

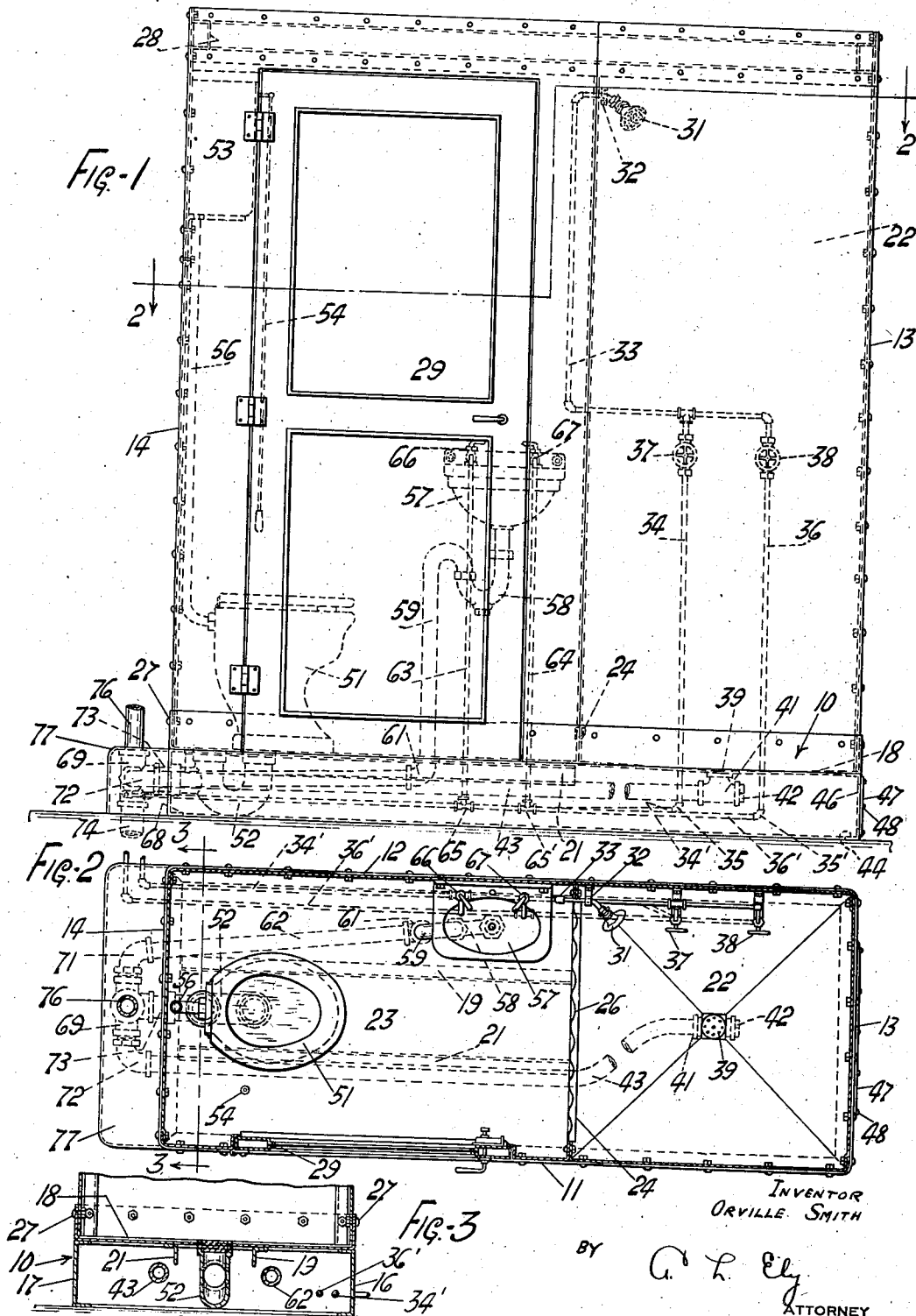
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UNITARY BATHROOM STRUCTURE

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UNITARY BATHROOM STRUCTURE

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This invention relates to building construction and to the relative arrangement of plumbing fixtures and connections, such, for example, as the usual bathroom fixtures and connections, into a unitary structure comprising sub-flooring adapted to provide adequate support for such fixtures and connections and, preferably, also for the upright walls of the room in which the fixtures are disposed. In a construction of this kind the manufacturer may install the fixtures and piping and complete the plumbing job within the room itself; the assembled structure may be transported as a unit and placed in a building of which the unit is to form a part; and when this has been done the fixtures are ready for use as soon as the piping, installed in the assembled unit by the manufacturer, has been connected to the piping of the building.

This apparently simple task of connecting the piping to complete the installation in the building has heretofore presented difficulties which are not readily appreciated. When an assembled unit of this general class has been placed in a building to form a room therein, at least three sides of the unit become inaccessible and the only way that piping connections can be made at these points is by tearing out part of the walls of the building. This offsets the advantages of the unitary construction. On the other hand, when the wall enclosing the fourth side of the room of the unitary structure has been accessible or partly so, it has not been feasible to bring all of the piping connections out through this wall.

The purposes of this invention are to provide a unitary structure comprising sub-flooring and plumbing fixtures and connections which may be transported as a unit and installed with minimum labor; to provide a unitary structure of the class described in which the piping for the fixtures is arranged in the sub-flooring so that the connections may be brought into convenient proximity at some accessible point for connection to the piping of the building; to provide an economical and efficient structure of the class described which is well adapted for use in rural districts, and in camps, summer cottages and the like; and also to provide a structure of the class described having an improved construction and relative arrangement of parts.

In the drawing:

Fig. 1 is a front elevation of a unitary bathroom structure in accordance with this invention;

Fig. 2 is a sectional plan on the line 2-2 of Fig. 1; and

Fig. 3 is a section on the line 3-3 of Fig. 2.

In the preferred embodiment of the invention selected for illustration herein, a unitary bathroom structure is provided comprising a platform or base structure indicated generally at 10, and side walls 11, 12, and end walls 13 and 14. The platform or base structure comprises the longitudinal side channels or base members 16 and 17 (Fig. 3) on which the sub-floor 18 is secured, as by spot welding. The floor 18 may have suitable reinforcements such as the angle bars 19 and 21, to assure adequate support for the occupant of the room and the fixtures with which the room is equipped. A shower compartment 22 is separated from the main compartment 23 by a threshold 24 and a shower curtain 26 suspended above the threshold in any approved manner (not shown). Preferably the flooring 18 is provided with upright peripheral flanges to which the plates forming the side and end walls are connected by suitable attaching elements, such as bolts 27. Preferably the upper portions of the side and end walls are strengthened by suitable reinforcing members, such as the members 28 of channel section. One of the side walls of the main compartment, preferably the wall 11, is equipped with a door 29 of any approved construction.

In the shower compartment 22, a shower head 31 is mounted as by means of a bracket 32 preferably so as to direct the spray away from the curtain 26. Hot and cold water may be supplied to the shower head through a common connection 33 from the hot water supply pipe 34 and the cold water supply pipe 36, these supply pipes being controlled respectively by suitable valves 37 and 38. These supply pipes 34 and 36 extend downwardly through the sub-floor where they are connected to the main hot and cold water supply pipes 34' and 36' by the elbows 35 and 35' respectively. The pipes 34' and 36' extend longitudinally beneath the floor to the left end of the structure as viewed in Figs. 1 and 2 and as shown in Fig. 3. The floor of the shower compartment slopes downwardly to a drain 39 connected to a T connection 41. One end of this T construction is fitted with a removable plug 42, while a pipe 43 extends from the other end of the T through a suitable seal (not shown) to the left end of the base structure as viewed in Figs. 1. At the right end of the platform or base structure a transverse structural member 44, preferably of channel section as shown, is provided with an opening 46 through which access may be had to the removable plug 42 for cleaning. This

opening is closed by a removable panel or cover plate 47 which may be secured to the member 44 by attaching elements such as screws 48.

In the main compartment 23 a water closet 51 is mounted on the sub-floor, preferably above the reinforcing members 19 and 21, and connected to a seal 52. In order to reduce the special requirements for this fixture, a flush tank 53 is mounted on the end wall 14 near the ceiling and equipped with a hand chain 54 and a discharge pipe 56 which extends along the wall 14 and is connected to the water closet. A wash-stand or bowl 57 is mounted on the side wall 12, preferably adjacent the shower compartment, and has its drain connected through a suitable seal 58 to the discharge pipe 59 which extends downwardly through the sub-floor where it is connected by an elbow 61 to the pipe 62 which extends to the left end of the base structure as viewed in Fig. 1. Hot and cold water for the wash-stand is supplied through the pipes 63 and 64 connected to T connections 65 and 65' in the water supply pipes 34' and 36' and to the faucets 66 and 67 of the wash-stand or bowl.

At the left end of the platform or base structure, as viewed in Fig. 1, a transverse structural member 68, similar to the member 44, extends beneath the floor and to the end wall 14, and is provided with an opening through which the water supply pipes and the various drain and waste pipes may pass. Outside the member 68 a fitting 69 has connections 71 and 72 respectively to the waste pipes 62 and 43; and this fitting also has a connection 73 to the seal 52 of the water closet. This fitting 69 is adapted to be connected to the soil pipe 74 of the building and also to the vent pipe 76. Any suitable connection (not shown) may be passed through the same opening in the member 68 for replenishing the water supply in the flush tank. A suitable hood or apron 77 is arranged to enclose the fitting 69 and the connections thereto. Preferably this apron is detachably secured to the base structure in any approved manner (not shown).

It will be observed that the platform or base structure provides in effect a housing for external pipes and fittings, and thereby affords protection to these members during handling and transportation of the unit. It will also be seen that once this unitary structure is set in its intended location in a building, the only plumbing work required is that of connecting the fitting 69 to the soil pipe and to the vent pipe of the building and also connecting the water supply pipes 34' and 36' to the proper pipes in the building. A feature of great practical importance is that a complete unitary structure of this kind may be made with an over all width and height which will permit it to be moved through an ordinary door opening. Obviously this simplifies the problem of installing such a structure in existing buildings.

While the preferred form of the invention and the best known manner of using and applying the same have been illustrated and described herein, it will be understood that various modifications thereof will occur to those skilled in this art when informed by this specification, and that the invention is not limited except as indicated by the appended claims.

What is claimed is:

1. In a prefabricated room structure adapted to be installed as a unit, a base structure, a housing comprising end walls and side walls erected on said base structure, plumbing fixtures located within said housing, water pipes and drain pipes enclosed within said base structure and extending laterally within said base structure from said plumbing fixtures to one end of said base structure whereby said water pipes and drain pipes may be connected to suitable supply pipes and a soil pipe after said room structure is installed.

2. In a prefabricated room structure adapted to be installed as a unit, a housing comprising side walls and narrow end walls, a base structure equal in width to said end walls, plumbing fixtures within said housing, water pipes and drain pipes enclosed within said base structure and extending laterally within said base structure from connections to said fixtures to connections to suitable supply pipes and a soil pipe, said housing and base structure being of such width that the structure may be passed through ordinary doors in an existing building in order to be installed.

3. In a prefabricated bathroom structure adapted to be installed as a unit within an existing building, a housing comprising side walls and narrow end walls, bathroom fixtures installed within said housing, a base structure supporting said housing, an apron detachably secured to said base structure and extending laterally beyond one wall of said housing, water pipes and drain pipes for said fixtures enclosed within said base structure and adapted to be connected to suitable water supply pipes and a soil pipe entering said laterally extending apron.

4. In a prefabricated bathroom structure adapted to be installed as a unit within an existing building, a base structure adapted to support a housing and bathroom fixtures located therein, water pipes and drain pipes enclosed in said base structure and adapted to be connected to said fixtures, and an apron detachably secured to said base structure to permit said enclosed water pipes and drain pipes to be connected to plumbing in the existing building after the structure has been placed in the existing building.

5. A prefabricated base structure adapted to be installed as a unit within an existing building and adapted to serve as a foundation for a unitary bathroom structure, piping enclosed in said base structure and adapted to be connected to fixtures in said bathroom, and means to permit said piping to be connected to plumbing in the existing building after the structure has been placed in the existing building.

6. A prefabricated base structure adapted to be installed as a unit within an existing building and adapted to serve as a foundation for a unitary bathroom structure comprising a sub-floor and end and side members, piping enclosed in said base structure and adapted to be connected to fixtures in said bathroom, and means to permit said enclosed piping to be connected to plumbing in the existing building after the structure has been placed in the existing building.

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