Aug. 17, 1954 J. H. SCHMID 2,686,321

WALL CLOSET FITTING

Filed June 17, 1950 2 Sheets-Sheet 1

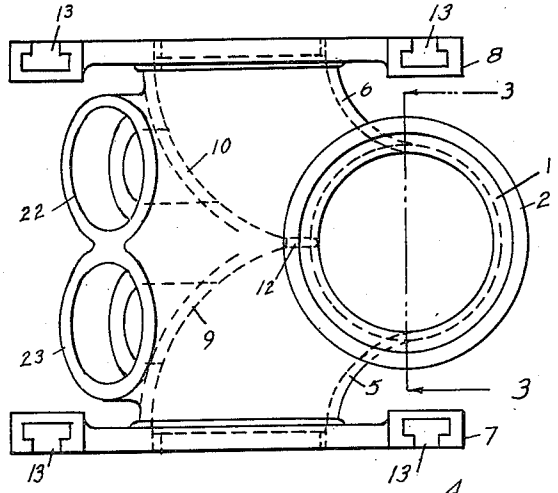


FIG. 1.

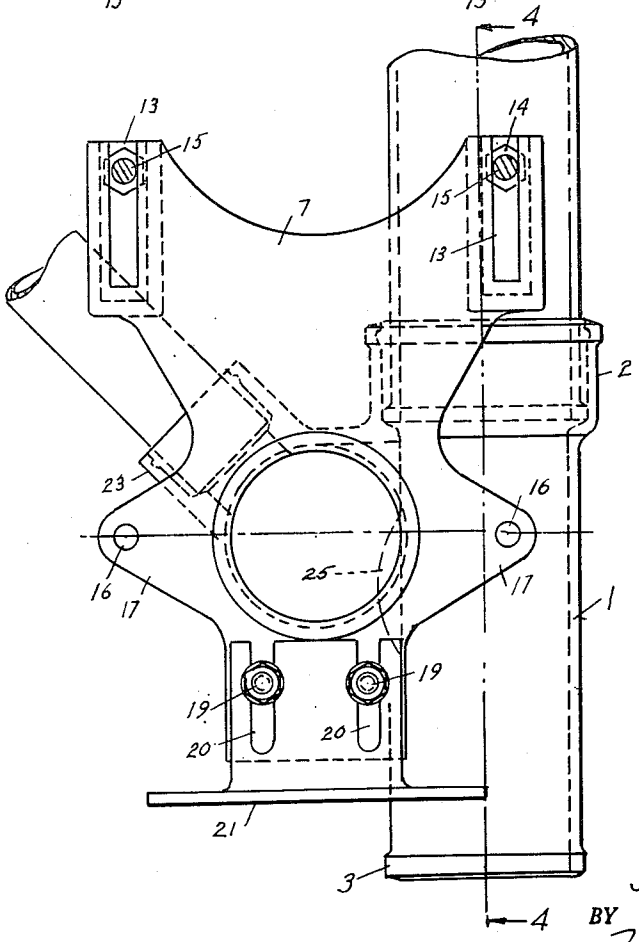


FIG. 2.

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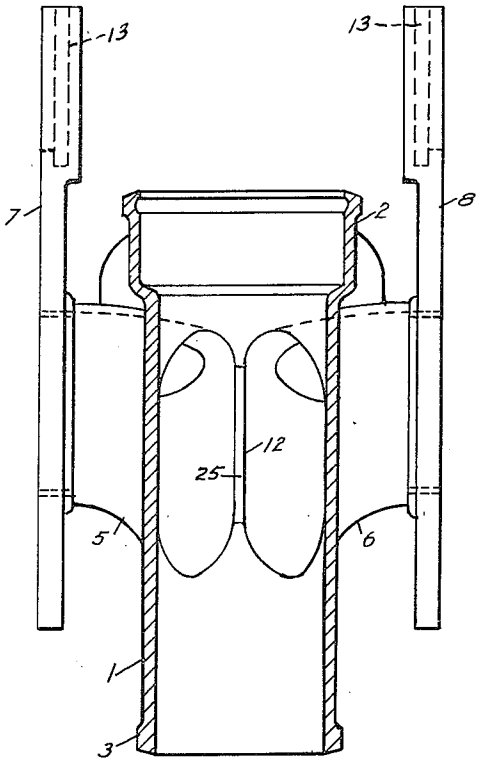


FIG. 3.

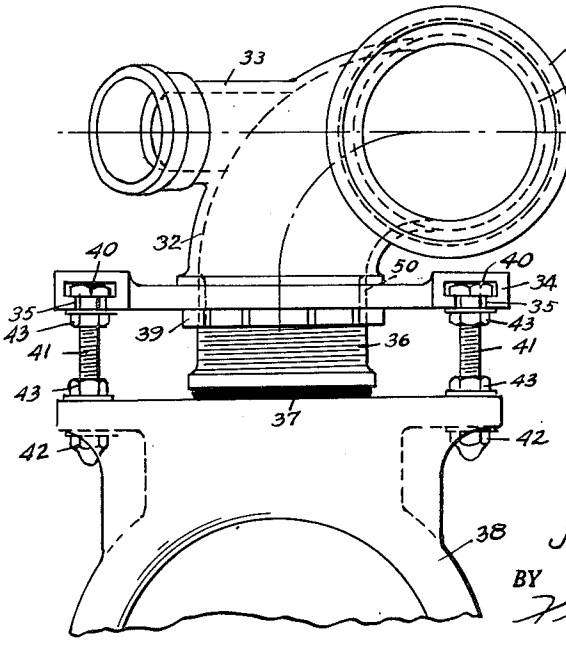


FIG. 4.

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UNITED STATES PATENT OFFICE

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WALL CLOSET FITTING

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1 Claim. (Cl. 4—252)

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This invention relates generally to wall closet fittings and more particularly to adjustable wall closet fittings for supporting a water closet horizontally.

Many of the previous water closet fittings do not provide support for the fitting with the result that the weight of the water closet is on the wall. Previous fittings comprise two or more parts so that when there is any settling of the building or other relative movement between the floors and walls thereof, the parts thereof engaging the water closet fitting are damaged. It has been particularly difficult to align these prior water closet fittings, especially where a bank of water closets are to be installed. Where previous water closet fittings have been disposed back to back, it has been necessary to provide comparatively long offset connections therebetween, offset so that waste water would not be flushed from one water closet into another. This requires a maximum amount of wall space.

It is, accordingly, an object of my invention to overcome the above and other defects in present water closet fittings and it is more particularly an object of my invention to provide a water closet fitting which is simple in construction, economical in cost, economical in manufacture, and efficient in operation.

Another object of my invention is to provide a water closet fitting whereby the water closet is carried by the fitting and not by the wall.

Another object of my invention is to provide a water closet fitting which requires a minimum amount of wall space.

Another object of my invention is to provide a water closet fitting which permits water closets to be carried free from the floor thereby giving a maximum free floor area so that it may be easily cleaned and kept sanitary.

Another object of my invention is to provide a water closet fitting whereby the entire load of the water closet may be carried by the floor preventing cracked tile or other construction material used or any other damaging strain on a wall.

Another object of my invention is to provide a novel water closet fitting which is particularly designed for battery installations.

Another object of my invention is to provide a water closet fitting which requires a minimum front to back distance providing for installation in extremely narrow wall spaces.

Another object of my invention is to provide a novel water closet fitting which gives a sanitary flush.

Another object of my invention is to provide

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a double integral vertical wall closet fitting whereby a rigid connection may be made to the waste piping.

Another object of my invention is to provide a novel water closet fitting wherein a clean sweep is provided for the waste water.

Another object of my invention is to provide novel offset vents in a water closet fitting.

Another object of my invention is to provide a water closet fitting wherein an adjustable foot support may be attached thereto for the support thereof on the floor.

Other objects of my invention will become evident from the following detailed description, taken in conjunction with the accompanying drawings, in which

Fig. 1 is a plan view of my novel double vertical wall closet fitting provided with hub and spigot ends;

Fig. 2 is a side elevational view of the double wall closet fitting shown in Fig. 1;

Fig. 3 is a view taken on the line 3—3 of Fig. 1; and

Fig. 4 is a plan view of a single wall closet fitting made in accordance with my invention.

Referring now to the drawings, I show in Figs. 1 to 3 inclusive a vertically extending tubular body 1 having a hub end 2 and a spigot end 3 for connection to a conventional stack. This is particularly adapted for installations in apartment houses, hotels, or any other application where one fixture is located above the other and connected to a common vertical stack. The body 1 has arcuate shaped branches 5 and 6 extending laterally outwardly and upwardly therefrom in opposite directions through a turn of approximately ninety degrees as shown in Fig. 1. The branches 5 and 6 move angularly and arcuately upwardly as well as arcuately outwardly so that when water closets are attached to the support plates 7 and 8 integral with the branches 5 and 6, the waste water will drain from the water closets through the branches 5 and 6 to the body 1. The diameters of the branches 5 and 6 are preferably of the same size as the diameter of the body 1. The radius of the curvature of the branches 5 and 6 is such that the outer walls 9 and 10 thereof coincide with a plane passing through the vertical axis of the body 1. A wall 12 is formed between the branches 5 and 6 so that waste water being flushed from one water closet will not pass to the opposite water closet. I preferably cut out a segment 25 in the end of the wall 12 to permit a greater flow of fluid to the body 1. It has been found that if a segment is

not cut in the edge of the wall 12, there is a restriction of the flow of fluid caused by the sharp turn of the branches 5 and 6. The whole wall cannot be cut off in a vertical plane because drainage water will pass to the opposite branch line 5 or 6. My novel fitting is extremely sanitary in that there are no pockets whatsoever provided for lodgment of waste material. The integral support plates 7 and 8 each have open parallel T-shaped slots 13 for receiving the heads 14 of screw bolts 15 to secure water closets to the plates 7 and 8. Apertures 16 are also provided in outwardly extending wings 17 on the plates 7 and 8 to receive screw bolts to provide further support for the water closets. The support plates 7 and 8 also have parallel screw studs 19 in the lower portion thereof for movement in open slots 20 in a foot support 21 so that the water closets may be supported from the floor of a building. Offset, angularly extending vent branches 22 and 23 are provided for each branch 5 and 6 of the fitting. By being offset, they allow extra clearance for water supply connections. The connection of a water closet to the support plates 7 and 8 is the same as that shown in Fig. 4 which will be hereinafter explained.

In Fig. 4, I show a modified form of my novel water closet fitting in which the fitting is provided for connecting and supporting one water closet rather than two as shown in the previous drawings. In Fig. 4, I show a vertically extending cylindrical body 30 having a hub end 31 on the upper end thereof and a spigot end (not shown) on the lower end thereof. The body 30 has a branch 32 extending arcuately outwardly and upwardly therefrom, the branch 32 being bent through ninety degrees so that the axis thereof is at right angles to a vertical plane passing through the axis of an offset vent branch 33 and the vertical axis of the tubular body 30. The vent branch 33 has its axis in a vertical plane passing through the vertical axis of the tubular member 30. A support plate 34 is integral with the outer end of the branch 32. The plate 34 has parallel T-shaped open slots 35 and other features of construction the same as the suport plates 7 and 8 shown in the double wall fitting in Figs. 1 to 3 inclusive.

An adjustable threaded sleeve or coupling member 36 threadably engages a threaded aperture 50 in the plate 34 in axial alignment with one end of the branch 32 of the fitting. The coupling 36 carries a gasket 37 to sealingly engage an aperture (not shown) in a conventional siphon jet water closet 38. My fitting may be adapted for mounting a blow out type water closet by making a change in the location of the aperture in a plate which is changed in shape but which has the same general function design. A lock nut 39 threadably engages the coupling 36 and sealingly engages the face of the plate 34. The heads 40 of bolts 41 are held against rotation in the T-slots 35 and the other ends thereof extend through the upper apertures in conventional water closet 38 and nuts 42 lockingly engage the ends of the bolts 41. Spacing nuts 43 on the bolts 41 space the water closet 38 a predetermined distance from the plate 34. The water closet 38 is adjustable in a vertical and in a horizontal direction.

The operation of the fitting in Fig. 4 is the same as the fitting shown in Figs. 1 to 3. The branch 32, besides passing through a ninety degree arc laterally, also moves angularly and arcuately upwardly so as to provide a branch which is inclined downwardly away from the water closet connected to the support plate 34. The axis of the vent branch 33 is placed in the same vertical plane as the axis of the cylindrical body 30 so that siphonage will be minimized.

It will be evident from the foregoing description and from an inspection of the drawings that my novel water closet fitting may be installed in a very narrow wall, the offset vent connections provide space for water connections, the fitting is so designed as to be completely sanitary, drainage from the water closets is provided for, the support plates and fittings are integral with each other so that no relative movement of the building will affect my novel fitting or the water closets connected thereto, and the installation of water closet fittings is greatly simplified.

Various changes may be made in the specific embodiment of my invention without departing from the spirit thereof or from the scope of the appended claim.

What I claim is:

A wall closet fitting comprising a cylindrical body member, means on opposite ends of said cylindrical body member to attach pipes in a vertical stack thereto, two adjacent branch pipes extending arcuately outwardly and angularly upwardly from one side of said cylindrical member in opposite directions through an arc of substantially ninety degrees, a support plate integral with the terminus of each of said branch pipes disposed transversely of the axis thereof and disposed adjacent said branch pipes to support said cylindrical body member in close relation thereto, said support plates being parallel to each other, a foot support attached to each support plate, said foot support being adjustable vertically on said plates whereby the weight carried by said foot support can be adjusted, the radius of the curvature of the branches being such that the outer walls thereof coincide with a plane passing through the vertical axis of said body member but terminating short thereof to define a baffle between said branches so that the waste water being flushed from one of said branches will not pass to the opposite branch, and means for attaching a water closet to said support plates.

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