

## **DESCRIPTION**

### **STRUCTURE FOR A WASHBASIN**

#### **PURPOSE**

The purpose to which this Patent refers consists of a "Structure for a washbasin", with preferential application to its complete composition.

#### **HISTORY**

There are a number of known structures applied to the formation of bathroom furniture for washbasins, each one differing from the other due to the shape of the vessel itself as well as the nature, number and arrangement of the complementary elements, of a mechanical (supports), functional or decorative kind.

In what is explained it is implicit that any structure for a washbasin can be considered composed of the following parts or components in general and wide terms:

The vessel that gives it the name (washbasin)

An upper board (bench) laid horizontally and intended to hold the toilet articles  
Anchoring and mechanical support elements both of the washbasin and the bench.

In some cases, the volume including the lower part of the bench and the floor can be used to complement the wash basin for toilet article storage, such as cupboards or drawers. In these cases, the floor view of the bench reproduces the shape of the upper plan of the washbasin formally and in size.

Within this generic structure there are a number of variations of an esthetic kind that affect the nature and shape of the structural elements, giving rise to numerous arrangements differentiated by their conception and design,

amongst which is the structure, with distinctive peculiarities, protected by this Patent.

### **DESCRIPTION OF THE INVENTION**

The purpose of the invention included in this Patent is the creation of a washbasin structure which, within the necessary generic composition, is noted for the design singularities of the functional components that, in turn, condition the originality of the solutions adopted for the mechanical components.

The original structure which is protected is made up of the following elements:

#### **– Functional**

Washbasin in the shape of a cap with a spherical surface and its cavity face upwards, with two different alternate ways of being used: one with a smaller maximum diameter and greater depth and another with a larger maximum diameter and smaller depth. The first is conventionally named "deep washbasin" and the second "flat washbasin". Both can be mounted with or without benches.

Flat bench laid horizontally, with more width than depth, with its back edge straight to adapt it to the facing of the wall to which it is affixed, its side edges perpendicular to the back and the front edge with one of the following alternative shapes:

Straight, parallel to the back edge

In three sections: the center straight and recessed and the ends in a curved convex and equal.

Furthermore, the two above shapes (straight benches) can have an incomplete circumferential inlet hollow in the central area of its front edge (cut benches).

#### **– Mechanical**

These are intended to support the functional elements and are:

– With any type of bench

Two vertical, cylindrical tubular legs situated on the longitudinal axle of the bench and perpendicular to its plane on the inside face, near its lateral edges and attached to the bench by means of two stubs joined to said inside face. These are inserted in caps provided on the upper end of the legs and are retained therein by prisoner screws applied in perimetral necks of the caps.

Each leg has a horizontal, cylindrical tubular crosspiece with a smaller diameter than the leg, one of the ends of which is inserted into the leg at approximately a third of its height and the other rests on the wall to compensate possible frontal thrusts that the washbasin could suffer during its use.

Two composed profile supports the section of which is formed by an inverted "U" and whose inside wing is prolonged outwards and downwards in a double straight angle, intended to anchor the back straight edge of the bench attached to facing. The supports are attached to the facing by two screws passing through the downwards prolongation of the inside wing of the "U" and are joined to the lower face of the bench by means of two attached caps which are inserted into an orifice of the central section of the "U" and are retained by prisoner screws applied in perimetral necks of the caps.

These supports are also used to attach the support squares to the wall as described later on.

– Only with straight benches

A vertical, cylindrical tubular support on one of the ends of which the washbasin is supported by the center of its outside face (drainage) and whose opposite end rests on the bench.

– Only with cut benches on legs

A central support square of the washbasin underneath the bench where the incomplete circumferential inlet exists. On the project wing the face of which is a curved concave, it has a circular end punch hole for drainage purposes and the vertical face is hollow, attached to the wall by means of a special part described below.

A special, rectangular flat part for attaching the squares to the wall, with its smaller sides doubled to form obtuse dihedrons, in the center of its edge there is a reinforcement re-thickening and near the vertices of the flat face two orifices through which the anchoring screws pass, intercalating the downwards prolongation of the lower wing of the inverted "U" section supports between the wall and the part, with its orifice coinciding with one of the upper orifices of the part so that the same screw can attach both the part and the support to the wall.

A vertical, cylindrical tubular support on one of the ends of which the washbasin is supported by the center of its outside face (drainage) and whose opposite end rests on the horizontal wing of the square.

– Only with a straight or cut bench with curved convex front ends

A three-bodied structure in which the two ends are symmetrically opposite and each one has a drawer on the upper part and a cupboard on the lower part. They are joined by a central body whose upper place is slightly lower than the two end bodies.

The structure is adapted by its back plane to the facing of a wall and its side planes are perpendicular to the back whilst the front is a curved convex in the two end bodies and a recessed vertical plane in the central body as regards said end bodies.

A vertical, cylindrical, tubular support on one of the ends of which the washbasin is supported by the center of its outside face (drainage) and whose opposite end is supported on the upper face of the central body of the structure. It is able to adopt two different heights; short support for a deep washbasin and long support for a flat washbasin.

Two equal cylindrical supports on one of the ends of which the bench rests and whose opposite ends rest on the center of each of the two end bodies of the structure, thus maintaining the bench separated from the upper plane of the structure and parallel to it.

– With any type of bench

A support for the plumbing shaped by: a horizontal and rectangular flat upper face with a central orifice for attaching the mono-control tap; two

trapezium and vertical flat side faces, the longest straight side of which is attached to the wall, the intermediate one is common to the upper face and the smaller to the open base; the front face is curved concave and has two passing orifices for housing two anchoring screws to the wall.

- Only without a bench (open washbasins)
- A support square, similar to the one described in paragraph c) but with the upper face of the projecting wing with more concavity with reinforcement ribs through its lower face. The highest flat section of said upper face has the largest surface on whose concavity a small projection is prolonged.

### **C)-Esthetical**

These are intended to cover, as adornments, those aspects of the functional or mechanical elements that could deteriorate the aesthetics of the structure, such as:

- Only with benches on legs or open washbasins

A cylindrical tubular drainage on the lower end of which a tubular joining part is attached by pressure to the U-bend by means of a peripheral edge.

A concealment cap of the washbasin drainage in the shape of a sphere joined in a removable way to a cap located at the center of the radii that delimit the upper part of the drainage.

## **BRIEF DESCRIPTION OF THE DRAWINGS**

To complete the description of the invention and facilitate the interpretation of its formal, structural and functional characteristics, attached are drawings in which the different aspects of a preferred performance of the structure for a washbasin constituting the purpose of this Patent are represented.

These drawings include the following representations:

Figure 1: Erection variant of a flat washbasin, straight bench and legs: elevated view sectioned by various vertical planes.

Figures 2 to 4: Support of the back area of the benches. Figure 2 is an elevated front view, figure 3 a longitudinal axial section and figure 4 a floor view.

Figure 5: Cap of the lower face of the bench that inserts into the orifice of the central branch of the "U" support profile for joining. Elevated view.

Figures 6 and 7: Support leg for benches. Figure 6 is a longitudinal section through a vertical plane and figure 7 a longitudinal section through the cross piece axle, cut by a horizontal plane and projected on a floor view.

Figure 8: Mounting variant of a deep washbasin, cut bench, legs and square. Elevated view, sectioned by various vertical planes.

Figures 9 to 14: Support square of a deep washbasin, with cut bench and legs. Figure 9 represents a lower floor, figure 10 a longitudinal section, figure 11 an upper floor, figure 12 a posterior elevation, figure 13 a side elevation and figure 14 a perspective view.

Figure 15: Mounting variant of an open shallow washbasin (without bench or legs). Details.

Figures 16 to 21: Support square for a shallow or flat washbasin, mounted openly (without bench or legs). Figure 16 represents a lower floor, figure 17 a longitudinal section, figure 18 an upper floor, figure 19 a posterior elevation, figure 20 a side elevation and figure 21 a perspective view.

Figures 22 to 26: Part that attaches the squares to the wall. Figure 22 represents a front elevation, figure 23 a floor view, figure 24 a side elevation, figure 25 a profile section and figure 26 a perspective view.

Figures 27 to 33: Support for a monobloc tap. Figure 27 represents a lower floor, figure 28 a longitudinal section, figure 29 a front elevation, figure 30 an upper floor, figure 31 a side elevation, figure 32 a front perspective view and figure 33 a back perspective view.

Figures 34 to 37: Cylindrical tubular drainage. Figure 34 represents an upper floor, figure 35 a side elevation, figure 36 an axial longitudinal section and figure 37 a perspective view.

Figure 38: Concealment cap of the washbasin drainage orifice. Diametrical section.

## **DESCRIPTION OF A PREFERRED PERFORMANCE**

In order to clearly show the nature and scope of the advantageous application of the structure for a washbasin that constitutes the purpose of the invention, the following is a description of its composition and mounting, making reference to the figures that, on representing a preferred performance of said object for information purposes, it must be considered in the widest sense and not as a limit of the application and content of the invention.

### **A) Functional components**

The structure includes the following functional components:

A washbasin that adopts the shape of spherical surface cap with its concavity face upwards, in two different forms to be used alternatively: one (1) (Figure 8) of a smaller maximum diameter and greater depth (deep); and the other (2) (Figure 1) of a larger maximum diameter and less depth (flat).

A flat bench laid horizontally, wider than deep, with its back edge straight, the side edges perpendicular to said back edge and the front edge with one of the following four alternative shapes: Straight (3) (Figure 1), parallel to the back edge; or with a straight central section (4) and recessed, and the ends (5) curved convex and equal; or any of the two mentioned above (straight benches) with an incomplete circumferential inlet hollow (6) (Figure 8) in the central part (cut benches).

### **B) Mechanical components**

The following mechanical components are provided to support the functional components:

#### **– With any type of bench**

Two vertical, cylindrical tubular legs (7) (figure 6) located in the longitudinal axis of the bench, perpendicular to its plane through the lower face, near the side edges, attached to this by means of stubs (8) joined to said lower face that are inserted into caps (9) that have the legs (7) on their upper end and

are retained in said caps by prisoner screws (10) applied in perimetral necks (11) of the stubs (8).

Each leg is provided with a cylindrical tubular cross piece (12) (Figure 7) which is horizontal and has a smaller diameter than the leg, one of the ends of which is inserted into said leg whilst the other rests on the wall and props up the structure.

Two composed profile supports (Figures 2, 3 and 4) the section of which is formed by an inverted "U" (13) and whose inside wing is prolonged outwards and downwards in a double straight angle, attached to the wall with screws (14) passing through the downwards prolongation (15) of the inside wing (16) of the "U" and joined to the inferior face of the bench by means of stubs (17) (Figure 5) attached to it, which are inserted in an orifice (18) of the central section of the "U" and are retained by prisoner screws (10) applied in perimetral necks (11) of the stubs (17).

These supports are also used to attach the support squares of flat washbasins with cut benches to the wall (Figure 8).

– Only with straight benches

A vertical, cylindrical tubular support on the upper end of which the washbasin rests through the center of its outside face (drainage) and the opposite end of which rests on the bench.

– Only with cut benches on legs

A central support square (20) (Figures 9 to 14) of the washbasin underneath the bench where the incomplete circumferential inlet exists. The project wing whose upper face is a curved concave has a circular end punch hole for drainage purposes and the vertical face is hollow, attached to the wall by means of a special part.

A special part (22) (Figures 22 to 26) for attaching the rectangular flat washbasin support squares to the wall, with there smaller sides (23) doubled forming obtuse dihedrons, in the center of the edge of which there is a

reinforcement re-thickening (24) and near the vertices of the flat face two orifices (25) through which the anchoring screws pass, intercalating the downwards prolongation of the lower wing of the inverted "U" section supports between the wall and the part (22), with its orifice coinciding with one of the upper orifices of the part (22) so that the same screw can attach both the part (22) and the support to the wall.

A vertical, cylindrical tubular support (19) on one of the ends of which the washbasin rests through the center of its outside face (drainage) and whose opposite end rests on the horizontal end of the wing of the square (20).

– Only with a straight or cut bench, with curved convex front end edges

A three-bodied structure in which the two ends are symmetrically opposite and each one has a drawer on the upper part and a cupboard on the lower part. They are joined by a central body whose upper place is slightly lower than the two end bodies.

The structure is adapted by its back plane to the facing of a wall and its side planes are perpendicular to the back whilst the front is a curved convex in the two end bodies and a recessed vertical plane in the central body as regards said end bodies.

A vertical, cylindrical, tubular support on one of the ends of which the washbasin is supported by the center of its outside face (drainage) and whose opposite end is supported on the upper face of the central body of the structure. It is able to adopt two different heights; short support for a deep washbasin and long support for a flat washbasin.

Two equal cylindrical supports on one of the ends of which the bench rests and whose opposite ends rest on the center of each of the two end bodies of the structure, thus maintaining the bench separated from the upper plane of the structure and parallel to it.

– With any type of bench

- A support square (31) (Figures 16 to 21), similar to the one (20) described in paragraph c), but with the upper face of the projecting wing, with more concavity, with reinforcement ribs through its lower face. The highest flat

section (32) of said upper face has the largest surface on whose concavity a small projection (33) is prolonged.

### **C) Esthetical components**

The structure has the following components to improve its aesthetics:

#### **- Only with benches on legs or open washbasins**

A cylindrical tubular drainage (34) (Figures 34 to 37) on the lower end of which a tubular joining part (35) is attached by pressure to the U-bend by means of a peripheral edge (36).

A concealment cap (37) (Figure 38) of the washbasin drainage in the shape of a sphere joined in a removable way to a cap (38) located at the center of the radii (39) that delimit the upper part of the drainage.



## CLAIMS

1. Structure for a washbasin, with preferential application to its complete composition, characterized by the fact that it includes the following functional components: a washbasin that adopts the shape of a cap with a spherical surface and its cavity face upwards, with two different alternate ways of being used: one (1) 8(Figure 8) with a smaller maximum diameter and greater depth and another with a larger maximum diameter and smaller depth. It also has a flat bench arranged horizontally with more width than depth, with its back edge straight, the side edges perpendicular to the back edge and the front edge with one of the following alternative shaped: straight (3) (Figure 1), parallel to the back edge; or with a straight central section (4) and recessed; and the ends curved convexes and equal, or any of the two mentioned above (straight benches) with an incomplete circumferential hollow inlet (6) (Figure 8) in the central area (cut benches).

2. Structure for a washbasin, according to claim 1, characterized by the fact that in order to support the functional components it has mechanical components in such a way that if the bench is of any type it has two vertical, cylindrical tubular legs (7) (Figure 6) located on the longitudinal axis of the bench, perpendicular to its plane through the lower face, near its side edges and attached to same by means of stubs (8) joined to said lower face which are inserted into caps (9) that have the legs (7) on their upper end and are retained in said caps by prisoner screws (10) applied in perimetral necks (11) of the stubs (8). Each leg is provided with a cylindrical tubular cross piece (12) (Figure 7) which is horizontal and has a smaller diameter than the leg, one of the ends of which is inserted into said leg whilst the other rests on the wall and props up the structure; and two composed profile supports (Figures 2, 3 and 4) the section of which is formed by an inverted "U" (13) and whose inside section of which is formed by an inverted "U" (13) and whose inside wing is prolonged outwards and downwards in a double straight angle, attached to the wall with screws (14) passing through the downwards



prolongation (15) of the inside wing (16) of the "U" and joined to the inferior face of the bench by means of stubs (17) (Figure 5) attached to it, which are inserted in an orifice (18) of the central section of the "U" and are retained by prisoner screws (10) applied in perimetral necks (11) of the stubs (17). These supports are also used to attach the support squares of flat washbasins with cut benches to the wall (Figure 8).

3. Structure for a washbasin, according to claim 1, characterized by the fact that in order to support the functional components it has mechanical components in such a way that if the bench is straight only it includes a vertical cylindrical tubular support (19) on the upper end of which the washbasin rests through the center of its outside face (drainage) and whose opposite end rests on the bench.

4. Structure for a washbasin, according to claim 1, characterized by the fact that in order to support the functional components it has mechanical components in such a way that if the bench is cut only on legs, it includes a central support square (20) (Figures 9 to 14) of the washbasin underneath the bench where the incomplete circumferential inlet exists. The project wing whose upper face is a curved concave has a circular end punch hole for drainage purposes and the vertical face is hollow, attached to the wall by means of a special part. This special part (22) (Figures 22 to 26) is for attaching the rectangular flat washbasin support squares to the wall, with there smaller sides (23) doubled forming obtuse dihedrons, in the center of the edge of which there is a reinforcement re-thickening (24) and near the vertices of the flat face two orifices (25) through which the anchoring screws pass, intercalating the downwards prolongation (15) of the lower wing of the inverted "U" section supports between the wall and the part (22), with its orifice coinciding with one of the upper orifices of the part (22) so that the same screw can attach both the part (22) and the support to the wall. A vertical, cylindrical tubular support (19) on one of the ends of which the washbasin rests through the center of its outside face (drainage) and whose opposite end rests on the horizontal end of the wing of the square (20).



5. Structure for a washbasin, according to claim 1, characterized by the fact that in order to support the functional components it has mechanical components in such a way that if the bench is cut or straight only with curved convex end front edges, it includes a three-bodies structure in which the two ends are symmetrically opposite and each one has a drawer on the upper part and a cupboard on the lower part. They are joined by a central body whose upper place is slightly lower than the two end bodies. The structure is adapted by its back plane to the facing of a wall and its side planes are perpendicular to the back whilst the front is a curved convex in the two end bodies and a recessed vertical plane in the central body as regards said end bodies. A vertical, cylindrical, tubular support on one of the ends of which the washbasin is supported by the center of its outside face (drainage) and whose opposite end is supported on the upper face of the central body of the structure. It is able to adopt two different heights; short support for a deep washbasin and long support for a flat washbasin. Two equal cylindrical supports on one of the ends of which the bench rests and whose opposite ends rest on the center of each of the two end bodies of the structure, thus maintaining the bench separated from the upper plane of the structure and parallel to it.

6. Structure for a washbasin, according to claim 1, characterized by the fact that in order to support the functional components it has mechanical components in such a way that if the bench is of any type, it includes a support for the plumbing (26) (Figures 27 to 33) shaped by: a flat, rectangular and horizontal upper face (27) with a central orifice (28) for attaching the mono-control tap; two trapezium and vertical flat side faces (29), the longest straight side of which is attached to the wall, the intermediate one is common to the upper face (27) and the smaller to the open base; the front face is curved concave and has two passing orifices (30) for housing two anchoring screws to the wall.

7. Structure for a washbasin, according to claim 1, characterized by the fact that in order to support the functional components it has mechanical components in such a way that if the washbasin has no benches, it includes a



support square (31) (Figures 16 to 21), similar to the one (20) described in paragraph c), but with the upper face of the projecting wing with more concavity, with reinforcement ribs through its lower face. The highest flat section (32) of said upper face has the largest surface on whose concavity a small projection (33) is prolonged.

8. Structure for a washbasin, according to the above claims, characterized by the fact that in order to improve the aesthetics of the structure it has elements so that if the benches are on legs or the washbasin free of benches it includes a cylindrical tubular drainage (34) (Figures 34 to 37) on the lower of which a tubular part (36) joined the U-bend is attached by pressure by means of a peripheral edge (35); and a concealment cap (37) (Figure 38) of the washbasin drainage orifice in the shape of a sphere joined in a removable way to a cap (38) located at the center of the radii (39) that delimit the upper part of the drainage.