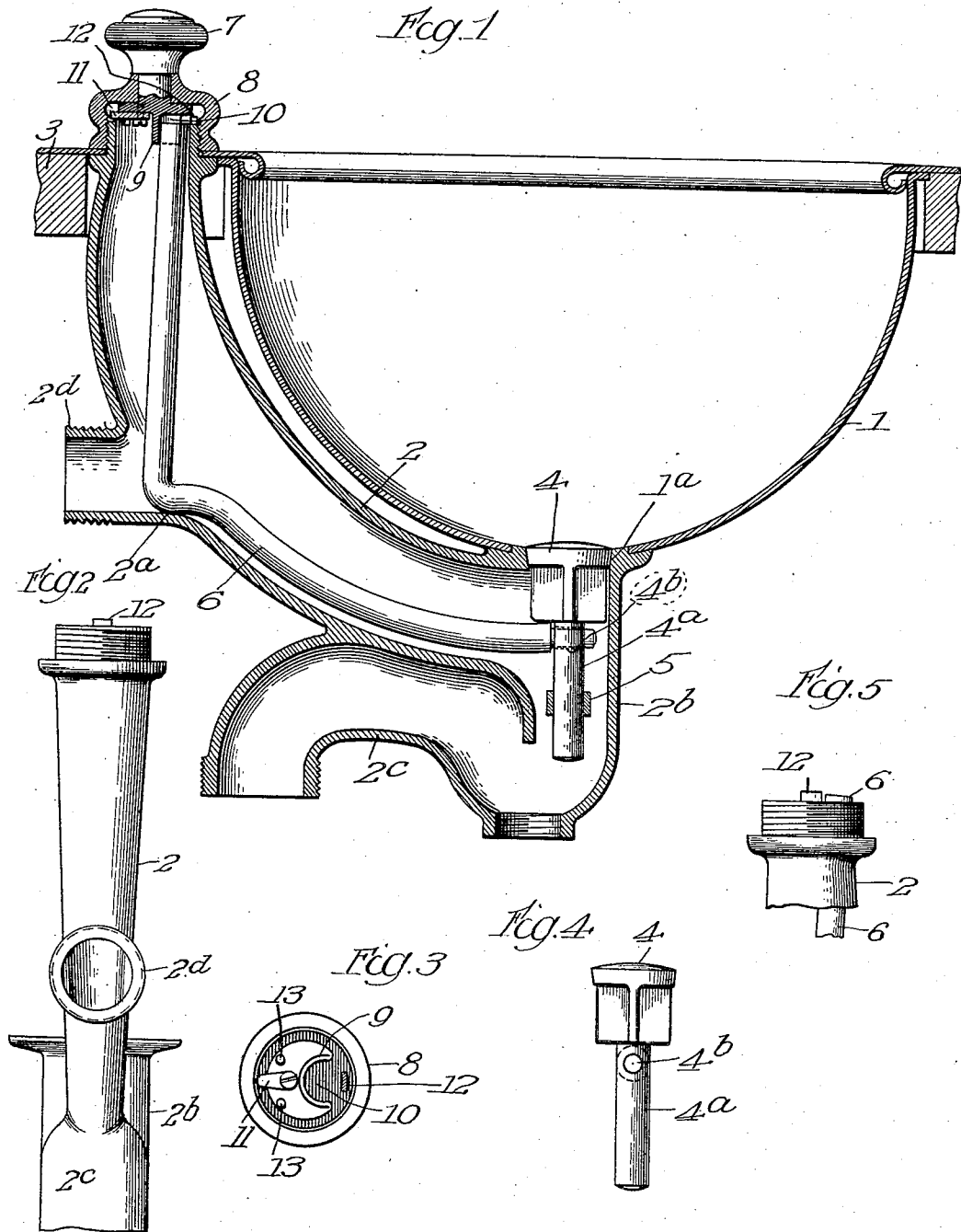


E. G. WATROUS.
LAVATORY FIXTURE.
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Patented Jan. 30, 1912.



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UNITED STATES PATENT OFFICE.

EARL G. WATROUS, OF CHICAGO, ILLINOIS.

LAVATORY-FIXTURE.

1,016,051.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EARL G. WATROUS, a citizen of the United States, residing at Chicago, Cook county, Illinois, have invented certain new and useful Improvements in Lavatory-Fixtures, of which the following is a specification.

My invention relates to lavatory fixtures, such as wash bowls or basins, and the object thereof is to provide novel, simple and efficient means for operating the waste valve or plug of such bowl and also to provide a fixture in which the trap and waste connection are combined.

In the drawings, Figure 1 is a vertical section of my lavatory fixture; Fig. 2 a side elevation of a portion thereof; Fig. 3 a bottom plan of the clamping nut and operating knob therein; Fig. 4 a detail view of the waste plug; and Fig. 5 an elevation of the upper portion of the tube or casing for the operating devices of the waste plug, with the clamping nut removed.

In the present instance my invention is embodied in a lavatory fixture suitable for use on railway cars, although the same is applicable to lavatory fixtures whatever the particular use to which they may be put.

Describing the form of fixture illustrated in the drawing, the bowl 1 is of metal and is here shown as secured in suitable manner at its bottom to a casing 2 which extends over the drain opening along one side of the bowl and through the usual support 3 therefor and incloses the operating connections for the waste plug as hereinafter described, the same forming in addition a portion of the trap. In the present instance this casing is provided with the drain opening 1^a which is controlled by the waste plug 4 having a vertical movement and guided in such movement by means of the lugs 5 through which the depending stem 4^a of such plug passes. For operating the waste plug I provide an operating rod 6 located in said casing 2 with its lower end engaging the stem of the waste plug by passing through the hole 4^b therein and with its upper end extending upwardly through said casing and slightly above the upper plane thereof. The construction and arrangement of this operating rod is such that a rotary or oscillating movement imparted to its upper end gives a vertical movement to its

lower end and consequently a vertical movement for the waste plug for the opening and closing of the drain opening of the bowl. To this end the operating rod is made somewhat L-shaped with its angled portion resting upon the shoulder 2^a of said casing as a fulcrum. For the convenient operation of this operating rod I provide a rotary or oscillating knob 7 which is mounted to oscillate in the clamping nut 8, or cap, which screws upon the upper end of the casing 2 and serves to clamp said casing in position as indicated in Fig. 1. The lower inner end of this operating knob is provided with a depending semi-circular flange 9 forming a socket 10 which engages the upper end of the operating rod 6, with the result that such rod is oscillated in unison with the knob. For the purpose of limiting the movement of the operating knob to a single rotation or substantially so, I provide an arm 11 pivoted to the lower face of the knob and adapted to cooperate with the fixed lug 12 projecting upwardly from the upper edge of the casing 2, the movements of the pivoted arm 11 being limited by the stop projections or pins 13 on such lower face of the knob. As a result of the described construction the waste plug is opened or closed by a partial oscillation of the operating knob 7, such movement being substantially a half-rotation. In practice when the operating knob is at its limit of rotation, the waste plug is in its resting or open position and is in its closed position when the operating knob is at an intermediate position. Thus, with said partial oscillation of the operating knob, the waste plug may be brought to an open or closed position, according to the direction of oscillation.

In the present instance the casing 2 connects at its lower end with and forms a part of a combined waste and trap, the waste portion being shown at 2^b and the trap at 2^c. In this manner the trap and waste are incorporated in a single unitary structure, thereby simplifying and compacting the structure.

The particular fixture being described is designed to be employed in railway cars and the same is consequently provided with a connection 2^a adapted to communicate with the usual drain of the water cooler of the car, although as will be understood the

same is not essential and may be dispensed with when the fixture is employed for other uses.

I claim:

5 1. In a lavatory fixture, the combination with a bowl having a drain opening and a vertically movable plug for controlling such opening, of an operating rod connected at its lower end to the plug and fulcrumed to
10 permit oscillation about a vertical axis at its upper end for operating the plug.

2. In a lavatory fixture, the combination with a bowl having a drain opening and a vertically movable plug for controlling such
15 opening, of an operating rod connected at its lower end to the plug and fulcrumed intermediate its length, the upper end of the rod being capable of oscillation about a vertical axis whereby the plug is movable vertically.
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3. In a lavatory fixture, the combination with a bowl having a drain opening and with a vertically movable plug for controlling such opening, of an operating rod connected at its lower end to the plug and fulcrumed intermediate its length, the upper
25 end of the rod being capable of oscillation about a vertical axis whereby the plug is movable vertically, and means for oscillating the upper end of the rod.
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4. In a lavatory fixture, the combination of a bowl having a drain opening and a vertically movable plug for controlling such opening, of an operating rod connected at
35 its lower end to the plug and fulcrumed intermediate its length, the upper end of the rod being capable of oscillation about a vertical axis whereby the plug is movable vertically, and a rotatable hand knob eccentrically connected with the upper end of the
40 rod for oscillating the latter.

5. In a lavatory fixture, the combination with a bowl having a drain opening and with a plug for controlling said opening, of an
45 operating rod comprising a vertical and a transverse member forming a sharp bend at their meeting point, a seat receiving the bend of the rod and forming a fulcrum for the same.

6. In a lavatory fixture, the combination with a bowl having a drain opening and with a vertically movable plug for controlling such opening, of an operating rod substantially L-shaped with its lower end or
50 member connected with the plug, and a casing connecting with the bowl at its outlet and extending upwardly outside thereof, said casing inclosing the rod and having a shoulder on which the same is fulcrumed at
55 the junction of its two members.
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7. In a lavatory fixture, the combination with a bowl having a drain opening and with a vertically movable plug for controlling such opening, of an operating rod connected at its lower end to the plug and fulcrumed intermediate its length, the upper
65 end of the rod being capable of oscillation about a vertical axis whereby the plug is moved vertically, and means for limiting the oscillation of such knob.

8. In a lavatory fixture, the combination with a bowl having a drain opening and with a vertically movable plug for controlling such opening, of an operating rod composed of a substantially vertical and a transverse member connected at its lower end to the plug and loosely held at the junction of its vertical and transverse members, the upper
70 end of the rod being capable of oscillation whereby the plug is moved vertically, and a hand-knob having on its lower face a depending semi-circular flange forming a socket to engage the upper end of the rod.
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9. In a lavatory fixture, the combination with a bowl having a drain opening and with a vertically movable plug for controlling such opening, of an operating rod connected at its lower end to the plug and fulcrumed intermediate its length, the upper
80 end of the rod being capable of oscillation about a vertical axis whereby the plug is moved vertically, a hand-knob having a socket to engage the upper end of the rod.
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10. In a lavatory fixture, the combination with a bowl having a drain opening and with a vertically movable plug for controlling such opening, of an operating rod substantially L-shaped with its lower end or member connected with the plug, a casing connecting with the bowl at its outlet and extending upwardly outside thereof, said
90 casing inclosing the rod and having a shoulder on which the same is pivoted at the junction of its two members, a clamping nut engaging the upper end of the casing, and a hand-knob adapted to oscillate in such nut and engaging the upper end of the rod.
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11. In a lavatory fixture, a bowl, a drain opening in the latter, a plug for closing the opening, a rod comprising a transversely extending and a vertical portion loosely engaging the plug, the specified portions and the rod forming at their junction a sharp bend and means for loosely supporting the rod at said bend.
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12. In a lavatory fixture, a bowl having a drain opening, a plug for closing the latter, a rod comprising a transversely extending and a vertical portion loosely engaging the plug, a casing inclosing the rod and provided with a shoulder by which the latter
105 is loosely supported substantially at the junction of the vertical and transversely extending portions, and means for oscillating the rod.
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13. In a lavatory fixture, a bowl having a
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drain opening, a plug for closing the latter, a rod comprising a transversely extending and a vertical portion loosely engaging the plug, a casing inclosing the rod and provided with a shoulder by which the latter is loosely supported substantially at the junction of the vertical and transversely extending portions, and means for rotating the upper end of the rod about a vertical axis.

14. In a device of the class described, the combination of a bowl having a drain opening, a plug for closing the same, a rod con-

nected to the plug for operating it and fulcrumed to permit a rotary motion of its free end, operating means for the end of the rod comprising a handle 7 and a socket 10, the latter for engaging the free end of the rod, an arm 11 pivoted to the rod operating means and a stop 12 with which the arm 11 coöperates to limit the movement of the rod.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."