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(54) Fitting for personal hygiene, in particular for bathrooms

(57) The proposed fitting for personal hygiene and lower limbs cleaning, in particular for bathrooms includes a substantially ring-like support structure (5), whose inner part is equipped with a duct (6) opening outside with a plurality of channels (6a) oriented in such a way, as to direct water toward said lower limbs and/or intimate parts. The support structure (5) is hinged to relative supporting means (2), which are fastened to a vertical wall (3a). The support structure (5) moves from a working configuration (B), which allows the personal hygiene and/or lower limbs cleaning, in time relation with the flow of water fed by the channels (6a), to a rest configuration (A), in which the size of the fitting (1) is reduced.

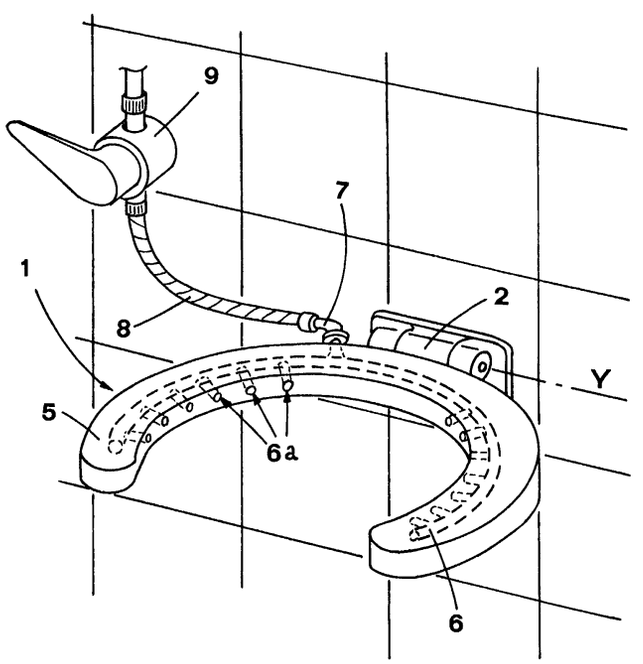

FIG. 2

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Description

[0001] The present invention relates to fittings used in bathrooms or toilets for personal hygiene and lower limbs cleaning.

[0002] In most European countries bathrooms are equipped with a sink, usually fastened to the wall and used for cleaning the upper part of the body; a toilet bowl, suitably connected with a flushing system and with a siphon for discharging organic sewages; and a bath-tube for the body global hygiene and cleaning.

[0003] The bath-tube is often fitted with or substituted by a shower, so as to limit the waste of water and/or minimize the space occupied thereby.

[0004] Moreover, in many European countries, the bathrooms are equipped with an additional fitting, better known as bidet, on which one usually sits astride for personal hygiene, and which is usually fastened to the floor.

[0005] The bidet usually includes a ceramic oblong bowl, connected with water supplies and discharging ducts.

[0006] The bidet is generally situated near the toilet bowl, so as to optimize its use.

[0007] Although the bidet is particularly functional and of rapid use, it is not always possible to install it in a bathroom, because of many disadvantages deriving from insufficient bathroom surface and/or from the necessity to provide a suitable refluent water discharge system connected to the bidet, which requires building work.

[0008] The object of the present invention is to propose a fitting for bathroom, which avoids the above mentioned drawbacks, allows personal hygiene and lower limbs cleaning also in small bathrooms, without necessarily installing a water discharge system.

[0009] Another object of the present invention is to propose a particularly strong and reliable fitting of reducible size, as will be explained in the following description.

[0010] A further object of the present invention is to propose a fitting which assures best functionality and a versatile use, in particular for elderly and handicapped people.

[0011] Still another object of the present invention is to propose a fitting obtained by a simple and cheap technical solution, which optimizes its frequent use, specially in caravans and airplanes, together with chemical water closets, and in all situations requiring easy transportability.

[0012] The above mentioned objects are obtained in accordance with the contents of the claims.

[0013] The characteristic features of the invention will be pointed out in the following description with particular reference to the enclosed drawings, in which:

- Figure 1 is a schematic lateral view of the proposed fitting in two particularly significant configurations (one of which is shown with broken line);
- Figure 2 is a schematic perspective view of the same fitting of Figure 1 according to another embodiment.

[0014] With reference to the above drawings, the reference numeral 1 indicates the proposed fitting for bathroom, basically including a support structure 5, substantially ring-like, e.g. open, and equipped inside with a duct 6.

[0015] The duct 6, preferably extending symmetrically with respect to the structure 5, is supplied with water by a sleeve 7 and opens in a plurality of channels 6a formed by the structure 5 and oriented in such a way as to direct the fed water toward the center, i.e. toward the inner part of the structure 5.

[0016] The sleeve 7, formed by the side part of the structure 5, is connected, by a flexible pipe 8, to a mixer 9, which supplies water with controlled temperature.

[0017] The support structure 5, which bears lower limbs and/or bottom parts (not shown), is hinged along a horizontal axis Y to relative supporting means 2.

[0018] The supporting means 2 are fastened to the rear vertical wall 3a of a hydraulic shower equipment, situated near the refluent water discharge means 4, e. g. making part of the same hydraulic shower equipment.

[0019] The support structure 5, hinged along the axis Y to the supporting means 2, moves from a working configuration B, in which the support structure 5 is orthogonal to the rear vertical wall 3a, and a rest configuration A, in which the support structure 5 is parallel thereto.

[0020] When in the working configuration B, the support structure 5, preferably a self-supporting structure, allows the personal hygiene and lower limbs cleaning, preferably with suitable cleansing substances.

[0021] The user regulates the flow and/or temperature of the water supplied by the channels 6a by acting on the mixer 9.

[0022] Thus, it is possible to clean the lower limbs and/or intimate parts by putting them on the upper part of the support structure 5, so that the channels 6a can sprinkle them with water.

[0023] The produced refluent water is conveyed to the collecting base of the shower system and flows through the discharge thereof.

[0024] After having completed the cleaning operation, the user can stop the water supplied by the channels 6a by acting on the mixer 9, and possibly bringing the support structure 5 back to the rest configuration A.

[0025] According to an advantageous embodiment, suitable means 10 stabilizing the working configuration B of the support structure 5 are situated in the part opposite to the supporting means 2.

[0026] The stabilizing means 10 can include a pair of bars 90 hinged to an end of the support structure 5, along a relative axis 90a.

[0027] The bars 90 assume relative operation positions U, substantially orthogonal with respect to the support structure 5. In this position, the other ends of the

bars 90 rest on a horizontal support surface 3b, while the support structure 5 is in the working configuration.

[0028] The bars 90 assume also non-operation positions V, in which they are substantially parallel to the support structure 5, when the latter is in the rest configuration A.

[0029] Thus, the working configuration B is firmly stabilized and possible structural breakings of the support structure 5 are maximally reduced.

[0030] According to another embodiment, safety means 91 of known type, are connected to each bar 90, so as to further stabilize the operation position U thereof.

[0031] It is obvious that the support structure 5, when in rest configuration A, can be situated completely over (Figure 1) or completely under (not shown) the corresponding supporting means 2, i.e. it can be respectively in a raised or in a lowered position.

[0032] According to other embodiments of a particular aesthetic value, a niche or an outer room (not shown) is made in the vertical wall 3a for receiving the support structure 5 when it is the rest configuration A.

[0033] In these cases, the supporting means 2 of the structure 5 can include a hinge having horizontal axis Y (Figures 1, 2), or a pair of vertical guides, fastened to the inner part of the niche or room, so as to guide the structure 5.

[0034] The support structure 5 is preferably obtained symmetrically with respect to a surface orthogonal to the vertical wall 3a passing through the supporting means 2 and the upper part thereof can be shaped anatomically.

[0035] The support structure 5 is advantageously interchangeable with respect to the supporting means 2, so as to facilitate possible changes of the structure 5 size.

[0036] The special shape of the proposed fitting for bathrooms assures high functionality and security standards for its use by elder people, children, people with motory disorders and/or any form of handicap.

[0037] The particular advantage of the proposed fitting lies in fact that it can be used in caravans and/or airplanes, together with chemical water closets, as well as a portable fitting, possibly closed in a suitable container.

[0038] Moreover, the discharge means 4 can be either made in the base of the hydraulic shower equipment, or in the floor of the bathroom.

[0039] The above mentioned advantages are obtained by a technical solution which allows the personal hygiene and lower limbs cleaning also in small bathrooms, and does not requires another refluent water discharge system.

[0040] Actually, the proposed fitting 1 can be installed in an already existing bathroom without any changes of building works and therefore, without any additional costs.

[0041] The proposed fitting, in its many embodiments, is substantially solid and reliable, very practical and versatile, and moreover, it can be used frequently.

[0042] Furthermore, it is to be pointed out that the parts of the above described fittings are few and simple to realize, which results in low production costs.

Claims

1. Fitting for personal hygiene and lower limbs cleaning, in particular for bathroom, including a mixer (9) of water supplied by the supplying system, and refluent water discharge system (4) characterized in that it includes: a support structure (5), whose upper part bears lower limbs and/or bottom parts, and whose inner part is equipped with at least one duct (6), said duct (6) being supplied with water via a sleeve (7) formed by said support structure (5) and connected to said mixer (9) by a flexible pipe (8), said duct (6) opening in a plurality of channels (6a) formed by said structure (5) and oriented in such a way as to direct the fed water toward the center and toward the lower limbs and/or bottom parts, and in that said support structure (5) moves from a working configuration (B) to a rest configuration (A), with said working configuration (B) allowing the personal hygiene and/or lower parts cleaning in time relation with the flow of water from said channels (6a), and with said rest configuration (A), in which the size of said fitting (1) is reduced.

2. Fitting, according to claim 1, characterized in that it includes supporting means (2), which carry said support structure (5) and are fastened to a vertical wall (3a) situated near said discharge means (4), said support structure (5), when in said working configuration (B), being substantially orthogonal to said vertical wall (3a).

3. Fitting, according to claim 1 or 2, characterized in that said support structure (5) is a self-supporting structure.

4. Fitting, according to claim 1 or 2, characterized in that it includes related means (10) for stabilizing the working configuration (B) of the support structure (5).

5. Fitting, according to claim 1 or 2, characterized in that said discharge means (4) include a base collecting refluent water in a hydraulic shower equipment.

6. Fitting, according to claim 1 or 2, characterized in that said support structure (5) is ring-like, open or closed.

7. Fitting, according to claim 2, characterized in that it includes a room, made in a vertical wall (3a) and

aimed at receiving the folded support structure (5), when the latter is in rest configuration (A), said room being embedded or outer with respect to the vertical wall (3a).

8. Fitting, according to claim 7, characterized in that said supporting means (2) include at least one vertical slide, fastened inside said room, so as to guide said support structure (5) while it passes from said rest configuration (A) to said working configuration (B), and vice-versa.

9. Fitting, according to any of previous claims, characterized in that said support structure (5) is hinged to said supporting means (2), substantially along a horizontal axis (Y).

10. Fitting, according to any of previous claims, characterized in that it includes a portable container, which contains said fitting, so that the latter can be transported.

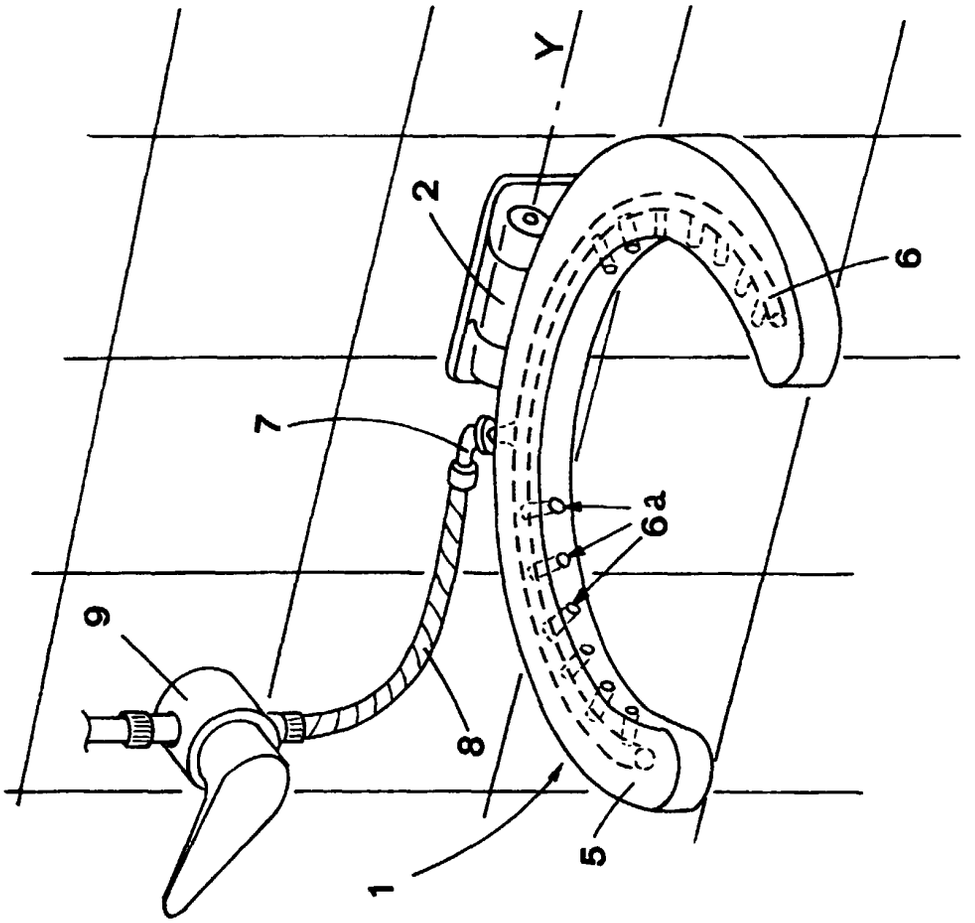

FIG. 2

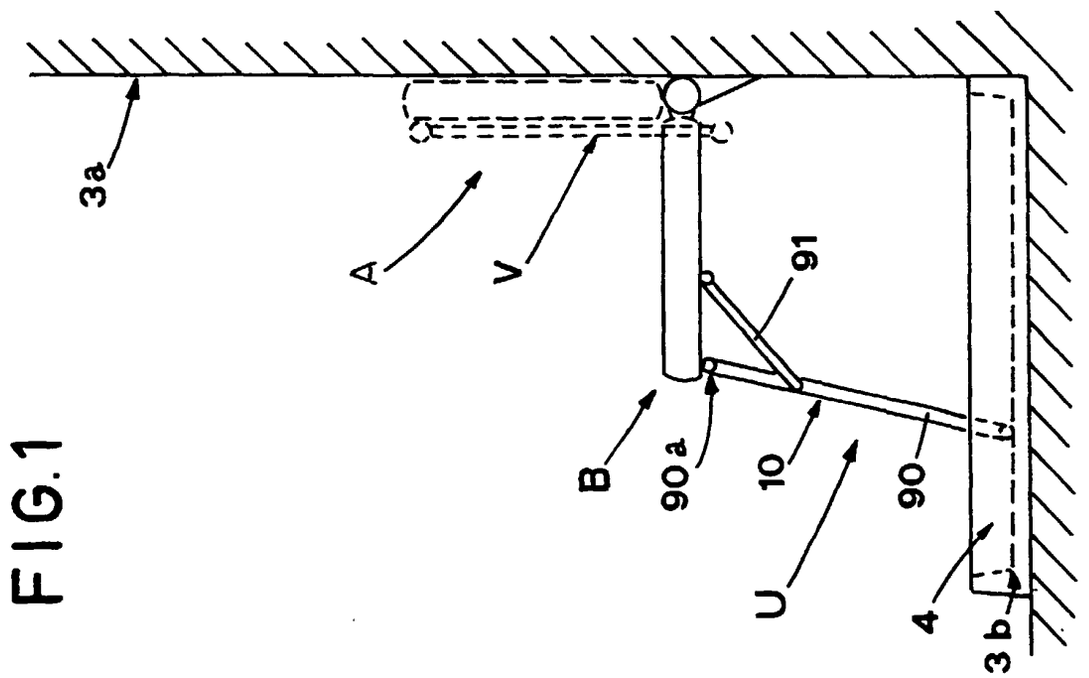

FIG. 1