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Morris

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[54] **MODULAR PLUMBING FIXTURE COMBINATION**

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[52] **U.S. Cl.** **4/146**

[51] **Int. Cl.** **A47k 3/22**

[58] **Field of Search** 4/145, 146

[56] **References Cited**

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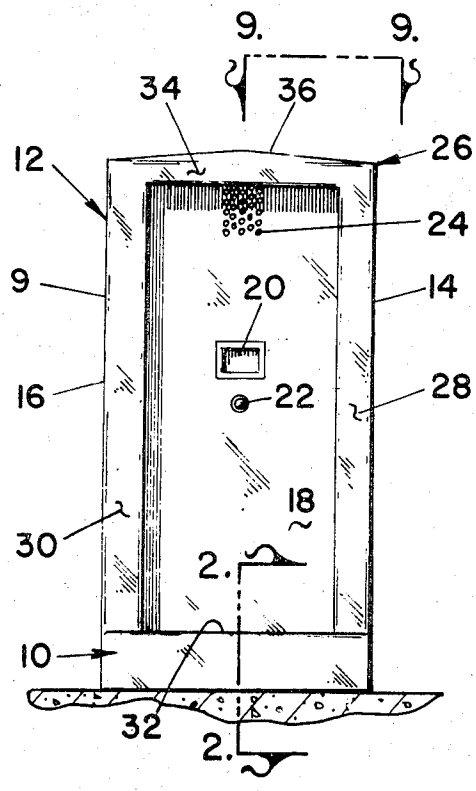
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Primary Examiner—John W. Huckert
Assistant Examiner—Jon W. Henry
Attorney, Agent, or Firm—Ben E. Lofstedt

[57] **ABSTRACT**

A modular, combination plumbing fixture having a unitary shower enclosure with a single entrance for the user(s) thereof, a shower head mounted on the hollow frame of the entrance, with means for detachably interconnecting therewith in a self-aligning fashion, a splash receptor for the user of the plumbing fixture to stand on while drying outside of the shower enclosure.

17 Claims, 9 Drawing Figures



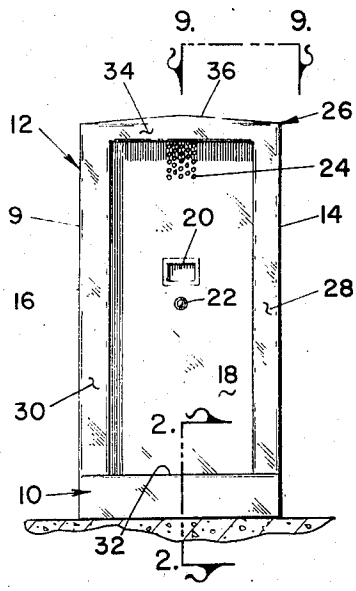


Fig. 1

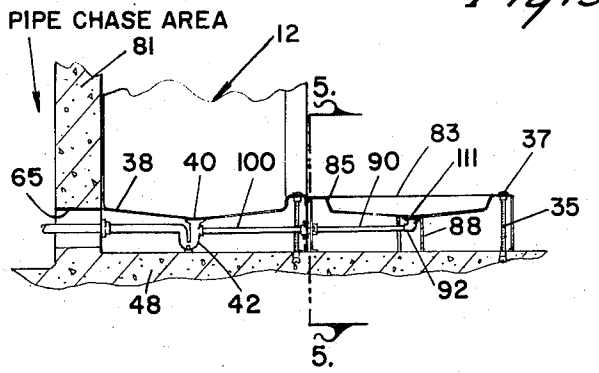


Fig. 2

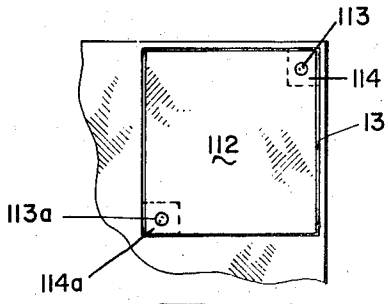


Fig. 9

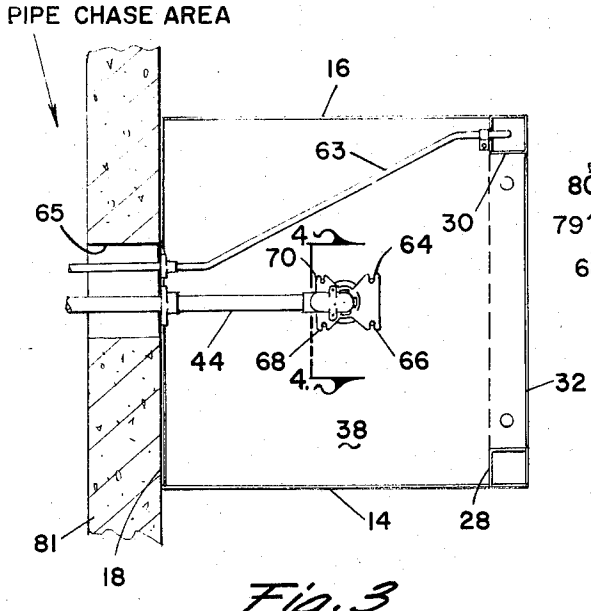


Fig. 3

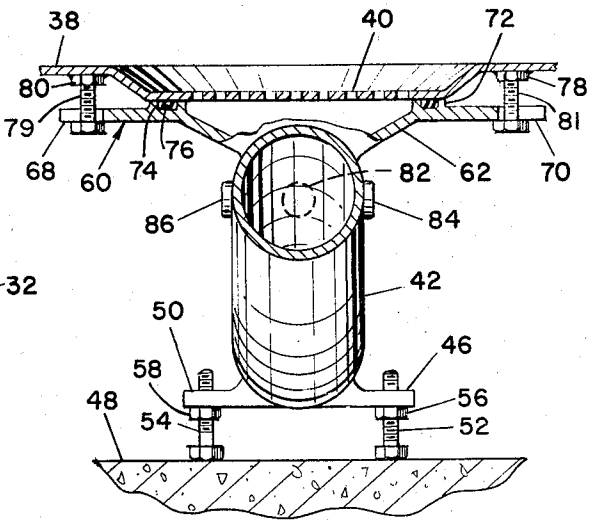


Fig. 4

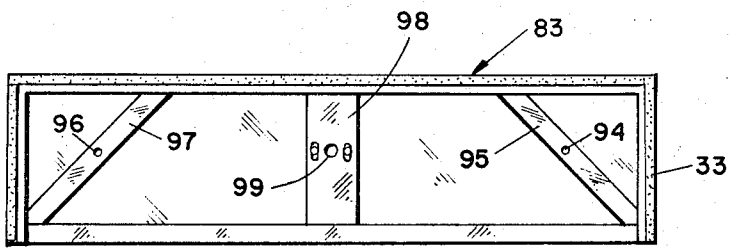


Fig. 5

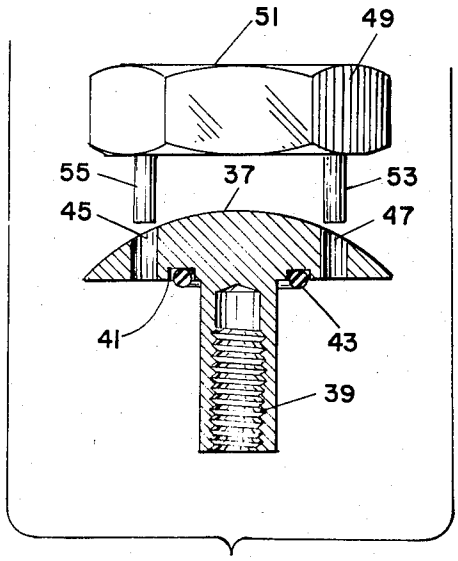


Fig. 7

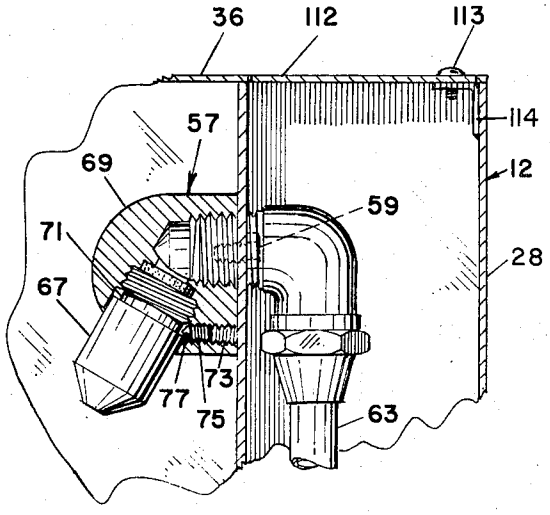


Fig. 8

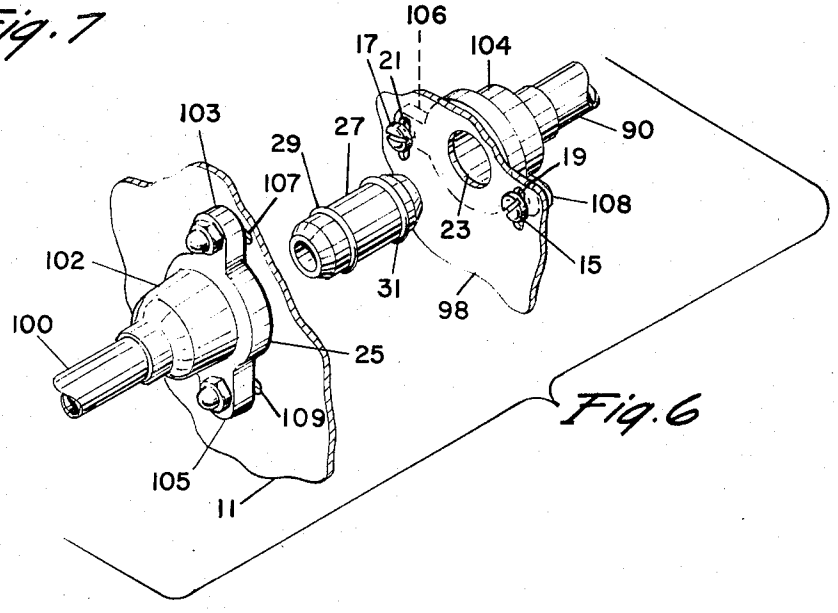


Fig. 6

MODULAR PLUMBING FIXTURE COMBINATION

BACKGROUND OF THE INVENTION

Combination fixtures having unitary shower enclosures and splash receptors of varied construction and adaptability to various uses have been available for some time. Such combinations have been found to be particularly useful in public institutions, such as prisons, jails and lockups, and like facilities where there exists both a need for rugged, portable showering facilities.

Such shower enclosures are highly desirable for containing water vapor and spray so as to minimize water vapor contact with the iron, steel and other corrodable materials in widespread use in such facilities which are used for both structural and security purposes. The advantages of the portability of such shower enclosures and the like are well known and need not be discussed in detail here.

Where multiple showering facilities are desired, shower enclosures must be capable of being stacked or nested side by side in a space-saving manner. The cost of floor area in these public institutions is very great and all floor area must be conserved and utilized as much as possible. The plumbing fixture combinations found in the prior art which embodied shower enclosures having showerheads disposed on the sidewalls of the enclosures could not be nested in a direct, side by side, spacesaving relationship, because the fluid supplying piping connected to the showerhead was placed exteriorly of the sidewall(s) and, therefore, prevented the enclosures from being nested sidewall-to-sidewall. Instead, the sidewalls of such adjacently located enclosures were separated by the space occupied by the fluid supply piping. Not only did this arrangement prevent the enclosures from being nested in a space-saving fashion, but in order to prevent the users of such plumbing fixture combinations from tampering by the users thereof, the open spaced areas between the enclosures required that they be covered and rendered inaccessible by means of access panels secured to these enclosures by means of special, costly security fasteners which can only be installed or removed by means of special tools restricted to authorized persons.

In the event that the shower enclosures were not required to be nested together and the showerhead was desired to be mounted on the sidewall of the enclosure in order to maintain the fluid supply piping in the necessary tamperproof condition, the generally rectangularly shaped enclosures required installation in a corner area. When installed in a corner, the rear wall of the enclosure typically was used as a mounting surface for the control for the fluid supply to the shower head. The showerhead mounted on the enclosure's sidewall which is placed in intimate abuttment with the wall behind which the plumbing is typically located is used to conceal the fluid supply piping from the user's side of the combination plumbing fixture.

If, on the other hand, only the rear wall of the enclosure is placed against the building's wall the fluid supply piping would be exposed to the user's side of the shower. It would, in this configuration, be exposed to tampering by the persons on the exposed side of the plumbing fixture. To conceal this piping would require the use of additional panels which must also be removable in the event that the piping required replacement or servicing.

Some combination plumbing fixtures as found in the prior art ran the exposed piping vertically along the sidewall and over the roof portion thereof. This arrangement required that a second removable access panel be used to conceal the piping run over the roof portion of the enclosure. This configuration entailed even greater expense and required additional concealing panels to conceal the piping.

In addition, the entirety of such plumbing fixture combinations must be constructed so as to be tamperproof. No exposed fasteners or fastener covering devices should be removable from the side of the plumbing fixture which is accessible to the users thereof. If such are accessible, they must be removable only by means of special tools which are not in general use nor can be easily fabricated by the inmates of such institutions. All plumbing piping should be concealed and serviceable from the pipe chase area located outside of the users facilities or cell area and therefore not accessible to the prisoner or cell user. Not only should the piping be inaccessible or hidden from the user, but it should be contained within the combination plumbing fixture so that in the event that a water leak develops the water will be contained within the fixture and directed into the pipe chase rather than into the cell or room area.

The spray of the shower head must be adjustable from within the shower enclosure yet must be vandalproof, and constructed in such a manner so that it cannot be removed or disassembled from the users side of the enclosure. A highly desirable feature of such a fixture would be to locate the shower head within the enclosure so that it cannot direct the water spray towards the entrance to the shower enclosure. Frequently, in prior art combinations, the shower heads were mounted so as to direct water towards the entrance of the shower enclosure. This resulted in a significant amount of water being deposited outside of the shower enclosure. Adding a door to the shower enclosure in order to prevent this from occuring is not acceptable in penal institutions because the inmate is not visible to the guard with the shower door closed. Should a significant amount of water be deposited outside of the enclosure, it forms into pools or "puddles" of water on the floor thereby creating a safety hazard as well as oftentimes producing both cosmetic and structural damage to the facilities.

In the prior art, shower enclosure walls were used as mounting surfaces for shower heads. Frequently, the wall must be reinforced either directly by increasing the wall strength or indirectly, by abutting the wall of the enclosure against a wall of the cell area, to carry the weight of a mature human being in the event that he places his full weight thereon. In penal facilities, where portable shower enclosures, such as hereinbefore and hereinafterwards are described, find widespread use and application, it is not unusual for an inmate to place his full weight on the shower head by hanging thereon. It should be remembered that penal institutions have unique problems. These are the only institutions whose occupants spend most of their time figuring out how to destroy, damage or render inoperative, plumbing facilities, fixtures, accessories and the like.

Further, the distance between the floor and the shower receptor should be minimized both to reduce

the weight and cost of the enclosure and to lower the center of gravity of the entire structure in order to increase its stability.

Generally, the anchoring bolts or threaded rods used in the prior art are formed of strong, but inexpensive, metals, such as non-stainless steel. Stainless steel, although more desirable due to its non-rusting qualities, is not generally used due to its high cost. Consequently, such removable anchoring devices must be "capped" with water-tight security caps which are incapable of being removed without special tools.

Drain pipe odors should be isolated from the users side of the shower enclosure by means of a water plug seal, such as effected by a "P" trap. In order to minimize the amount of drain pipe surface likely to harbor odorcausing bacteria which is exposed to the cell area, the "P" trap should be located immediately beneath the shower drain opening, and not in the pipe chase.

The size of the shower enclosure is often reduced to minimize both the weight and the cost of the enclosure. Consequently, the enclosure volume is generally found to be too small to conveniently permit the user to towel dry within the enclosure. In addition, following a shower, a significant amount of water vapor is contained within the enclosure; in fact, this is one of the primary features of the shower enclosure; that is, to contain this water vapor. Consequently, to reduce the amount of time necessary to towel dry a splash receptor is placed on the floor adjacent to the entrance to the enclosure and is detachably connected thereto. A plumbing drain receptacle and pipe is provided to allow shower water which is drained from the user into the splash receptor to flow into the water drain system of the shower enclosure. Splash receptors found in the prior art were difficult to align with the drain connection to the lower portion of the shower because the drain connection utilized a threaded, rigid fluid connection thereto. Further, the drain outlet of the prior art splash receptors were plumbed so that the fluid drained onto the shower receptor. This not only is unsightly and unsanitary but also requires that the drain system of the splash receptor be disposed above the inlet of the drain in the shower receptor. This, of course, requires that the floor of the splash receptor be disposed at a higher elevation than the floor of the shower receptor, and sloped towards the shower receptor. Therefore, the user must step up to the splash receptor floor when moving from the shower receptor to the splash receptor and to step down when moving from the splash receptor to the shower receptor. On wet surfaces it is generally conceded that it is desirable to maintain the floors at the same height and with a minimumly sloped surface, or better yet, a non-unidirectional sloped surface, in order to reduce the chance of slipping and falling causing the user to be injured.

Therefore, it may be seen that the combinations found in the prior art offered little in the way of integration of these long-needed security features and/or elements into a combination plumbing fixture, and, in fact, in most cases it has heretofore not been feasible or practical, in view of the diversity of elements and/or features, to be combined.

SUMMARY OF THE INVENTION

The present invention represents a combination plumbing fixture comprising a tamper-proof shower enclosure with the provision of being detachably connected to a splash receptor. Basically, it is a combination plumbing fixture having a unitary shower enclosure with a single entrance thereinto for users thereof and a showerhead mounted on the hollow frame of the shower entrance. Provisions are made so as to make the shower enclosure, as desired, mateable with a removable, self-aligning interconnecting splash receptor for the user to stand on while drying outside of the shower enclosure. The shower head is located on the inside of the hollow frame entrance to the shower enclosure so that the shower spray is directed into the enclosure rather than towards the entrance. All plumbing, both drain and water supply piping, is hidden within the enclosure without the use of large, removable access panels which must be opened to the users side of the enclosure for servicing of the piping found therebehind. Both the enclosure and receptor are anchorable to the floor by means of threaded anchoring devices concealed therein by waterproof security caps which cannot be removed from the users side of the enclosure or receptor without the use of specially designed security tools. All plumbing pipes are run underneath the shower receptor into a single aperture in the pipe chase wall. A combination "P" trap and vertically adjustable support is disposed beneath the shower receptor for support thereof. When incorporated, the splash receptor drains directly into the "P" trap of the shower.

Shower controls, shower enclosure vent, a bar soap dish or liquid soap supply are mounted through the enclosure walls abutting the walls of the pipe chase.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a front elevational view of the shower enclosure with the detachably removable splash receptacle connected thereto.

FIG. 2 is a side elevational view of a section of FIG. 1 taken along plane 2—2 showing how the shower and splash receptor are detachably interconnected.

FIG. 3 is a bottom view of the shower enclosure.

FIG. 4 is an elevational view along plane 4—4 of FIG. 3 of the outlet end of the combination "P" trap and vertically adjustable receptor support, with a fragmentary section of the upper portion thereof.

FIG. 5 is an end elevational view of the detachable splash receptor taken along plane 5—5 of FIG. 4 showing the alignment and locating pins and the drain outlet thereof.

FIG. 6 is an isometric assembly view of the self-centering drain connection means for detachably connecting the drain outlet of the splash receptor to the drain of the shower enclosure.

FIG. 7 is a vertical section of security and fluid-sealing cap for the recessed threaded rods which anchor the bottoms of the shower enclosure and the splash receptor to the floor and of the special tool for removing the cap.

FIG. 8 is an enlarged fragmentary section of the hollow frame of the shower entrance with the shower head mounted thereon with the water supply piping connected thereto.

FIG. 9 is a fragmentary plan view of the removable cap shown in the upper portion of FIG. 8, and more particularly in FIG. 1, along plane 9—9.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to the drawings, and particularly to FIG. 1, an improved plumbing fixture combination comprising a unitary, portable shower enclosure 12 and a detachably connectable splash receptor 83, according to this invention, is generally denoted by the reference numeral 10. While the shower enclosure 12, and in fact the entire combination plumbing fixture 10, can be readily constructed of any durable material depending on the application and use intended, it has been found that when the present invention is intended for use in a penal or public institution where a trouble-free, rugged combination plumbing fixture is required, that preferably such a fixture as the present invention be fabricated primarily of the stainless steel. The many fine characteristics of stainless steel and its inherent aesthetic qualities when textured or polished, lend themselves to its use in this regard. But the primary reason for its use in the fabrication of such fixtures is its non-corroding and/or non-rusting qualities.

Referring again to FIG. 1, and now also to FIG. 3, the unitary shower enclosure, which is generally identified at 12 and shown in this particular embodiment, has a pair of vertical walls 14, 16 oppositely disposed and which are rigidly disposed in a substantially parallel spaced relationship along the rear vertical edges thereof by yet another vertical wall 18 which forms the rear of the shower enclosure 12 and is disposed in a substantially perpendicular relationship to walls 14, 16.

The rear wall 18 is abutted against the pipe chase wall 81 and is secured thereto by means of threaded rods or bolts (not shown) which are passed through the wall 81 and threadably anchored to nuts (not shown) welded to the rear of wall 18. Generally, the nuts may be welded to any portion of the rear of the wall 18. However, it has been found that these are preferably four in number and are welded along a rectangular pattern near the four corners of the aperture in the wall through which the soap dish 20 is disposed and welded.

In placing the recessed soap dish 20 adjacent to the fluid control valve 22, only a single hole in the pipe chase wall 81 is required to accomodate both the soap dish 20 and the control valve 22. This, of course, reduces the cost of installation of the combination plumbing fixture 10.

Shown mounted on the rear wall 18 is a bar soap dish 20, a pushbutton control valve 22 for controlling the water supply to the shower enclosure 12, and vented area 24. The vented area 24 serves to vent the water vapors which accumulate during showering into the pipe chase area behind the mounting wall 81. In so doing, the water vapors which promote oxidation and/or corrosion of steel bars and security fixtures typically found in penal facilities are directed into a concealed area; namely the pipe chase area where the steel pipes are coated to prevent rusting or where such deterioration can be more easily controlled and contained.

The front of the shower enclosure is rimmed by a hollow frame, generally designated at 26, formed by a pair of pilasters 28, 30, a horizontal cross-member forming a brace 34 joining the top end portions of the pair of pilasters 28, 30. The tops of the pilasters 28, 30 are capped by detachable stainless steel plates similar to the cap 112 shown in FIG. 9 capping the top of pilaster 30. The cap 112 is removable only by authorized persons using a special security tool as hereinafterwards described. Having a removable cap such as 112 is necessary in order to install the showerhead and to permit maintenance and repair of the showerhead 57, shown in FIG. 8, and its associated piping.

The top of the shower enclosure 12 is capped by a roof member 36 which is welded or brazed to the inner periphery of the opening formed by the walls 14, 16, 18 and the cross brace member 34.

As shown in FIGS. 2 and 4, the bottom section of the shower enclosure 12 is enclosed by means of a water receptor 38, the surface of which slopes downwardly towards the central portion thereof. Substantially in the center of the receptor 38, a series of small aperatures are formed to serve as a strainer 40 to prevent the passage of solid objects into the P-trap 42 which might serve to block the passage of fluid therethrough. It should be noted that the small aperatures are formed by perforating the receptor 38, rather than by the use of the usual separate strainer which is detachably connected to the receptor 38. By forming the strainer 40 as an integral, non-removable part of the receptor 38, the strainer 40 is rendered tamper-proof; an important requirement in the use of the present invention in penal facilities.

On the underside of the receptor 38 and disposed directly beneath the strainer 40 portion thereof is a combination "P" trap and support member 42 for the receptor 38. The function of the "P" trap is well known in the art and operates to prevent odors from passing back through the drain piping 44 and into the shower enclosure 12 and thereafter into the area wherein the shower enclosure 12 is disposed.

Another important function of the "P" trap and support member 42 is to serve as a central support for the shower receptor 38. Generally, the receptor 38 is also formed from stainless steel sheet metal similar to the rest of the shower enclosure 12. The weight of a human being on the shower receptor 38 requires that the receptor be supported in order to prevent unwanted deformation of the preshaped self-draining receptor 38 surface. Such deformation could produce pooling of the water delivered to the shower enclosure and reduce or eliminate the self-draining feature of the shower receptor 38. Further, such support is virtually a necessity when such a shower enclosure is used in a penal institution as the inmates or occupants thereof are likely to jump up and down on the shower receptor 38 to attempt to damage it or to "test" its ability to withstand such abuse.

In addition to its new and useful purpose, the "P" trap 42 serves as a vertically adjustable device for varying the distance between the floor 48 and the underside of the receptor 38 in order to provide proper support therefor. This is accomplished by means of at least two horizontal fingers 46, 50 having at least one perforation in each of the fingers for receiving the threaded shanks of bolts 52, 54 which have nuts 56, 58 threaded thereon. By abutting the heads of the bolts 52, 54 to the floor 48 and adjusting the nuts 56, 58 upwardly until the fingers 46, 50 are contacted thereby, the fingers will then be supported thereon and, in turn, supported by the bolts whose heads are resting on the floor.

The upper portion of the "P" trap 42 designed to receive the water from the strainer 40 of the receptor 38

is generally designated at 60 and comprises a funnel-like receiving section 62, apertured finger members 64, 66, 68, 70, and a flange 72 with an annular groove 74 therein for receiving an annular fluid-sealing member 76, such as an O-ring.

Four nuts (only two of which are shown 78, 80) are welded to the underside of the shower receptor 38, the centers of which are substantially aligned with the centers of the aperture of fingers 64, 66, 68, 70. Bolts 79, 81 (the two other bolts are not shown) are received into the aperture of fingers 68, 70, respectively, and threadably engaged into the nuts 80, 78 welded to the receptor 38. As the bolts are tightened, the fingers of the "P" trap and support member 42 are urged towards the bottom of the shower receptor 38. In so doing, the flange 72 with the annular fluid sealing member 76 disposed within the annular groove 74 is, in turn, urged into intimate abutment about the perforations in the receptor 38 which form the strainer portion 40 therein, and effects a fluid seal therearound. Such a fluid seal is desired in order that during blockage of the drain system or in the event of fluid backing up in the drain, such fluid is not permitted to seep therebetween and out into the floor 48 area beneath the shower receptor 38. Since this floor area cannot be conveniently cleaned or sanitized without removing the shower enclosure from its wall attachment (as hereinafter described) and/or attachment to the plumbing without this fluid seal, if such spillage were to occur, it is highly likely that the end result would be the placement of odor-causing fluid mixture in an inaccessible area; a highly undesirable condition, and, in most cases, totally unacceptable. Three threaded bosses 82, 84, 86 are provided on the sidewalls of the "P" trap and generally disposed above the water line of the water plug-seal established on the "P" trap 42 to permit the connection of another source of draining effluent to the "P" trap 42. Generally, only one of the bosses will be used at any one time, and the others will be plugged, in fluid-sealing fashion by means of bolts threadably mated thereinto. The three bosses 82, 84, 86 are provided to conveniently permit the additional draining source to be routed directly into the "P" trap 42 from any quadrant, except, of course, the quadrant wherein the outlet of the "P" trap 42 resides.

Referring again to FIG. 2, the splash receptor 83 resides immediately outside of and adjacent to the front of the shower threshold 32 and is detachably connectable thereto. Similar to the shower receptor 38, the splash receptor 83 possesses a self-draining water receiving surface 85 comprising a generally rectangular surface which gently slopes downwardly from the vertical sides towards the central portion thereof, the central portion having a number of small perforations constituting an integral tamper-proof strainer 111.

A hollow support 88 is welded to the underside of the central portion of the splash receptor 83 in order to provide the necessary means for preventing the draining surface 85 from undergoing deformation under the weight of the user's body. A vertical slotted portion along the top of the support 88 is provided to permit the drain pipe 90 to pass through the hollow support 88 so that it can be connected to the drain receiving elbow 92. The drain elbow 92 is brazed or welded to the underside of the splash receptor 83 so that it circumferentially encompasses the strainer 111 in fluid sealing relationship thereof.

As is shown in FIG. 5, the splash receptor 82 is detachably connectable to the front bottom portion of the shower enclosure threshold 32 by means of two locating or guide pins 94, 96 fixed in their location on the splash receptor by means of angle braces 95, 97. A vertical bracket member 98 is provided for fixing the location of the drain outlet 99 with respect to the receiving drain pipe 100 of the shower receptor 38.

Two apertures (not shown) are located on the front vertical wall of the threshold 32 for receiving the locating pins 94, 96 so that the drain outlet 99 may be aligned with the inlet of the receiving drain pipe 100.

Due to the high cost of maintaining narrow tolerances for such manufactured items, alignment between the detachably connectable portions of the combination plumbing fixture 10, namely: the shower enclosure 12 and the splash receptor 83, is not, in production items, perfect. Consequently, the drain connection must be capable of coupling one to the other in spite of these relatively broad production tolerances.

Referring now to FIG. 6, a detachably connectable drain connection is shown, comprising two similar or identical receiving bodies 102, 104 having apertured radially-directed fingers 103, 105 and 106, 108 respectively at the receiving ends thereof. The apertures in fingers 106, 108 are adapted to receive threaded fasteners 15, 17 thereinto. The apertured fingers 103, 105 are similarly attached by means of similar threaded fasteners which are not shown. A pair of elongated vertical slots 19, 21 are disposed on the bracket 98 which are slightly larger in diameter than the shanks of the fasteners 15, 17. These permit the receiving body 104 to be secured to the bracket 98 and to be adjusted up or down along a vertical plane in order to properly align it with the other receiving body 102.

A pair of elongated horizontal slots 107, 109 are formed in the front wall 11 of the threshold 32 of the shower enclosure 12 and are similar to the vertical slots 19, 21 in the bracket 98 of the splash receptor 83. These slots 107, 109 permit the receiving body 102 to be adjusted either right or left along a horizontal plane in order to properly align it with the other receiving body 104.

A pipe 27 whose outer diameter is slightly smaller than the inner diameters of the ends 23, 25 of the receiving bodies 104, 102 which face each other, is provided to serve as a detachable interconnecting passageway between the receiving bodies 102, 104. In order to provide the requisite fluid seal and frictional connection between the outer surface of the pipe 27 and the inner pipe-receiving surfaces of the receiving bodies 102, 104, two annular grooves are provided around the pipe 27 adjacent to its outer ends wherein suitable fluid sealing O-rings 29, 31 may be disposed.

Referring now again specifically to FIG. 5, it should now be noted that an elastomeric cushion and fluid seal 33 is typically adhesively attached and disposed about the face of the open side portion of the splash receptor 83. This seal 33 not only provides a fluid seal provided between the splash receptor 82 and the front wall of the threshold 32 to prevent water from seeping therebetween and thereunder, but it acts to also prevent metal to metal contact therebetween. Should metal to metal contact exist therebetween, when the user's weight is shifted from the shower receptor 38 to the splash receptor 83, a vertical movement therebetween occurs

which frequently produces not only an undesirable loud metallic sound but abrasive wearing as well, both of which are highly undesirable.

Typically, the bottoms of the shower **12** and the splash receptor **83** are firmly anchored to the floor **48** by means of four threaded rods, similar to that identified as **35** and shown in FIG. **2.** In general, the combination plumbing fixture **10** is preferably fabricated from strong non-deteriorating stainless steel. However, threaded stainless steel rods are too expensive for anchoring purposes. Consequently, ordinary steel rods are used. In the prior art such steel rods were anchored through holes in the floors of the shower receptor **38** and the splash receptor **83.** In this location the tops of such anchoring rods are virtually immersed or continually bathed in water. In addition, prior art security fasteners failed to incorporate a fluid seal to prevent the passage of water from the receptor into the area therebeneath. Should water come in contact with the steel anchoring rods, these rods would rust. In addition, an undesirable, odor-causing condition would exist in an area which is not normally accessible for cleaning and sanitation purposes. To prevent this and also the unauthorized removal thereof, the tops of these rods **35** are anchored to the shower enclosure **12** and the splash receptor **83** by means of a security cap **37.** This cap **37** has a lower threaded receiving portion **39** and an annular groove **41** circumferentially disposed on the underside of the top of the cap **37** (illustrated in FIG. **7**) which is adapted to receive an O-ring **43.** Disposed between the periphery of the top of the cap and the groove **41** are at least two vertical bores **45, 47** extending therethrough to the underside thereof.

A special security cap installation and removal tool **51** as depicted in FIG. **7** comprising a nut-like vertical gripping surface **49** adapted to be gripped by a wrench and at least two cylindrical pins **53, 55** slightly smaller in diameter than the bores **45, 47** and set in the tool so as to be in alignment with the bores **45, 47.** When the pins **53, 55** are slideably mated with the bores **45, 47,** a wrench may be conveniently applied to the gripping surface **49** of the tool **51** and rotated in either direction so as to either secure or remove the security cap **37** as desired.

As clearly shown and depicted in FIGS. **1, 8** and **9,** the showerhead **57** may be mounted within the shower enclosure anywhere on the hollow frame **26** but is preferably mounted to one of the pilasters **28, 30.** By mounting the showerhead near the top of either pilasters **28, 30** the showerhead **57** can be secured thereto by means of two threaded fasteners **59,** (the other fastener is not shown, but is located on the other side of the inlet to the showerhead **57** in substantial symmetrical relationship to fastener **59**) from the backside thereof. The showerhead **57** is anchored preferably near the top of either hollow pilaster **28, 30** for numerous reasons. One reason is that this location places the showerhead **57** above, at least a substantial portion of, the user's body for showering purposes. Another important reason for this location is that in order to anchor the showerhead **57** to the hollow pilaster from the inside of the pilaster, access thereinto is provided by the opening **13,** as shown in FIG. **9,** and located on top of the pilaster. Following installation of the showerhead **57** to the pilaster, a cap member **112** is fastened thereto by means of security caps **113, 113a** which are similar in construction to security cap **37,** except that caps **113, 113a** have threaded male shanks instead of the threaded female shank **39** of cap **37.** The shanks of caps **113, 113a** are passed through appropriate perforations, diagonally disposed, in cap member **112** and threadably secured to bracket members **114, 114a** which are welded to the inside wall of the hollow pilaster. Or, if desired, the cap member **112** may be simply tack welded to enclose the top of the pilaster in a tamper-proof fashion and rendered removable only with the proper tools from the edges of the pilaster to provide access to the rear of the showerhead to effect maintenance and repair thereof.

Referring also now to FIG. **8,** in order to ensure the tamper-proof quality of the structure, the water supply pipe **63** is routed inside of the hollow pilaster down to the underside of the shower receptor **38** and into the pipe chase area via the wall aperture **65** as clearly shown in FIGS. **2** and **3.** Not only does this conceal the water supply piping **63** from the user of the shower enclosure, but in the event that a leak should develop the water from the leak will be channeled down the length of the pilaster and onto the floor underneath the shower receptor **38** and into the pipe chase via the wall apertures **65.** Because of this possibility it is sometimes desirable to place a fluid sealing gasket (not shown) about the rim of the bottom portion of the shower which is defined by the bottom edges of the walls **14, 16** and **18** and the bottom edge of the threshold **32** which abutts the floor upon which the shower enclosure **12** is typically placed.

The nozzle **67** of the showerhead **57** is threadably secured to the showerhead body **69.** An annular groove **71** about the nozzle body separates that portion of nozzle **67** which is exposed to the inside of the shower enclosure **12** from the threaded, non-exposed portion. When the nozzle **67** is threadably secured within the body **69,** the groove **71** is aligned with and intersects the threaded bore **73** in the body **69** and exits only to the rear portion of the body **69.** A set-screw **75** having a pointed end portion **77** is threadably mated with the bore **73** and secured so that the pointed portion **77** substantially protrudes into the groove **71.** Not only does the set screw **75** tend to and/or prevent rotation of the nozzle **67** but in the event that such rotation should nevertheless occur, the threads of the nozzle **67** will be forced against the set screw **75** and thereby prevent the nozzle **67** from being withdrawn or detached from the body **69,** thereby rendering said nozzle tamper-proof.

While it will be apparent that the embodiment of the invention herein disclosed is well calculated to fulfill the objects of the invention, it will be appreciated that the invention is susceptible to modification, variation and change without departing from the proper scope or fair meaning of the subjoined claims.

I claim:

1. A combination plumbing fixture for connection to a source of fluid and to a fluid drain, comprising:

a. a shower enclosure having a sidewall thereabout, said sidewall having an entrance therethrough for human access into said shower enclosure, and further comprising a roof capping the top of said sidewall and a receptor, secured about the inside of said sidewall adjacent to the bottom of thereof, for receiving fluid, said receptor having a drain aperture therein for the passage of fluids therethrough;

b. a hollow frame member disposed about said shower enclosure entrance, said frame member having at least one perforation through the wall of the frame member facing the inside of said shower enclosure;

c. a showerhead means disposed about said perforation in said frame member;

d. a first anchoring means for securing said showerhead means to said frame member;

e. a first piping means connected in fluid communication with said showerhead means for delivering fluid thereto, said piping means disposed within said hollow frame member and above the bottom of said sidewall and beneath the shower receptor and thereafterwards passed through said sidewall below said shower receptor for connection to a source of fluid such as water; and

f. fluid drain means connected in fluid communication to said drain aperture in said shower receptor for draining the fluid which accumulates in said shower receptor from said shower receptor.

2. The combination plumbing fixture of claim **1**, further comprising:

valve means for regulating the amount of fluid delivered to said showerhead means.

3. The combination plumbing fixture of claim **1**, further comprising second anchoring means for removably securing said shower enclosure to a wall of a building wherein said second anchoring means is not removable from the side of said building wall facing said shower enclosure.

4. The combination plumbing fixture of claim **1**, wherein said drain means includes a "P" trap detachably connected thereto.

5. The combination plumbing fixture of claim **1** where said drain means comprises:

a. a floor for said shower enclosure, said floor disposed above the bottom of said shower enclosure sidewall and joined to the inside thereof and sloping downwardly from its peripheral portion to its central portion and having a plurality of small holes adjacently disposed to each other about said central portion to form a sieve;

b. a "P" trap having an upper fluid-receiving portion with a flanged rim thereabout, said rim having an annular groove therein and further having at least two oppositely-disposed, slotted arms extending radially outwardly from said flanged rim and further having at least two apertured, oppositely-disposed fingers extending radially outwardly from the body of said elbow portion of said "P" trap;

c. a fluid sealing gasket adapted to be disposed within said groove;

d. at least two oppositely-disposed threaded receptacles bonded to the underside portion of said shower receptor floor and adjacently disposed to said sieve, said receptacles lying on the locus generated by the path of said slots in said slotted arms when said fluid-receiving portion of said "P" trap is rotated about the central axis of said drain in said floor of said shower receptor;

e. at least two threaded fasteners adapted to be threadably mated with said oppositely-disposed receptacles so that said fasteners may be disposed within said slots and threadably secured to said receptacles and tightened so as to urgingly place said flange and said sealing gasket into intimate fluid-sealing abuttment with and about said sieve; and

f. at least two bolts with nuts thereon, said bolt shanks being disposed within said apertures so that said fingers rest upon the faces of said nuts, said bolts being sufficiently long to contact the floor upon which said shower enclosure is mounted so that the bolts may be threadably adjusted so as to contact the floor and thereby provide support for said "P" trap.

6. The combination plumbing fixture of claim **1**, further comprising vent means in said shower enclosure wall, said vent means being adjacently disposed to the upper portion of said shower enclosure for venting the fluid vapors generated during the showering process from the shower enclosure.

7. A combination plumbing fixture for connection to a source of fluid under pressure and to an external fluid drain, and adapted to be disposed within a building, comprising:

a. a shower enclosure having an entrance thereinto;

b. a hollow frame member disposed about said entrance, said frame member having a wall with at least one perforation therethrough adjacently disposed to the inside of said enclosure;

c. a showerhead means;

d. a first anchoring means for securing said shower head means to said frame member through said perforation therein;

e. a first piping means for placing said fluid source in fluid communication with said shower head means;

f. drain means for draining the fluid disposed within the lower portion of said enclosure away from said lower portion, said drain means includes a "P" trap detachably connected thereto;

g. support means between said "P" trap and the floor of said building; and

h. means for adjusting said support means to vary the distance between said "P" trap and the floor of said building.

8. The combination plumbing fixture of claim **7**, wherein said first anchoring means comprises:

a. a shower head means having a rear surface disposed about said entrance thereto, said rear surface conforming to the contour of said wall surface of said frame member disposed about said perforation and which faces the inside of said enclosure and further having at least two threaded receptacles which are disposed on either side of said entrance;

b. a wall portion of said frame member adjacently disposed to said perforation therethrough, said wall portion having at least two apertures therethrough the axes of which are in substantial alignment with the corresponding axes of said threaded receptacles in said shower head means; and

c. at least two fasteners each having a threaded shank portion adapted to be threadably mated to said receptacles and a top portion which is larger in diameter than said wall aperture whereby said fastener shanks are passed through the apertures from the side of said wall which faces the inside of said hollow frame member and is thereafterwards threadably secured to said receptacles and tightened until

said rear surface of said shower head means is disposed in intimate abuttment with said wall.

9. The combination plumbing fixture of claim **7**, wherein said drain means comprises:

a. a floor for said enclosure, said floor sloping downwardly from its peripheral portion to its central portion and having a plurality of small holes disposed about said central portion to form a sieve;

b. said "P" trap having an upper fluid-receiving portion with a flanged rim thereabout, said rim having an annular groove therein and further having at least two oppositely-disposed, slotted arms extending radially outwardly from said flanged rim and further having at least two apertured, oppositely-disposed fingers extending radially outwardly from the body of said elbow portion of said "P" trap;

c. a fluid sealing gasket adapted to be disposed within said groove;

d. at least two oppositely-disposed threaded receptacles bonded to the underside portion of said shower receptor floor and adjacently disposed to said sieve, said receptacles lying on the locus generated by the path of said slots in said slotted arms when said fluid-receiving portion of said "P" trap is rotated about the central axis of said drain in said floor of said shower receptor;

e. at least two threaded fasteners adapted to be threadably mated with said oppositely-disposed receptacles so that said fasteners may be disposed within said slots and threadably secured to said receptacles and tightened so as to urgingly place said flange and said sealing gasket into intimate fluid-sealing abuttment with and about said sieve; and

f. said support means including at least two bolts with nuts thereon, said bolt shanks being disposed within said apertures so that said fingers rest upon the faces of said nuts, said bolts being sufficiently long to contact the floor upon which said shower enclosure is mounted so that the bolts may be threadably adjusted so as to contact the floor and thereby provide support for said "P" trap.

10. The combination plumbing fixture of claim **5**, further comprising:

a. a splash receptor disposed adjacently to the threshold of said entrance to said shower;

b. drain means in said splash receptor;

c. piping means for receiving and delivering said fluid disposed in said splash receptor from said drain means to said shower drain means;

d. a first fluid receptacle disposed in and about an aperture in said front wall portion of said threshold, said receptacle being adjustable along a horizontal plane;

e. a second fluid receptacle disposed in and about an aperture in the rear wall of said splash receptor and in substantial alignment with said first fluid receptacle, said second receptacle being adjustable along a vertical plane;

f. means for placing said first and second receptacles in fluid communication wtih each other; and

g. guiding and locating means for aligning said splash receptor with the threshold of said shower so that said first and second receptacles will be placed in substantial alignment with each other.

11. The combination plumbing fixture of claim **10**, further comprising:

anchoring means for anchoring said splash receptor to the floor of said building.

12. The combination plumbing fixture of claim **11**, wherein said anchoring means for achoring said splash receptor to the floor of said building, comprises:

a. a threaded rod anchored at one end to the floor of said building;

b. a threshold adjacently disposed to the front of said splash receptor, said threshold having a perforation therein adapted to receive said threaded rod therethrough; and

c. an anchoring cap for anchoring said threshold to the other end of said rod via a perforation in said threshold, said cap having a crown and a shank portion wherein said shank has a threaded axial bore therein adapted to be threadably mateable with said other end of said rod and wherein said crown portion has a radiused top portion with at least two bored receptacles therein, said receptacles being adapted to receive rod ends therein for providing tool-gripping surfaces whereby said shank may be rotated about its longitudinal axis by a gripping tool and wherein said bottom portion of said crown has a surface about said perforation, said bottom portion further having an annular groove therein disposed about said shank portion, said annular groove being adapted to receive a resilient gasket therein so that when said threaded shank is threadably engaged with said other rod end and tightened so as to place the bottom portion of said cap in contiguous relationship with said threshold surface disposed about said perforation, the resilient gasket is deformed to effect a fluid seal therebetween.

13. The combination plumbing fixture of claim **7**, further comprising:

a recessed soap dish in the wall of said enclosure.

14. The combination plumbing fixture of claim **7**, further comprising:

a second anchoring means for securing said enclosure to said building, said second anchoring means comprising:

a. a threaded rod anchored at one end to the floor of said building;

b. a threshold adjacently disposed to the entrance to said enclosure, said threshold having a perforation therein adapted to receive said threaded rod therethrough; and

c. an anchoring cap for anchoring said threshold to the other end of said rod via a perforation in said threshold, said cap having a crown and a shank portion wherein said shank has a threaded axial bore therein adapted to be threadably mateable with said other end of said rod and wherein said crown portion has a radiused top portion with at least two bored receptacles therein, said receptacles being adapted to receive rod ends therein for providing tool-gripping surfaces whereby said shank may be rotated about its longitudinal axis by a gripping tool and wherein said bottom portion of said crown has a surface conformable to the threshold surface about said perforation, said bottom portion further having an annular groove therein disposed about said shank portion, said annular groove being adapted to receive a resilient gasket therein so that when said threaded shank is threadably engaged with said other rod end and tightened

so as to place the bottom portion of said cap in contiguous relationship with said threshold surface disposed about said perforation, the resilient gasket is deformed to effect a fluid seal therebetween.

15. The combination plumbing fixture of claim **5**, further comprising vent means in said shower enclosure wall, said vent means being adjacently disposed to the upper portion of said shower enclosure for venting the fluid vapors generated during the showering process from the shower enclosure.

16. The combination plumbing fixture of claim **1**, further comprising:

a. a splash receptor disposed adjacently to the threshold of said entrance to said shower;

b. drain means in said splash receptor;

c. piping means for receiving and delivering said fluid disposed in said splash receptor from said drain means to said shower drain means;

d. a first fluid receptacle disposed in and about an aperture in said front wall portion of said threshold, said receptacle being adjustable along a horizontal plane;

e. a second fluid receptacle disposed in and about an aperture in the rear wall of said splash receptor and in substantial alignment with said first fluid receptacle, said second receptacle being adjustable along a vertical plane;

f. means for placing said first and second receptacle in fluid communication with each other; and

g. guiding and locating means for aligning said splash receptor with the threshold of said shower so that said first and second receptacles will be placed in substantial alignment with each other.

17. The combination plumbing fixture of claim **1**, further comprising a second anchoring means for securing said enclosure to said building, said second anchoring means comprising;

a. a threaded rod anchored at one end to the floor of said building;

b. a threshold adjacently disposed to the entrance to said enclosure, said threshold having a perforation therein adapted to receive said threaded rod therethrough; and

c. an anchoring cap for anchoring said threshold to the other end of said rod via a perforation in said threshold, said cap having a crown and a shank portion wherein said shank has a threaded axial bore therein adapted to be threadably mateable with said other end of said rod and wherein said crown portion has a radiused top portion with at least two bored receptacles therein, said receptacles being adapted to receive rod ends therein for providing tool-gripping surfaces whereby said shank may be rotated about its longitudinal axis by a gripping tool and wherein said bottom portion of said crown has a surface conformable to the threshold surface about said perforation, said bottom portion further having an annular groove therein disposed about said shank portion,, said annular groove being adapted to receive a resilient gasket therein so that when said threaded shank is threadably engaged with said other rod end and tightened so as to place the bottom portion of said cap in contiguous relationship with said threshold surface disposed about said perforation, the resilient gasket is deformed to effect a fluid seal therebetween.

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