No. 711,135. Patented Oct. 14, 1902.

J. STEWART.

WATER CLOSET OR URINAL.

(Application filed Jan. 30, 1897.)

(No Model.) 2 Sheets—Sheet 1.

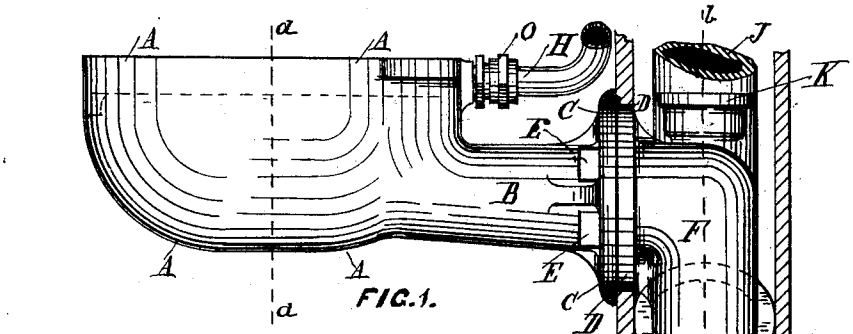


FIG. 1.

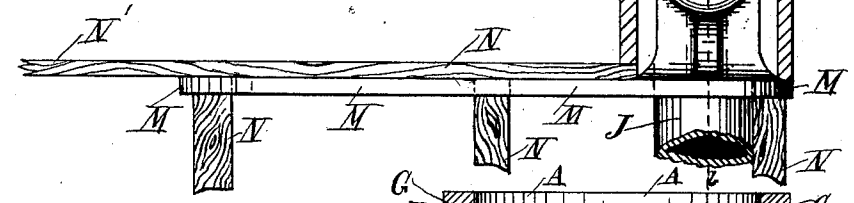


FIG. 2.

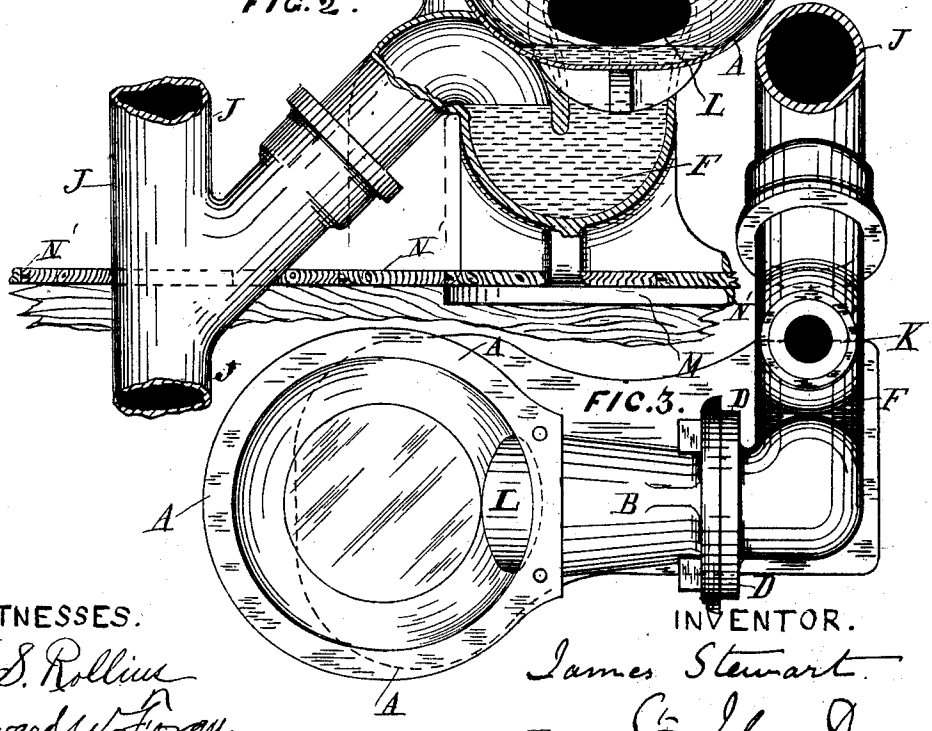


FIG. 3.

WITNESSES.

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FIG. 4.

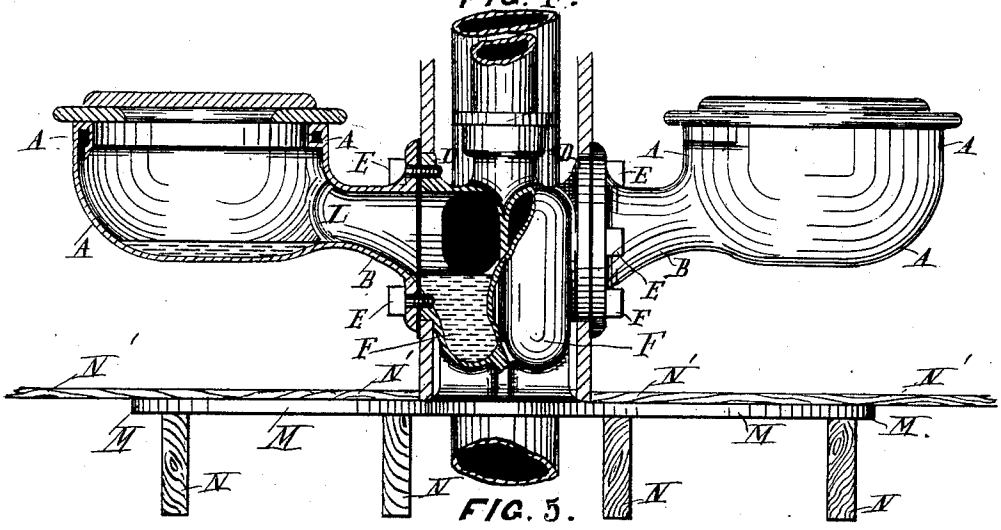
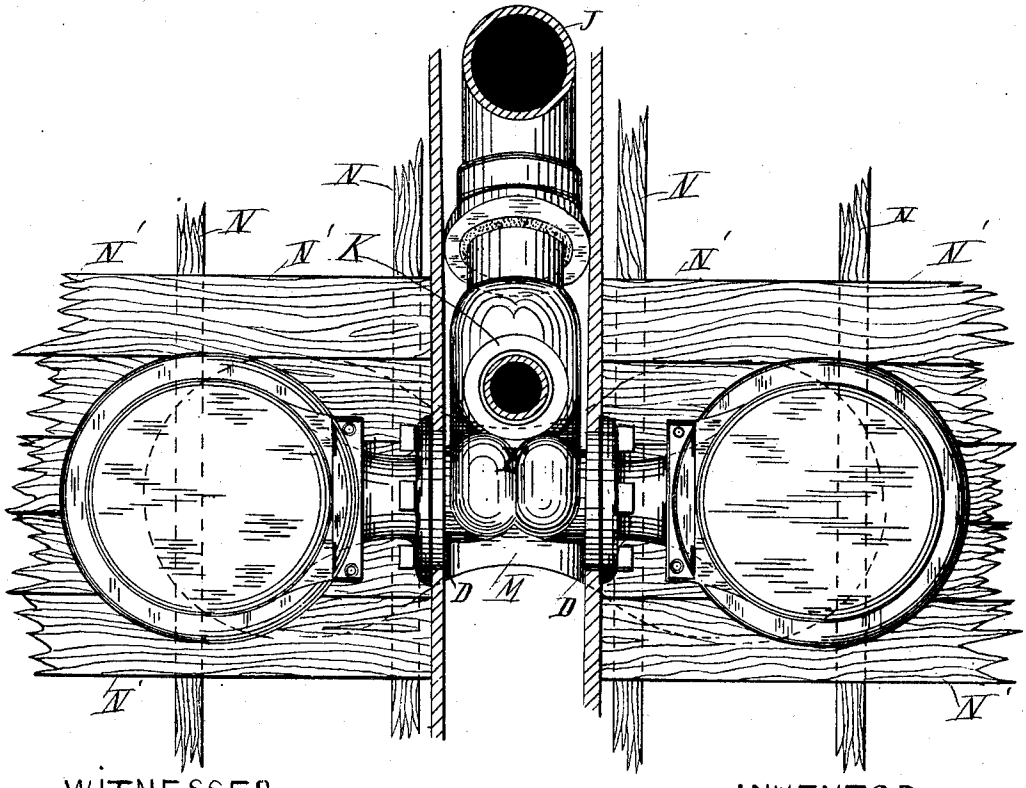


FIG. 5.



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UNITED STATES PATENT OFFICE.

JAMES STEWART, OF LOS ANGELES, CALIFORNIA.

WATER-CLOSET OR URINAL.

SPECIFICATION forming part of Letters Patent No. 711,135, dated October 14, 1902.

Application filed January 30, 1897. Serial No. 621,338. (No model.)

To all whom it may concern:

Be it known that I, JAMES STEWART, of the city of Los Angeles, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Water-Closets or Urinals, of which the following is a full, clear, and exact description or specification, reference being had to the annexed sheets of drawings, and to the letters marked thereon—that is to say:

My invention, which relates to certain new and useful improvements in water-closets and urinals, has for its object to produce a water-closet or urinal which shall leave a clear or unimpeded space under or beneath the bowl of the water-closet or urinal and the floor of the apartment in which such water-closets or urinals are or may be placed, and at the same time to generally simplify the construction and arrangement of water-closets and urinals.

In my improved water-closet or urinal the bowl of the apparatus, wherein fecal discharge or urination is made, projects horizontally outward from the wall or partition of the building wherein the same are contained. The water-closet or urinal is formed with a short horizontal branch provided with a flange, whereby by means of stud-bolts passing through holes in the said flange the same is attached to a corresponding flange upon the water-trap of the apparatus, a joint being made between the flanges of putty, india-rubber, gasket, white lead, tow, or other suitable water-tight packing material. The water-trap is placed within a hollow space of the partition or wall of the building and at right angles to the projecting direction of the bowl of the apparatus, and is connected to the soil-pipe, also placed within the hollow space of the partition or wall, having a ventilating branch and pipe leading upward to and above the roof. The lower part of the trap is provided with a foot, extending horizontally outward beneath the bowl of the water-closet or urinal, and this foot is let into the upper part of the joists supporting the floor of the building, to which it is securely fastened by bolts or screws, and it projects far enough outward horizontally and is of sufficient width to give stability to the projecting bowl of the water-closet or urinal.

My said invention is applicable either to a single closet projecting from one side of a wall or partition of a building or to water-closets or urinals which project upon opposite sides of the partition or wall of a building. In the latter case the trap is made double and with a flange at each side, so that the discharges from the bowls of the water-closets or urinals do not interfere with each other, the two divisions of the trap in this case being connected to a soil-pipe common to both and having a ventilating-pipe common to both divisions of the trap ascending to and through the roof of the building.

On the annexed drawings, Figure 1 is a side elevation of the parts of a single water-closet constructed according to my invention. Fig. 2 is in part a transverse section through the bowl of the same upon the line *a a*, Fig. 1, and the section through the trap of the same on the line *b b*, Fig. 1. Fig. 3 is a plan of the same. Fig. 4 is a view, one-half in vertical section and one-half in side elevation, of a double water-closet and duplex trap constructed in accordance with my invention. Fig. 5 is a plan corresponding to Fig. 4.

In Figs. 4 and 5 my improved water-closet is shown provided with a cover or lid, not, however, as constituting any part of my invention, but as showing a detail of common construction to be used in connection therewith. These covering parts are omitted in Figs. 1, 2, and 3.

In Figs. 1, 2, and 3 the bowl of the closet is marked A, from the rear part of which the branch B projects, being provided with the flange C, by which it is connected to the flange D of the trap by means of the stud-bolts E, which pass through cylindrical holes in the flange C and screw into corresponding tapped or threaded holes in the flange D of the trap F. The bowl of the closet is constructed with the water-passage G, to which water is led from the tank or other source of supply by means of the pipe H and led around the passage G for being discharged into the bowl through the perforations I and through the front discharge (not shown in the drawings) for the purpose of flushing the bowl and discharging the fecal or urinated contents into and through the trap F to the soil-pipe J. The top of the trap F is provided with the faucet K, to which a ventilating-pipe for al-

lowing the gases to pass off through the roof of the building is attached. The bowl is so shaped, as shown in Figs. 1, 2, and 3, as to insure that a small quantity of water—say about an inch or more in depth—is always left in the bowl after the same has been flushed—that is to say, the lower edge of the discharge-opening L is about an inch or more above the bottom of the interior of the bowl. The lower part of the trap is provided with a horizontally-projecting foot M, which rests in or upon the joists N, which carry the floor of the building, the joists being notched, as shown more especially in Fig. 1, to allow the foot M to occupy the notched spaces in the joists and so that the upper surface of the foot M is level or flush with the upper surface of the joists, thus enabling the floor N′ to be laid upon the joists and above the foot M, whereby the foot M is inclosed, resting upon the joists and beneath the floor N. The floor N may be of wood, such as is commonly used in the construction of flooring, or it may be constructed of tiles or slabs of marble, stone, cement, or other suitable flooring material.

The foot M, in place of being formed in one piece or cast with the trap F, may be made separately therefrom and bolted thereto, and the pipe-joints, instead of being flanged or formed as spigots and faucets, as shown in the drawings, may be constructed as screwed joints after the manner generally known as the "Durham" system of plumbing.

In Fig. 3 the centrally-shaded portion in the bowl indicates the quantity of water always remaining in the bowl.

In Figs. 4 and 5 the apparatus is of the same construction as that shown at Figs. 1, 2, and 3. The trap F is formed duplex and with the flange D at each side thereof facing and preferably flush with the opposite wall of the apartments of the building in which the water-closets or urinals are arranged, the discharge branch of the trap entering or being connected with the soil-pipe J, which is common to both divisions of the duplex trap, and having a ventilating branch K, also common to both divisions of the trap.

In Figs. 4 and 5 I have shown the water-closets as provided with a hinged cover, such as is commonly in use, whereby the same may be used either as a seat of a water-closet or when lifted up as a urinal, and when my apparatus is used in connection with bowls which serve the purpose of urinals alone then it is to be understood that the height of the foot connected with the trap is made longer to enable the bowl to be placed at such a height as is suitable or convenient for the purpose of urinating.

The foot M of the apparatus may be made of any convenient shape, the essential feature of such foot being that it should be made long enough and wide enough to give complete stability to the bowl of the water-closet or urinal.

From the construction of my improved water-closets or urinals, as hereinbefore described, and shown upon the annexed drawings, the bowls or urinals are left clear and unimpeded and free from all impediments to prevent the said floor from being washed and otherwise cleaned and maintained in a clean and healthful condition. At the same time by removing the stud-bolts E and disconnecting the coupling O enables the bowl at any time to be easily and quickly removed, so that access is readily obtained to the interior of the trap for cleansing the same or for removing any obstruction which may take place therein. My improved water-closets and urinals are by preference constructed of cast-iron, enameled; but they may be made of other material.

Having now described the nature of my said invention and the best system, mode, or manner I am at present acquainted with for carrying the same into practical effect, I desire to observe in conclusion that what I consider to be novel and original, and therefore claim as the invention to be secured to me by Letters Patent, is as follows:

1. The water-closet or urinal wherein the bowl is connected by a hollow and approximately horizontal branch to the trap of the apparatus, the said trap being arranged at right angles to the projecting bowl, the trap having connected with it a foot projecting horizontally outward and sufficiently far beneath the bowl but without contact therewith so as to support and carry the said trap and bowl of the water-closet or urinal without any other support, the trap being connected with the soil-pipe and ventilating-pipe and the whole operating together in the manner and for the purposes substantially as set forth.

2. The combination constituting my improvements in water-closets or urinals consisting of a projecting bowl, the trap at right angles thereto, the soil-pipe, the ventilating-pipe, the foot projecting horizontally from and attached to the lower part of the trap for carrying and supporting the trap and bowl without any other support, the pipe connecting the bowl of the water-closet or urinal to the source of water-supply for flushing the same thereby providing a water-closet or urinal which does not impede the floor-space of the apartment wherein the same is situated, all in the manner and for the purposes substantially as set forth.

3. The improved water-closet or urinal consisting of two bowls projecting into adjacent apartments from opposite sides of the duplex trap, each division of the trap being connected to one of the water-closet or urinal bowls the two bowls and the two divisions of the said duplex trap being connected to one soil-pipe common to both water-closet or urinal bowls and provided with a ventilating-pipe common to both divisions of the trap, also for supporting the trap and bowls arranged to leave a clear and unimpeded space beneath the bowls, all operating in the man-

ner and for the purposes substantially as set forth.

4. The combination of two water-closet or urinal bowls, the duplex trap, the soil-pipe common to both divisions of said trap, the ventilating branch common to both divisions of said trap and to both bowls, and the foot projecting from the lower part of the duplex trap, beneath each bowl thus leaving a clear or unimpeded space beneath each bowl, the trap arranged at right angles to the bowls, in the manner and for the purposes substantially as set forth.

5. The combination of two water-closet bowls, a soil-pipe common to two water-closet bowls and also common to a duplex trap, each division of which trap is separately connected to each bowl, a ventilating-pipe common to both bowls and common to both divisions of said trap and a foot common to the two bowls and the two traps, all operating together in the manner and for the purposes substantially as hereinbefore described.

In testimony whereof I have hereunto set my hand and seal, in the presence of two subscribing witnesses, this 12th day of January, A. D. 1897.

JAMES STEWART. [L. S.]

Witnesses:
EDWARD V. FORGY,
ST. JOHN DAY.