

IMPROVED MOUNTING SYSTEM FOR WATER SUPPLY FITTINGS

The present invention relates to an improved system for mounting water supply fittings and in particular to a system whereby the area immediately adjacent the external intersection of the water supply fitting and mounting platform protrudes from the main plane of the mounting platform. The system has particularly advantageous application to the mounting of tap fittings on vanity tops.

The term vanity where used throughout this specification is intended to encompass simple basins which have now largely gone out of fashion as well as the more common vanity type basins currently in vogue.

For many years vanity units have provided horizontal surfaces behind the basin for the purpose of supporting taps in such locality. Often tap and spout holes are pre-drilled so that water pipes may be brought to the underside of such holes whereas the taps and spouts simply sit upon the vanity directly above such holes. A nut is usually provided on the underside of the vanity adapted to spin onto the underside of the tap unit in order that the tap may be securely affixed to the vanity and a seal effected between the tap and piping therebeneath. The tap often contains a decorative bell sitting over the shaft and valve of the tap above vanity level; a brass ring often sits between the bottom of the bell and the top vanity surface. This system provides an aesthetically pleasing tap mount on the vanity although it has typically been very difficult to clean that area of the vanity top

immediately adjacent the tap fitting and unsightly mould and grime often accumulates in this area.

It is accordingly an object of the present invention to provide a mounting system for water supply fittings to overcome one or more of the abovementioned defects with existing mounting systems for water supply fittings or at least to provide the market with an alternative to existing products.

According to the present invention there is provided a mounting platform having provision for the mounting of one or more water supply fittings; the area of the mounting platform immediately adjacent the external intersection of the water supply fitting/mounting platform intersection protruding from the main plane of the mounting platform and being profiled such that water running over the external water supply fitting/mounting platform protrusion intersection will tend to be evacuated from such intersection by gravity.

Two embodiments of the present invention will now be described with reference to the accompanying drawings in which:

Figure I is a sectional view of part of a conventional vanity top water supply fitting mounting platform;

Figure II is a sectional view of part of a mounting platform in accordance with the present invention; and

Figure III is a sectional side elevation of an alternate embodiment of the present invention.

Figure I depicts a conventional vanity top and tap in exploded section the vanity having a bowl section 1 and a flat topped section 2 surrounding aperture 3 adapted to receive tap 4. Tap 4 is shown only in part. It will be observed that tap 4 comprises a shaft portion 5 about which there is a decorative bell 6 designed to hide the functional valve portion (not shown) of the tap. Beneath bell 6 there is a ring 7 often of brass adapted to abut the top vanity surface 2.

Unfortunately water dripping down the shaft 5 and bell 6 of the tap 4 drops down onto the vanity top 2 adjacent ring 7 from which position it can only escape very slowly through evaporation. It is at the intersection of ring 7 and vanity 2 that much grime builds up which is difficult to remove having regard to the near right-angle profile of the ring/vanity top interface. The horizontal nature of the upper surface of the vanity top precludes gravity assisting the evacuation of water. This near right-angle interface is avoided according to the present invention by the provision of bell-shaped protrusion 8 integral with vanity top 2.

It will be observed that the upper surface 9 of the bell is adapted to conform to the dimensions of a complementary ring 7 and hence water dripping down the bell 6 of the tap of figure II will continue without entrapment over brass ring 7 and down the bell-shaped protrusion 8 to the main upper platform of the vanity top 2. The bell-like configuration of raised platform 8 results in a smooth transition from the side of protrusion 8 to the horizontal surfaces of the vanity top at radiused portions 10. There is therefore little scope at radiused portions 10 for entrapment of water and the drying of this area is a simple procedure due to the accessibility of the location.

It will be appreciated that the tap 11 of figure II is provided with a truncated bell 6 as compared with the standard bell depicted in figure I having regard to the fact that a large bell is not required to disguise the valve (not shown) of the tap as much of the valve of the tap can be accommodated within aperture 3 due to the greater depth of vanity top through which aperture 3 passes as compared with a standard vanity. This greater depth is occasioned by the height of bell 8.

The embodiment of figure III depicts a vanity top of thermoplastic material rising up into a bell-shaped protrusion 13 to facilitate fixing of a tap 14 at this position. The tap 14 comprises a main body portion 15 to which a water supply pipe 16 is affixed and in which valve 17 is captivated in the usual manner. The main body of the tap 15 is fixed mostly beneath bell-shaped protrusion 13 by affixation to mounting plate 18 affixed to the underside 12 of the vanity. Affixation to

mounting plate 18 is by way of two nuts 19 and 20 one above and one below mounting plate 18. It will be noted that the stuffing box 21 portion of the tap is fixed into the main tap body 15 by the usual male/female thread combination 22.

It is necessary to remove the stuffing box 21 in order to gain access to valve 17 for the purposes of renewing the valve when its seat deteriorates and this removal may occur through the opening 22 in the top of bell-shaped protrusion 13. This opening is normally blocked by decorative cap 23 lying thereover and threadably engaged at 24 to the top of the stuffing box 21. It may be observed that much of the tap is contained within bell-shaped protrusion 13 such that any water dripping down from tap handle 25 or tap spindle 26 will simply fall on decorative cap 23 and then assisted by gravity onto the sides of bell-shaped protrusion 13 before coming to rest on the horizontal portion of the vanity top. The intersection 27 between the horizontal portion of the vanity top and the bell-shaped protrusion 13 is radiused so as not to present an inaccessible crevice for cleaning and furthermore it will be observed that the angle between the upper surface of the vanity top and the bell-shaped protrusion 13 is in excess of ninety degrees thereby additionally enhancing accessibility for the purposes of cleaning at this juncture.

It should be appreciated that the advantages of the present invention may be obtained provided protrusion 8 is of sufficient height above the main vanity top 2 so as to provide at least a slightly radiused portion 10 rather than a completely planer to planer abutment of vanity top with the planer bottom of ring 7.

It should be appreciated that alternate embodiments of the present invention may be devised apart from those above described without departing from the scope and intendment thereof. For example the present invention may be utilised not only in relation to basins but to any situation where taps normally rise out of thermoplastic mounting platforms such as shower recesses, baths or splashbacks. The entrapment of dirt between a tap and a mounting surface is still a problem, even when the mounting surface is vertical, due to surface tension and adhesion quite apart from the effect of gravity. It is furthermore not necessary that the portion of the thermoplastic tap mounting platform which is raised so as to partially surround the tap body be circular in cross-section or even bell-shaped as the advantages of the present invention would for example still be present if the integral bell were configured as a pyramid.

The claims defining the invention are as follows:

1. A mounting platform having provision for the mounting of one or more water supply fittings; the area of the mounting platform immediately adjacent the external intersection of the water supply fitting/mounting platform intersection protruding from the main plane of the mounting platform and being profiled such that water running over the external water supply fitting/mounting platform protrusion intersection will tend to be evacuated from such intersection by gravity.
2. A mounting platform in accordance with claim 1 hereof wherein the intersection of the protruding part of the mounting platform and the immediately surrounding area of the mounting platform forms an obtuse angle with the intersection exhibiting a radius of at least four millimetres.
3. A mounting platform in accordance with any one of the preceding claims wherein the mounting platform is a unitary shower recess having substantially planer vertical sides surrounding protrusions adapted to receive taps.
4. A mounting platform in accordance with any one of the preceding claims wherein the mounting platform is a splashback.



5. A mounting platform in accordance with any one of the preceding claims wherein the mounting platform is a basin or vanity top and the protrusion is integral therewith and rises vertically therefrom.
6. A mounting platform in accordance with claim 5 hereof wherein the protrusion is of substantially bell-shaped configuration formed of thermoplastic material; the interior of the bell defining a void adapted to receive at least the stuffing box of a tap body inserted from above.
7. A mounting platform in accordance with claim 6 hereof wherein the bell-shaped protrusion is provided with a decorative cap adapted to surround the spindle of a tap and to sit down over an open upper extremity of the bell through which the stuffing box of the tap may be removed or inserted in such a manner that the decorative cap prevents water directed at the top of the bell-shaped protrusion gaining access to the interior of the bell.



8. A mounting platform in accordance with any one claims 5 - 7 hereof wherein the underside of the mounting platform adjacent the water supply fitting receiving protrusion is provided with a fixing plate fixed to the underside of the mounting platform; the fixing plate being provided with an aperture through which a water supply fitting may pass and to which a water supply fitting may be securely fixed.



1/2

FIG. II

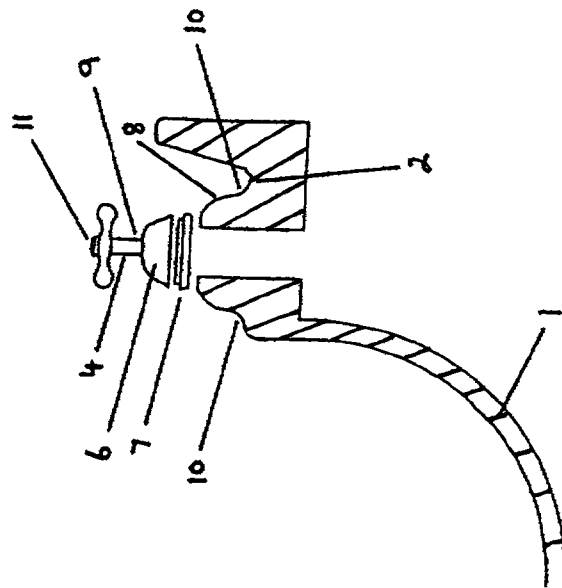
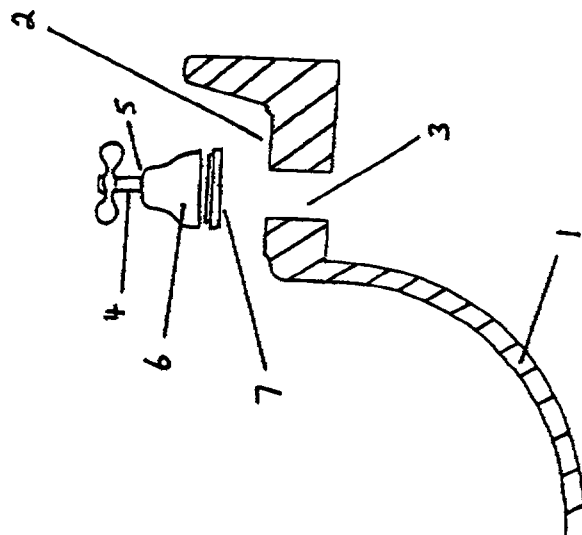
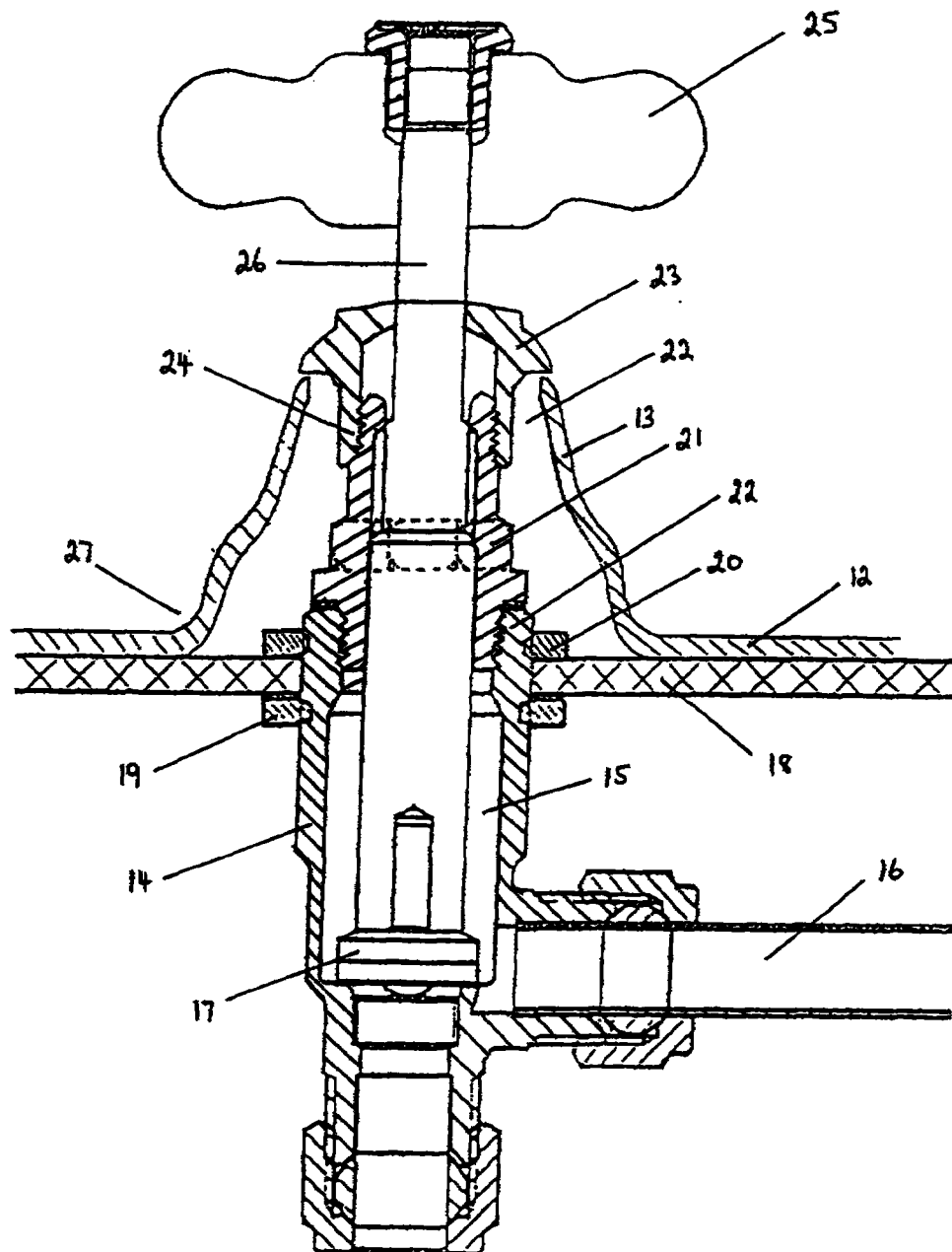


FIG. I



2/2

FIG. III



PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : E03C 1/04, A47K 3/22, A47J 47/20	A1	(11) International Publication Number: WO 97/34056 (43) International Publication Date: 18 September 1997 (18.09.97)
---	----	--

(21) International Application Number: PCT/AU97/00158

(22) International Filing Date: 13 March 1997 (13.03.97)

(30) Priority Data:

PN 8646	13 March 1996 (13.03.96)	AU
PO 1194	24 July 1996 (24.07.96)	AU

(71) Applicant (for all designated States except US): FLAIR INTERNATIONAL PRODUCTS PTY. LTD. [AU/AU]; Unit 40/132 Hassall Street, Wetherill Park, NSW 2164 (AU).

(72) Inventor; and

(75) Inventor/Applicant (for US only): MENZIES, Brian [AU/AU]; Unit 40/132 Hassall Street, Wetherill Park, NSW 2164 (AU).

(74) Agent: BLENKINSHIP, Julian; Barker Blenkinship & Associates, P.O. Box 34, Chatswood, NSW 2067 (AU).

(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BI, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).

Published

With international search report.

(54) Title: IMPROVED MOUNTING SYSTEM FOR WATER SUPPLY FITTINGS

(57) Abstract

A mounting platform (8) having provision for the mounting of one or more water supply fittings (11); the area of the mounting platform (8) immediately adjacent the external intersection of the water supply fitting (11)/mounting platform (8) intersection protruding from the main plane of the mounting platform (8) and being profiled such that water running over the external water supply fitting (11)/mounting platform (8) protrusion intersection will tend to be evacuated from such intersection by gravity.

