

United States Patent

Carfora

[15] 3,696,448

[45] Oct. 10, 1972

[54] LAVATORY-WATER CLOSET
COMBINATION

[72] Inventor: Joseph Carfora, Verona, Pa.

[22] Filed: June 25, 1971

[21] Appl. No.: 156,698

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 856,621, Sept. 10, 1969, Pat. No. 3,588,922.

[52] U.S. Cl.4/3

[51] Int. Cl.A47k 4/00

[58] Field of Search4/1-3, 68

References Cited

UNITED STATES PATENTS

1,868,760 7/1932 Norberg4/3
1,935,779 11/1933 Kemach4/3
2,331,592 10/1943 Bagwell4/68 X

2,595,009 4/1952 Sillen4/3
2,860,348 11/1958 McClenahan4/3
3,015,827 1/1962 Iwata4/3 X

FOREIGN PATENTS OR APPLICATIONS

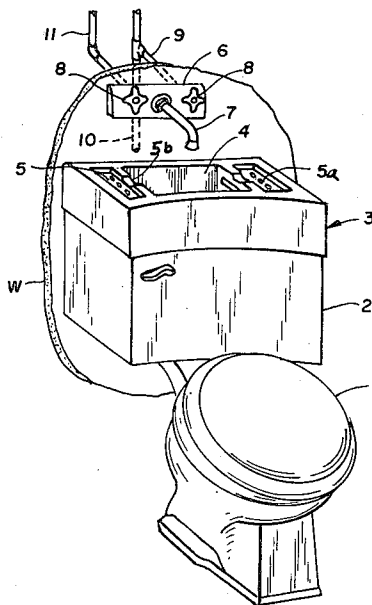
255,523 2/1963 Australia4/3
1,490,029 6/1967 France4/2

Primary Examiner—Henry K. Artis
Attorney—William J. Ruano

[57] ABSTRACT

A lavatory for mounting on a flush tank of a toilet, such as used in a powder room or other room involving very limited space. The lavatory replaces the lid of the closet tank and is completely separate from a water faucet connection thereabove to hot and cold water pipes located behind a wall, so as to enable the lavatory to be lifted independently of the faucet when repairs in the closet tank are necessary.

5 Claims, 5 Drawing Figures



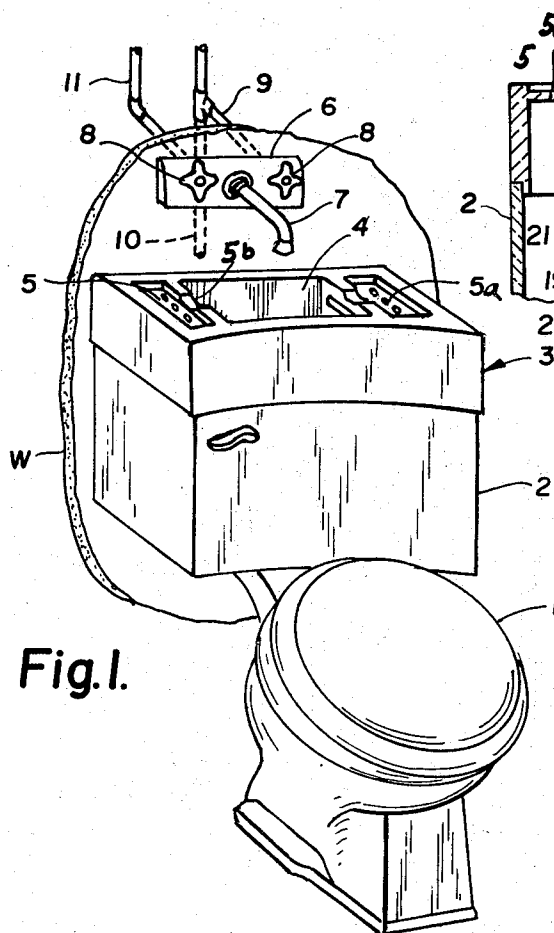


Fig.1.

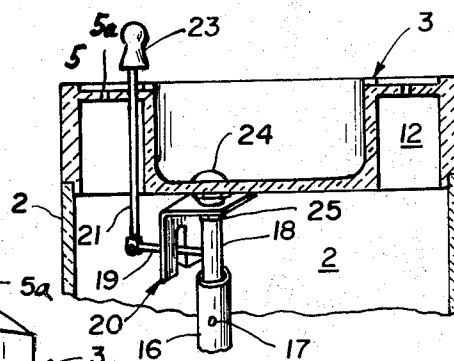


Fig. 4.

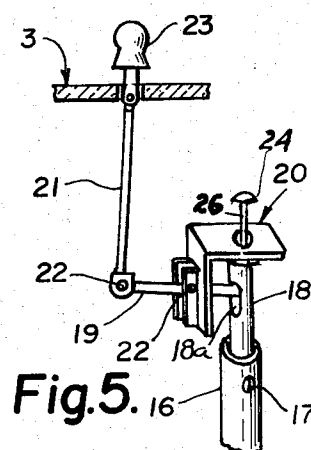


Fig.5.

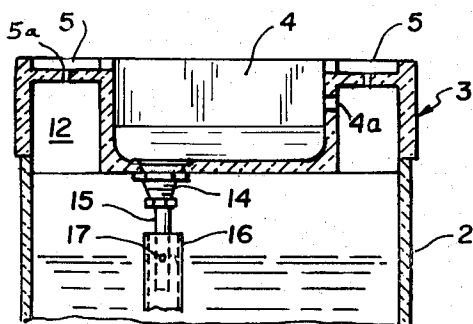


Fig.2.

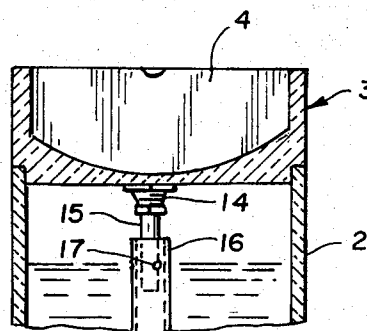


Fig.3.

INVENTOR.

JOSEPH P. CARFORA

BY

BY
William J. Ruano
his ATTORNEY

his ATTORNEY

LAVATORY-WATER CLOSET COMBINATION

This application is a continuation-in-part of my patent application, Ser. No. 856,621, filed 10, 1969, maturing as U.S. Pat. No. 3,588,922.

This invention relates generally to a lavatory and toilet combination and, more particularly, to a lavatory that is adapted to be mounted on top of the closet tank of the toilet.

An outstanding disadvantage of conventional powder room lavatories is that most are separately mounted from the toilet, therefore require additional space and separate drainage.

It has been heretofore suggested, in the past, to install a complete lavatory on top of the closet tank. However, such arrangement has not been practical nor adopted generally because it made the lavatory almost inaccessible in times of needed repairs to the water closet tank by requiring complete disassembly of the lavatory and its integrally mounted faucet connection to hot and cold water pipes.

An object of the present invention is to provide a novel lavatory for a closet tank of a toilet which will overcome the abovenamend disadvantages of well known lavatories by enabling easy and quick access to the closet tank when in need of repairs.

Another object of the present invention is to provide a very inexpensive lavatory that may be easily and quickly adapted to existing water closet tanks and which involves a minimum of expense and time for installation.

Still another object is to provide a relatively simple lavatory construction that is easy to install without requiring an additional drain or trap and which is easy to remove.

Other objects and advantages will become more apparent from a study of the following description taken with the accompanying drawing wherein:

FIG. 1 is a perspective view of a lavatory and closet tank combination of a toilet and embodying the principles of the present invention;

FIG. 2 is a fragmentary, cross-sectional view taken longitudinally of the lavatory closet tank combination shown in FIG. 1;

FIG. 3 is a fragmentary, cross-sectional view taken transversely of the lavatory closet tank combination shown in FIG. 1;

FIG. 4 is a cross-sectional view similar to FIG. 2 but showing a stopper plug operating means; and,

FIG. 5 is a top, perspective view separately showing the stopper plug operating means of FIG. 4.

Referring more particularly to FIG. 1 of the drawing, numeral 1 denotes a toilet of conventional design having the well known flush tank 2.

In accordance with the present invention, and in place of the conventional lid (not shown) of the flush tank 2, there is provided a substantially rectangular lavatory, denoted generally by numeral 3, having soap trays or wells, 5 with drain openings 5a, on the sides thereof with grooves 5b for drainage into bowl 4 which has an overflow drain 4a (see FIG. 2). Water will drain at 4a from bowl 4 through hollow spaces 12 under the tray and into flush tank 2.

At the bottom of the bowl 4 there is a conventional drain 14 connected to a drain pipe 15 which extends into the upper end of the flush tank existing overflow

drain pipe or tubes. Holes 17 are provided in the existing overflow tube 16 so that in case of overflow in the flush tank 2 caused by drainage from bowl 4, water will drain freely through tube 16.

A vertical slot 18a is provided in drain tube 18 into which projects one end of lever 19 pivoted on pivot pin 22 to mounting bracket 20 fastened by jam nut 25 to the bottom of the bowl. Operating arm or lever 21 is pivotally connected at its lower end to lever 19 and is connected at its upper end to operating knob 23. The free end of lever 19 projects into slot 18 and into a slot formed at the bottom of rod 26 extending inside and axially of tube 18, the top of which rod is connected to stopper or plug 24.

In operation, when knob 23 is lifted, lever 19 is pivoted clockwise and will pull rod 26 downwardly together with stopper 24 thereby plugging the bowl drain hole. When knob 23 is lowered, lever 19 lifts rod 26, thereby raising stopper 24 and unplugging it from the drain hole to permit drainage of water from the bowl into the flush tank.

As shown in FIG. 1, the faucet 7 is mounted on a base 6, on which is mounted hot and cold water valve 8.

Base 6 is preferably mounted on a wall W, as shown, and connections are made between the hot and cold water pipes 9 and 11 and valve 8 by selective turning of the valves 8. The faucet and valve combination is mounted well above the top level of lavatory 3, say about three inches above, so that the lavatory may be lifted from the top of flush tank 2 and removed therefrom without interference by the faucet and valves, that is, the lavatory fixtures when repairs are needed in the tank. Of course, the valve and faucet assembly and the hot and cold water pipes 9 and 11 may be located in front of the wall, if so desired, instead of on the rear as shown. Furthermore, separate hot and cold water faucets may be separately mounted on the wall if so desired.

Lavatory 3 is preferably made of molded plastic material, however it may be made of vitreous material, such as porcelain or even metal, as desired. If desired, the sidewalls of the lavatory may be funnel shaped and flexible so as to fit varying top dimensions of existing water closets.

Thus it will be seen that I have provided a highly efficient lavatory-closet tank combination that enables easy and quick installation of a lavatory on existing water closet tanks at very low cost and which can fit a variety of water closet tanks; also, I have provided a novel lavatory construction which separates the fixtures from the bowl to enable easy access to the interior of the water closet for purposes of repair; also, I have provided a novel molded lavatory which is very inexpensive to manufacture and to assemble.

While I have illustrated and described a single specific embodiment of my invention, it will be understood that this is by way of illustration only and that various changes and modifications may be made within the scope of the following claims.

I claim:

1. For use in combination with a flush tank of a conventional toilet provided with said flush tank, a substantially rectangular, faucetless lavatory bowl detachably mounted on top of said flush tank in place of the lid thereof, a water faucet fixture mounted en-

3

tirely separately and independently of spaced above said lavatory bowl with a clearance therebetween so that said lavatory bowl may be lifted from said flush tank for easy access to the interior thereof without disturbing said separately mounted fixture, a drain hole at the bottom of said bowl, a plug for closing said hole, and means including an operating element exteriorly of said bowl for selectively moving said plug into or out of said drainhole.

2. Apparatus as recited in claim 1 wherein said lavatory bowl has perforated soap wells at the sides thereof under which open spaces are provided for drainage, and an overflow drain on the sidewall of said bowl for draining overflow water from said bowl into said flush tank.

3. Apparatus as recited in claim 1 wherein holes are provided in the top portion of an overflow drain pipe

4

communicating with said bowl at the bottom thereof to permit overflow therethrough from said flush tank.

4. Apparatus as recited in claim 1 wherein said fixture comprises a faucet having a base with valves thereon mounted on the outside of a wall and wherein hot and cold water pipes connected to said valves are located inside said wall.

5. Apparatus as recited in claim 1 together with a tube extending from said drain hole into an overflow drain pipe of said flush tank, a bracket secured to the bottom of said bowl, lever means pivotally mounted on said bracket and connected to a plug for plugging said drain hole, and an operating knob extending above said bowl and connected to said lever means to enable selective opening and closing of said drain hole.

* * * * *

20

25

30

35

40

45

50

55

60

65