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LAVATORY FITTING

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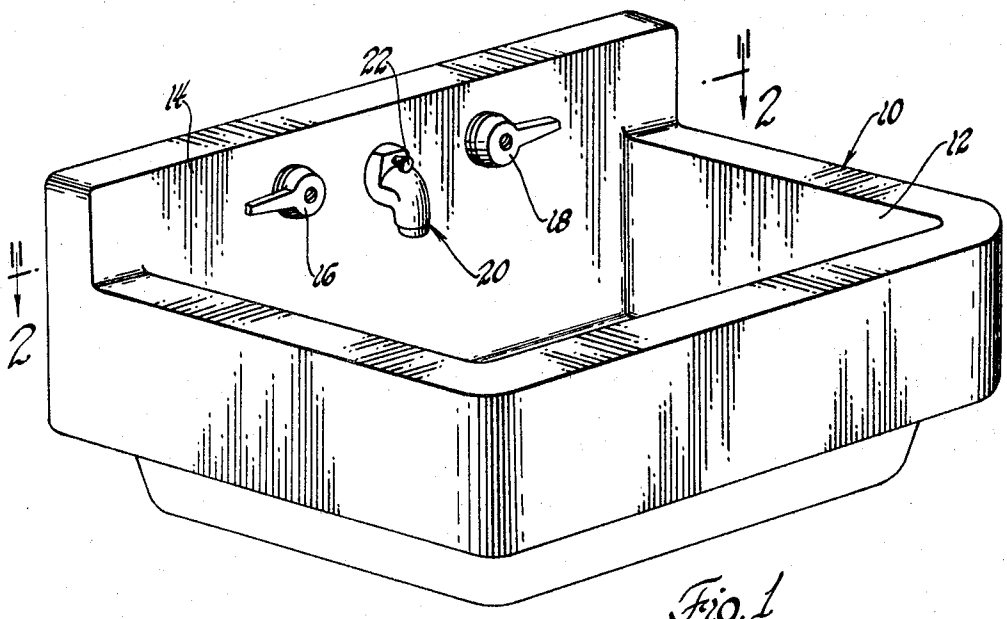


Fig. 1

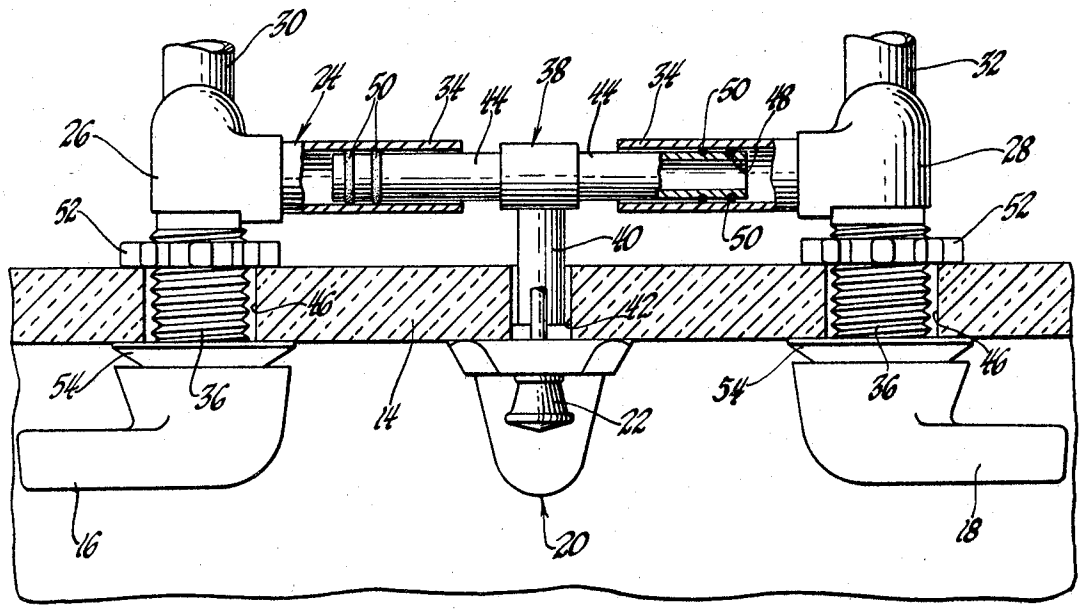


Fig. 2

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LAVATORY FITTING

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ABSTRACT OF THE DISCLOSURE

In a preferred form this invention is embodied in a lavatory fitting assembly in which facing valve bodies telescopingly receive a central conduit or T-fitting connected to the spout structure. The telescoping arrangement of the central conduit bodies relative to the valve body allows the subject mechanism to be adjustably fitted to lavatory basins having variably spaced apertures to which the mechanism is mounted.

This invention relates to lavatory fittings, and more particularly to lavatory fittings adapted to be mounted in the ledge back of a lavatory structure.

In the design and manufacture of lavatories, it is not uncommon to provide a ledge back to receive a lavatory fitting incorporating the hot and cold water valve structures and a spout member for water flow into the lavatory. In the usual manner of construction, the lavatory is provided with spaced apertures through which the valve and spout structures extend from the rearward side, to receive operating handles and the like. The lavatory manufacturer provides a particular spacing of apertures in the ledge back to receive a fitting assembly, such spacing being dependent upon the desires of the purchaser. Thus, a lavatory manufacturer will carry a line of lavatories with different spacing between the apertures, such spacing varying in increments beginning with and extending to any desirable dimension, from which the customer may choose.

The varied spacing in mounting apertures in ledge backs presents a problem to a manufacturer of the fitting assembly. Such manufacturer must provide a line of fitting assemblies from which one is selected for mounting in each of the line of lavatories with variously spaced apertures in the ledge back. It is the normal practice for fitting manufacturers to provide a fixed fitting assembly including valve bodies and a spout structure, with the spacing between the valve bodies and the location of the spout structure being dependent upon the aperture spacing in the lavatory ledge. Thus, should a customer obtain a ledge back lavatory with four-inch spacing between valve apertures, the customer must also select a fitting assembly wherein the valve bodies are on four-inch centers. Another customer selecting a lavatory with six-inch spacing between ledge apertures must select a fitting assembly with the valve bodies on six-inch centers. Alternatively, a fitting structure may be selected piecemeal and assembled by a plumber to fit the particular spacing in the ledge back, the entire structure being fixed upon assembly in the lavatory.

The structure in which this invention is embodied comprises, generally, a lavatory fitting assembly in which spaced valve bodies telescopingly receive a central conduit body connected to a spout structure, so that the valve bodies may be separated over a range of centers to permit mounting in any of a series of ledge aperture spacings in a line of lavatory structures. Suitable sealing means are provided between the outlet conduit structure and extending sleeve on the valve bodies to prevent leakage at the telescoping connections, and thus assure a

positively mounted and leak-proof lavatory fitting assembly.

Such a lavatory fitting is extremely versatile in the number of ledge back lavatories in which it might be mounted, and is extremely simple to mount in the lavatory structure. The assembly is of simple construction and easily assembled, either prior to mounting or at the time of mounting in the lavatory ledge, and presents a leak-proof structure adaptable to a wide variety of installations.

These and other advantages will become more apparent from the following description and drawing in which:

FIGURE 1 is a perspective view of a typical lavatory structure having a fitting assembly mounted therein;

FIGURE 2 is a cross-sectional view of the lavatory structure and fitting assembly illustrated in FIGURE 1, taken substantially along the line 2—2 of FIGURE 1, and looking in the direction of the arrows.

Referring more particularly to the drawing, FIGURE 1 best illustrates the general environment of the assembly. A lavatory, or sink, indicated generally by the numeral **10**, is of any typical construction, having a bowl **12** for receiving and retaining water, or whatever fluid is dispensed therein. The bowl **12** is provided with the usual drain, not shown, for emptying the bowl as desired. Rearwardly of the bowl is a ledge back **14**, extending upwardly above the bowl and in which are mounted the hot and cold valves having handles **16** and **18**, respectively. Intermediate the faucets **16** and **18** is a spout structure, indicated generally by the numeral **20**, through which the incoming water flows to the sink bowl **12**. A suitable lift knob **22**, mounted on the spout structure **20**, is suitably connected to the means operating the drain in the bowl **12** to permit closing or opening such drain in the well known manner.

Referring next to FIGURE 2, the structure of the lavatory fitting, indicated generally by the numeral **24**, is best shown. Spaced valve bodies **26** and **28** are provided and may be of identical construction, except that one is the mirror image of the other. Valve body **26** may be connected to a hot water inlet pipe **30** in any suitable manner, and valve body **28** may be connected to a cold water inlet pipe **32** in any suitable manner. Extending from each valve body **26** and **28**, and toward the other valve body, is a conduit **34**, the conduits **34** terminating in spaced relation relative to each other. Such conduits **34** serve as outlets from the valve bodies **26** and **28** to convey water from the inlet pipes **30** and **32** as controlled by the valve structures within the valve bodies **26** and **28** and which are of conventional construction. Extending forwardly from the valve bodies **26** and **28** are threaded members **36** to which are secured the handles **16** and **18** and within which the valve operating mechanism is confined.

Disposed between valve bodies **26** and **28** is a central conduit member, indicated generally by the numeral **38**, having a forwardly extending arm **40** extending through a suitable aperture **42** in the ledge **14** and to which is attached the spout structure **20** in any suitable manner. Such connection may include a threaded end on the conduit portion **40**, received in mating threads in the body of the spout structure **20**.

Extending outwardly from the center conduit member **38** are conduit arms **44** which are telescopingly and slidably received in the outlet conduits **34** extending from the valve bodies **26** and **28**. Such slidable connections between the outlet conduits **34** and the arms **44** permits variation in the distance between the valve bodies **26** and **28**, depending upon the location of valve apertures **46** in the ledge back **14**.

Adjacent the outward ends of each of the extension arms **44** are annular grooves **48** to receive and retain sealing rings **50**, preferably of the O ring type, such seal-

ing rings engaging the inner surface of the outlet conduits 34 extending from the valve bodies 26 and 28. Sealing rings 50 provide a sealed connection between the outlet conduits 34 and the extension arms 44 to prevent the leakage of fluid therepast, regardless of the extension of the conduits 34 and so long as the telescoping connection is maintained.

It is to be understood that even though the drawing illustrates the extension arms 44 being received within the outlet conduits 34, it is possible to reverse the construction and provide extension arms that will receive therewithin the outlet conduits 34, with sealing means adequately disposed therein to seal the sliding connection.

In order to mount the lavatory fitting assembly 24 in the ledge back 14, mounting nuts 52 are threadedly received on the threaded extensions 36 of the valve bodies 26 and 28. Flanges 54 on the opposite side of the ledge 14 from the assembly 24 cover the apertures 46 and are suitably received on the threaded extensions 36 to clamp the ledge back 14 between the nuts 52 and the flanges 54.

Thus, a lavatory fitting assembly is provided which may be easily adapted to varied spacing between apertures in ledge back lavatories so that it is not required that a separate lavatory fitting assembly be provided for each variation in spacing in ledge back structures. Such device is easily mounted in the ledge back and provides a secure and leak-proof construction which is economical to manufacture and assemble.

Numerous alterations and modifications to the structure will occur to those having skill in the art after having had reference to the foregoing description and drawing. However, it is not intended to limit the scope of the invention by the foregoing description and drawing but by the scope of the appended claims.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A lavatory fitting adapted to be mounted on a lavatory ledge having a plurality of spaced apertures therein and comprising:

a pair of spaced valve bodies having fluid inlet means therein, each of said valve bodies having a fluid outlet conduit extending therefrom and toward the other of said valve bodies, said outlet conduits terminating in spaced relation relative to each other;

a center conduit member having portions extending toward each of said outlet conduits and being slidably and telescopingly received therein to permit extension of said valve bodies relative to said center conduit member for mounting in some of said apertures in said ledge, said member having another portion extending from said first-named portions and adapted to extend through another of said apertures in said ledge;

sealing means disposed between said outlet conduits and said portions of said center conduit member to prevent fluid flow therebetween;

a spout member received on said other portion of said conduit member and on the opposite side of said ledge;

and valve means in said valve bodies to control fluid flow therethrough.

2. The lavatory fitting set forth in claim 1 wherein said portions of said center conduit member are each provided with an annular groove adjacent the end thereof, and an O ring received in said groove for sealing engagement with said portions of said center conduit member and with said outlet conduits.

3. The lavatory fitting set forth in claim 1 wherein each of said portions of said center conduit member is provided with a pair of spaced grooves adjacent the end thereof, and an O ring received in each of said grooves for sealing engagement with said portions of said center conduit member and with said outlet conduits.

4. The lavatory fitting set forth in claim 3 wherein each of said valve bodies is provided with a threaded portion adapted to extend through an aperture in said lavatory ledge, and a nut member threadedly received on said threaded portion and adapted to engage said lavatory ledge and retain said fitting thereon.

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