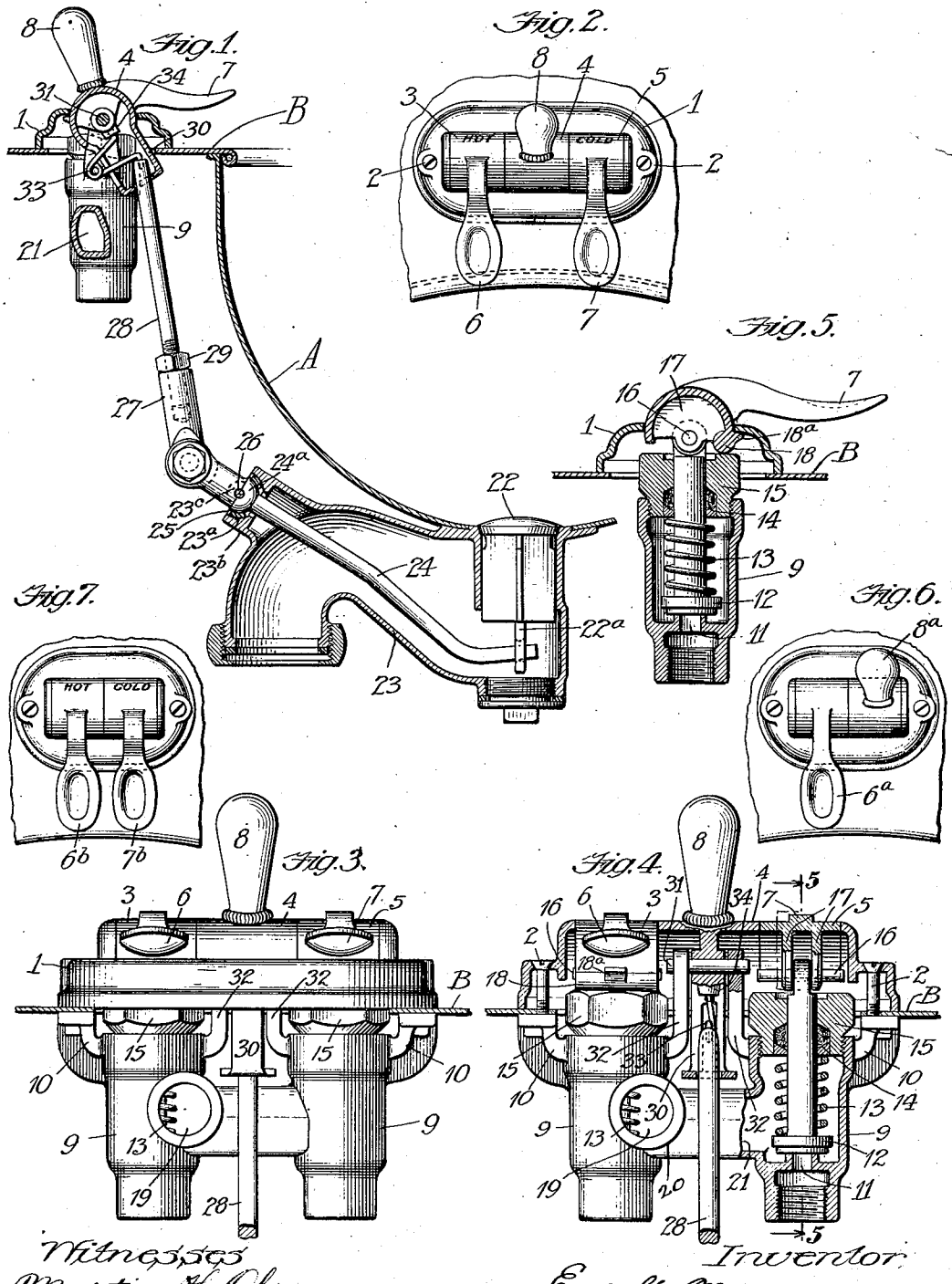
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LAVATORY.

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LAVATORY.

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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 Lavatories, of which the following is a specification.

My invention relates to lavatories and the object thereof is to provide simple and efficient operating and controlling fixtures for the hot and cold water and for the waste plug. My lavatory is intended more particularly for use on railroad cars where it is necessary to have compact fixtures capable of easy and reliable operation.

In the drawing Figure 1 is a sectional elevation of a portion of a bowl with my fixtures applied thereto; Fig. 2 a plan view of the hot and cold water fixture; Fig. 3 a front elevation thereof but on a larger scale; Fig. 4 a similar view but showing some of the parts in section, Fig. 5 a section on the line 5—5 of Fig. 4; and Figs. 6 and 7 different simplified and modified forms of my invention.

The bowl A may be of any suitable or conventional form and may as usual be provided with the top plate B. Upon the top plate is mounted a cap plate 1 secured thereto in suitable manner, as by the screws 2. This cap is open at its top in order to receive and accommodate the operating members controlling the hot and cold water valves. These members consist of three substantial half cylinders or shells 3, 4 and 5, the outer two of which are associated with the hot and cold water valves and the intermediate one of which is associated with the waste plug. These cylinders are provided with handles, the cylinders 3 and 5 being provided with similar handles 6 and 7 projecting forwardly toward the bowl and the cylinder 4 with an upstanding handle 8. These cylinders are placed end to end and form a continuous surface which fills the top opening of the cap and matches the contour thereof.

The hot and cold water valve mechanisms are the same so that a description of one will apply to the other. These mechanisms are contained within similar casings 9 secured to the under side of the top plate B through the medium of the side brackets 10. The water enters the lower end of the casing and is adapted to pass through a port 11 which is controlled by the vertically operating valve 12 normally held seated by means of the spring 13, which encircles the stem 14 of the valve. This stem passes upwardly through the packing nut 15, screwing into the upper end of the casing and is pivotally connected to its shell or cylinder by means of the cross pin 16 passing through the upper end of the valve stem and through downwardly projecting lugs or ribs 17 of such cylinder. Each of the cylinders 3 and 5 is provided along one edge with a depending curved projection or bead 18 which bears upon the top of the nut 15, with the result that when the cylinder is oscillated by downward pressure of the handle 6 or 7, the valve stem and valve 12 will be raised against the tension of the spring 13, with the result that the water will be supplied to the bowl through the opening 19 and pipe 20, it being understood that there is a cross passage 21 between the two casings 9. When the pressure of the hand is removed from the handle 6 or 7, the spring 13 will restore the parts to the normal position shown, the cylinders being stopped in such normal position by the engagement of the lug 18^a against the under side of the cap 1.

Referring to the waste plug fixture, the bowl A is provided with a central opening controlled by a vertically movable valve or plug 22 and is also provided with a suitable coupling which is here in the form of an elbow 23. An operating rod 24 extends through this fitting 23 and its annular free end passes through a slot or opening in the depending stem 22^a of the plug. This rod toward its other end is provided with a ball formation 24^a received within a socket 23^a formed on the outside of a boss 23^b through which such rod passes. By preference suitable packing material 25 is provided between this ball and its socket in order to pack the joint at this place. This rod is pivoted at its ball-and-socket by means of the cross pin 26 passing through such rod and also through the lugs 23^c. The extreme outer end of the rod is pivotally connected to a short rod or sleeve 27 into which screws for adjustment purposes the actuating rod 28, a lock nut 29 being employed to maintain the proper adjustment between the parts 27 and 28.

Referring to the operating connection between the cylinder 4 and the actuating rod 28 such cylinder is provided with a depending frame 30, through an opening in the bottom of which the upper end of the rod 28 passes freely. The cylinder 4 and this frame 30 is mounted to oscillate by means of the pin 31 passing through such frame and through two parallel arms 32 extending upwardly from the casings 9. In order that the operating rod 28 shall pass beyond center and thereby be held in one position or the other, a bent wire spring 33 is provided, the same being substantially V-shaped with its free ends entering respectively an opening in the outer end of the rod 28 and an opening in a boss 34 in the frame 30.

When the parts are in the position shown in Fig. 1 the waste plug is closed but when the handle 8 is drawn forwardly toward the bowl the cylinder 4 and the frame 30 will be oscillated in a clockwise direction, with the result that the rod 28 will be depressed and the rod 24 thereby moved upwardly as to its free end, with the result that the plug 22 will be elevated or opened. When the handle 8 is moved forwardly to full extent it will be held in that position by reason of the fact that the connection between the operating rod 28 and the frame 30 will be off-center requiring application of positive force to the handle 8 before the reverse operation can take place and the plug be thereby closed. The operating connections for the waste plug, particularly the employment of the ball-and-socket joint, and the adjustment between the parts 27 and 28, permit of the attachment of my fixture to different bowls having a wide range of size and style.

The pivot pins 16 and 31 are not individually locked in position but are maintained in position when all the parts are assembled, it being observed from Fig. 4 that the pins 16 are limited in their endwise movement by the cap 1 and the brackets 32, and likewise the pin 31 is limited in endwise movement by the other pins 16. The hand-operated members can be disassembled by removing the cap 1 and the handle 8, whereupon the pivot pins are free to be removed.

While I have above described my invention as embodied in a lavatory fixture having valves for both hot and cold water and mechanism for operating a waste plug, only a single water admission valve may be employed, if desired, as in the simplified form of my device illustrated in Fig. 6, in which 8^a indicates the operating handle for the waste plug connection and 6^a indicates the handle for the water admission valve; or the waste plug connections may be dispensed with, as in the modified form of my invention illustrated in Fig. 7 in which the reference character 6^b and 7^b indicate the handles of the hot and cold water valves, respectively.

I claim:

1. In a lavatory having a bowl and a plurality of independently operable mechanisms for controlling water flow with respect to the bowl, a part having upstanding ends and an intermediate opening, a series of handled members having their handles projecting within convenient single-hand-grasp, said members arranged in axial alinement, extending through and substantially filling said opening, and mounted for individual oscillation, and operating connections between said members and said water flow controlling mechanisms.

2. In a lavatory, the combination, with valve mechanisms for hot and cold water, of a cap having a top opening, oscillating half cylinders arranged in axial alinement and projecting through said opening and operating connections between said cylinders and said valve mechanisms.

3. In a lavatory, the combination, with valve mechanisms for hot and cold water, of a cap having a top opening, oscillating half cylinders arranged in axial alinement and projecting through said opening, and operating connections between said cylinders and said valve mechanisms, said cylinders having on one edge projecting portions acting as fulcrums and also having stops engaging the cap to limit the oscillation of the cylinders.

4. In a lavatory, the combination, with hot and cold water valve mechanism including their valve stems, of oscillating half cylinders arranged end to end and having depending ribs or lugs on their inner sides, and a pivot pin passing loosely through the lug and stem relating to each cylinder, the cap having portions preventing endwise movement of the pins.

5. In a lavatory, the combination of hot and cold water mechanisms including casings having water inlet ports, spring-pressed valves normally closing said ports and provided with stems, packing nuts on the casing through which the stems pass, oscillating half cylinders arranged end to end and pivotally connected with said stems, said cylinders having projections bearing on the packing nuts and acting as fulcrums.

6. In a lavatory, the combination, with a bowl and its waste plug, of a pivoted rod or lever having its outer end operatively connected with the plug, a manually operable oscillating frame, an actuating rod operatively engaged at its upper end by the frame and pivotally connected at its lower end to the other rod, and a spring located between the frame near its axis of oscillation and the upper end of the actuating rod.

7. In a lavatory, the combination, with a bowl and its waste plug, of a pivoted rod or lever having its outer end operatively connected with the plug, a manually operable oscillating frame, an actuating rod operatively engaged at its upper end by the frame and pivotally connected at its lower end to the other rod, and a V-shaped spring arranged within said frame and having its free ends in engagement respectively with the upper end of the actuating rod and the frame near its axis of oscillation.

8. In a lavatory, the combination with the bowl, the top plate, and a plurality of water flow controlling mechanisms for the bowl, of a control fixture comprising a relatively long and narrow cap on the top plate, having a relatively long and narrow opening, a plurality of oscillatable members extending through said opening, each having a body portion closing a portion of said opening so that jointly said members complete a closed exterior in connection with the cap, said members having radially extending handles located within convenient single-hand, simultaneous operation-range, and said members respectively operatively connected with the several water flow control mechanisms.

9. In a lavatory, the combination with a bowl having a waste plug and hot and cold water valves, of a single control fitting comprising three oscillatable members disposed in axial alinement, the extreme members having parallel handles radially extending and the intermediate member having a radially extending handle lying normally in another radial plane, all of said handles lying within range of convenient single-hand simultaneous operation, operating connections between the extreme handles and the hot and cold water valves normally spring-maintaining said extreme handles at one limit of movement, and connections between said waste plug and the intermediate member for raising and lowering said plug when the intermediate handle is at opposite extremes of movement, and for maintaining said handle at either extreme of movement.

10. In a lavatory, the combination with a bowl having a waste plug and hot and cold water valves, of a single control fitting comprising three oscillatable members disposed in axial alinement, said members having respective radial handles operatable in parallel planes, all of said handles lying within range of convenient single-hand simultaneous operation, operating connections between the extreme handles and the hot and cold water valves normally spring-maintaining said extreme handles at one limit of movement, and connections between said waste plug and the intermediate member for raising and lowering said plug when the intermediate handle is at opposite extremes of movement, and for maintaining said handle at either extreme of movement.

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