or in bathing infants and small children. The stand 1 is so constructed that the user sits up on the rails 3, 3, the feet being placed on the rests 7, 7,

if desired, thereby permitting easy access to the parts to be treated, in the application of vaginal douches. Or the feet may be placed upon the rests 8, 8, while the user is seated on the rails 3, 3, causing the knees of the user to be spread further apart, and thereby further facilitating the application of the douche, as will be understood without additional and objectionable explanation.

In cleaning or treating the rectum, the user sits upon the rails 3, 3, with the feet upon the rests 8, 8, or upon the rests 7, 7, according to the nature of the treatment intended. In the treatment of the male generative organ, the user may sit upon the rails, or may stand on the rests 8, 8, astride the front portion of the basin, the legs fitting into the restrictions caused by the convergence of the front portions of the rails.

It is to be particularly noted that valve levers 15, 16 and 17, controlling the hot and cold water to the basin 2, and the waste outlet, are located directly below the rim 5, in easy reach of the person using the basin 2. The similar levers 18, 18′ and 18″, for controlling the flow of water to and from the tub 9, are arranged in a row directly below the controls for the basin, the levers 18, 18′ and 18″ being within easy reach of a user seated upon the folding top 6.

Modifications of the structure herein disclosed may be suggested to those skilled in the art, but my invention covers all embodiments falling fairly within the scope of the appended claims. As best illustrated in Fig. 7 of the drawings, the tops of the rails 3, and the sides of the restricted portions 2 of the basin, may be covered with a heat-insulation medium 3′ and 2′, such as cork, or rubber, rendering it more comfortable for the user when seated on said rails 3, or when standing on the foot rests 8, with the legs in contact with the sides of the basin thereabove, other portions of the structure may be similarly covered, if desired.

I claim:

1. A lavatory fixture comprising a basin provided with a surrounding seat concaved to the contour of the thighs of a user when seated thereon, and foot rests located in front of and below the plane of said seat.

2. A lavatory fixture comprising a basin provided with a surrounding seat concaved to the contour of the thighs of a user when seated thereon, foot rests located in front of and below the plane of said seat, and a second set of foot rests located below the plane of and on each side of said seat.

3. A lavatory fixture comprising a basin including defining walls having upper edges providing a seat portion shaped to conform to the contour of the thighs of the user when seated thereon, said walls gradually converging in front of said seat portion, and a foot rest located on each side of said basin, and opposite the point of closest approach of said converged walls, substantially as described.

4. A lavatory fixture comprising a stand provided with a basin and a tub located in front of and below the plane of the basin, a foldable cover for the basin adapted for use as a seat for the user of the tub, in combination with foot rests located laterally of the basin, and additional foot rests located above the tub and below the top of the basin.

In testimony whereof I affix my signature.

ERRETT G. SMITH.