June 2, 1931. R. E. CRANE 1,808,294

SANITARY FIXTURE

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Fig. 1

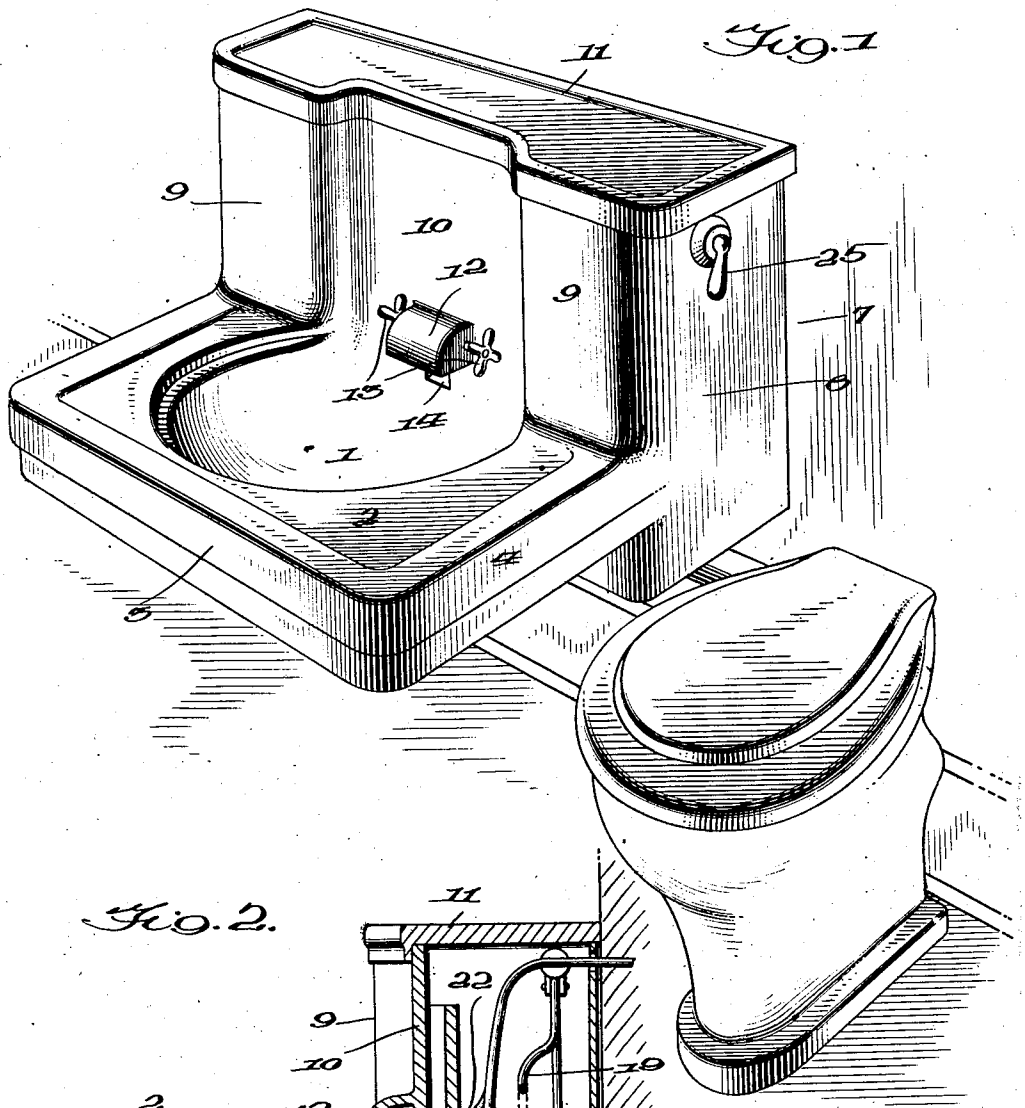

Fig. 2.

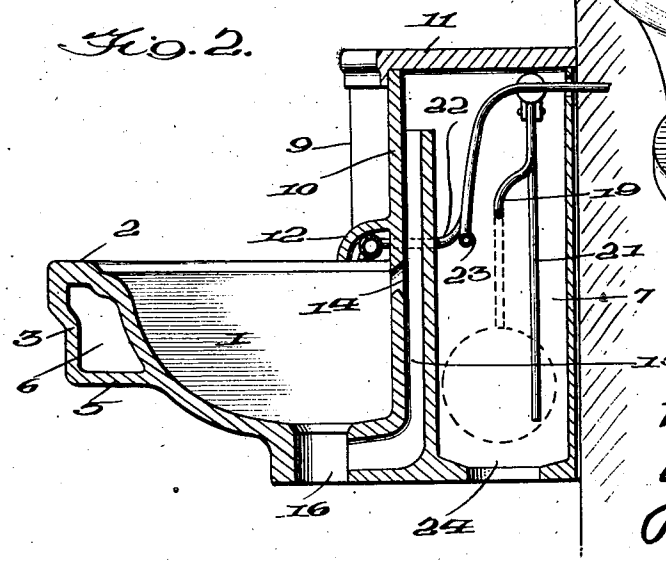

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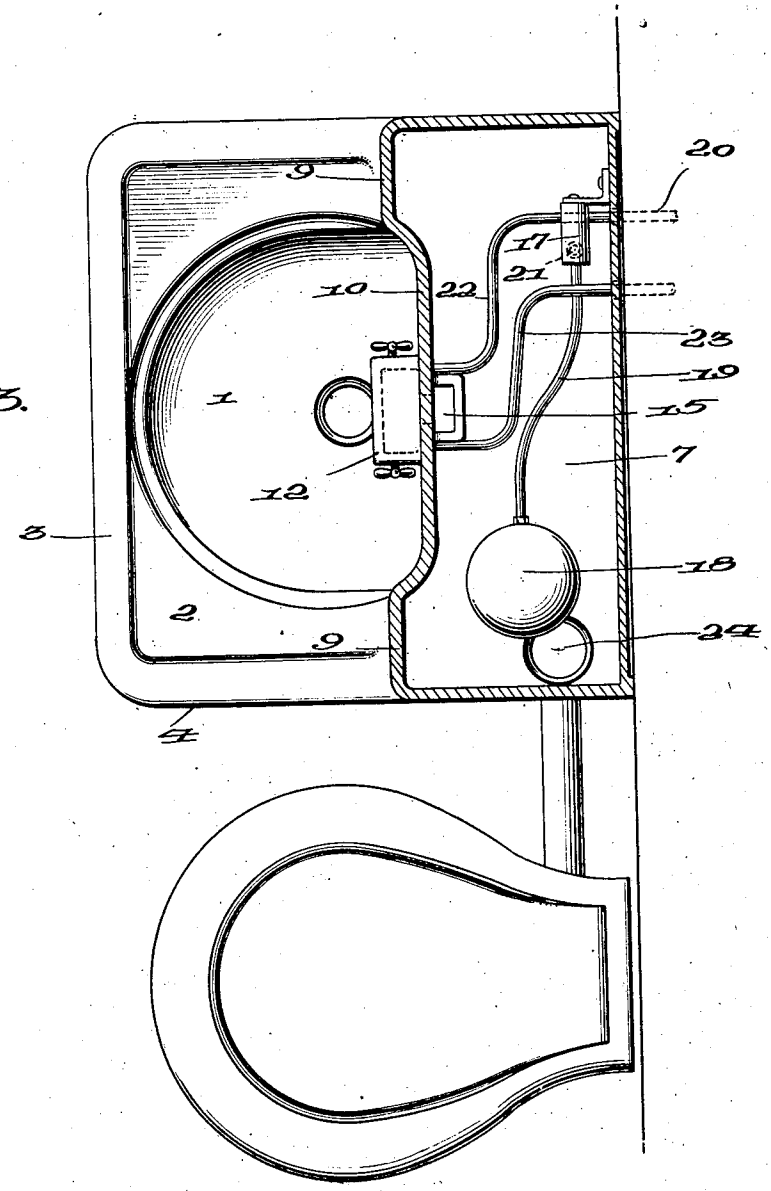
Fig. 3.



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UNITED STATES PATENT OFFICE

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SANITARY FIXTURE

Application filed January 26, 1931. Serial No. 511,386.

This invention relates to certain improvements in sanitary fixtures and particularly to a lavatory having integrally formed therewith, a flush tank for water closets and similar devices.

Most lavatories of present and improved construction are formed with a depending apron extending downwardly to conceal the lavatory basin and these aprons have also been formed to provide enclosed chambers. Some of these fixtures when adapted to be supported from a wall, are also provided with an upstanding apron or slab at the rear.

The object of the present invention is to combine with these types of lavatories, an integrally formed tank or receptacle to be used as a flush tank for closets and the like, without materially increasing the overall dimensions of the lavatory or the expense of manufacture, at the same time eliminating the usual separate closet flush tank and correspondingly reducing the cost of manufacture and installation of said fixtures.

A further object is to provide an improved structure in appearance and to reduce the space usually required for installations of this type.

A further object of the invention from a manufacturer's standpoint is to produce in substantially one molding operation a sanitary fixture comprising an integrally formed lavatory basin and water closet flush tank.

A further object is to simplify the valve mechanism and piping for the lavatory and closet bowl by combining with one "roughing in" operation a single unit adapted to contain or support all of said valve mechanism and piping, whereby a single pipe connection can supply the cold water for the operation of the closet tank and to the lavatory valve or faucet.

One form of the invention, and possibly the preferred one, is illustrated in the accompanying drawings, in which

Fig. 1 is a perspective view of the lavatory and associated closet;

Fig. 2 is a vertical transverse sectional view of the combined lavatory and tank; and

Fig. 3 is a view partly in section and partly in plan of Fig. 1.

Referring to the drawings in detail the improved fixture, comprises a lavatory basin 1 formed with the usual slab 2 and front and side depending apron portions 3 and 4 respectively. These depending apron portions 3 and 4 are joined to the basin 1 by a horizontal web 5, (see Fig. 2) whereby an enclosed chamber 6 is produced surrounding the front and sides of the basin.

Formed integrally with this structure just described, is a tank or like receptacle 7, the side walls 8 of said tank being continuous with the side apron portions 4 of the basin. The front wall of the tank is provided with oppositely disposed forwardly extending portions 9 producing an intermediate recessed portion 10, said recessed portion 10 being formed by an upward extension of the rear wall of the basin 1 and the aforesaid portions 9 being joined to the slab 2 whereby the enclosed chamber 6 surrounding the basin forms a part, and a continuation, of the chamber within the tank 7, said tank being provided with a removable cover 11, all of which is clearly shown in Figs. 1 and 2.

Although this construction is preferred, it is within the scope of the invention to eliminate the chamber surrounding the basin and further, the tank 7 instead of extending above the basin, can be extended below said basin with the entire top of the tank on a level no higher than the top of the lavatory slab. This latter construction would be especially desirable when the fixture is to be placed under a window where wall space is limited. Also by increasing the depth of the aprons 3 and 4 to slightly enlarge the chamber 6, said chamber may then be used in place of tank 7, to the elimination of said tank, in case it would be desirable to make the fixture more compact.

Projecting outwardly from the wall 10 and formed as an integral part thereof is a hood or the like 12 adapted to house and conceal the valve and faucet mechanism for supplying hot and cold water to the lavatory basin, said valve mechanism being operated by conventional handles or the like 13, said hood also concealing the basin overflow opening 14.

It is not thought necessary to show the

details of this valve mechanism but said mechanism is illustrated and described in the Crane and Kaufman Patent No. 1,740,156.

Also formed integral with the fixture and positioned within the tank 7 is an overflow conduit 15 common to both the tank 7 and the overflow opening 14 of the basin 1. The lower end of this conduit discharges into the basin waste 16 and the upper end thereof terminates sufficiently short of the top of the tank 7 to properly perform its function as an overflow for said tank.

Mounted within the tank 7 is a conventional type of ball cock represented at 17, adapted to be controlled by a float 18 operatively connected to said ball cock by a rod 19, all of which is common and well known in the art. Water is supplied to the tank 7 by a pipe 20 passing through the rear wall thereof into the pressure side of the ball cock 17 and upon the opening of said cock when the float drops, during the operation of the mechanism, the water is conducted to the discharge pipe 21 which is made long enough to extend well down into the tank to prevent a noisy discharge of the water while the tank is being filled.

Also connected to the pressure side of the ball cock 17, as a substantial continuation of the pipe 20, is a pipe 22 for conducting cold water to the double supply valve of the lavatory basin housed under the hood 12 hereinbefore described. The hot water for said valve is supplied by a pipe 23, all of said piping being more clearly shown in Fig. 3. It is to be understood that this piping, valve mechanism and float is merely shown in a conventional way to disclose an operative structure and in itself forms no parts of the present invention.

The bottom of the tank 7 is provided with a discharge opening 24 and the contents thereof are permitted to be discharged through said opening by means of any of the ordinary outlet valve mechanisms commonly used in water closet flush tanks to control the flow of water from said tank to the fixture to be flushed.

While there is not shown in the drawings the details of the operating mechanism to open the discharge valve above referred to, there are several types of lever or knob operated mechanisms which can be adapted to this particular structure. Such an operating lever 25 is conveniently located as shown in Fig. 1.

It would also be possible to provide a handle operating a wire pull mechanism on the under side of the reservoir or tank 7, but these matters are more a question of design to those skilled in the art, as there are many satisfactory devices for this purpose, and it is thought unnecessary to herein describe the same.

It can be readily appreciated also by those familiar with the art that it would be possible to discharge the waste water from the basin into the supply chamber of a closet bowl so that a single waste connection to the soil pipe would be the only necessary outlet connection. The present invention is very well adapted to this construction as the provision of a separate trap from the lavatory to the sewer system would be unnecessary. It is further proposed to place the closet bowl close to either side, or directly under the improved lavatory so that a suitable operating mechanism of any ordinary type will be within easy reach of the closet bowl and so arranged that a comparatively short waste connection from the integrally formed flush tank and lavatory, can conduct the water for supplying the closet bowl.

What I claim is:

1. A sanitary fixture comprising a flush tank for closets and the like, having combined therewith and supported thereby a lavatory basin, a discharge outlet for said tank and a separate and independent discharge outlet for said basin.

2. A sanitary fixture comprising a flush tank for closets and the like, having combined therewith in a single fixture a lavatory basin, a discharge outlet for said tank, a separate and independent discharge outlet for said basin and independent means for controlling said outlets.

3. A sanitary fixture comprising a flush tank for closets and the like, having combined therewith a lavatory basin, a conduit for controlling the discharge from said tank and a separate conduit for controlling the discharge from said basin.

4. A sanitary fixture comprising a flush tank for closets and the like, having a lavatory basin formed as an integral part thereof, a discharge outlet for said tank, a separate waste discharge outlet for said basin and means independent of the basin waste for opening and closing the discharge outlet from the tank.

5. A sanitary fixture comprising a flush tank for closets and the like, having a lavatory basin formed as an integral part thereof, said tank and basin being provided with separate inlets and outlets, separate valves for supplying water to the tank and basin and separate and independent means for controlling said outlets.

6. A lavatory fixture comprising a basin, a hollow rim portion formed as an integral part thereof, and a hollow vertically disposed portion, said hollow portions being in communication and comprising a flush tank for a closet or the like, the bottom of the vertically disposed portion being below the bottom of the hollow rim portion.

7. A lavatory fixture comprising a basin, a hollow rim portion partly surrounding said basin and formed as an integral part thereof, and a hollow vertically disposed rear por-

tion, said hollow portions comprising a flush tank for a closet or the like, and a discharge outlet for said vertically disposed hollow rear portion, said outlet being below the bottom of the hollow rim portion.

In testimony whereof I affix my signature.

RAYMOND E. CRANE.