

P. E. GOEHLE, Sr.
VALVE.

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921,230.

Patented May 11, 1909.

Fig. 1.

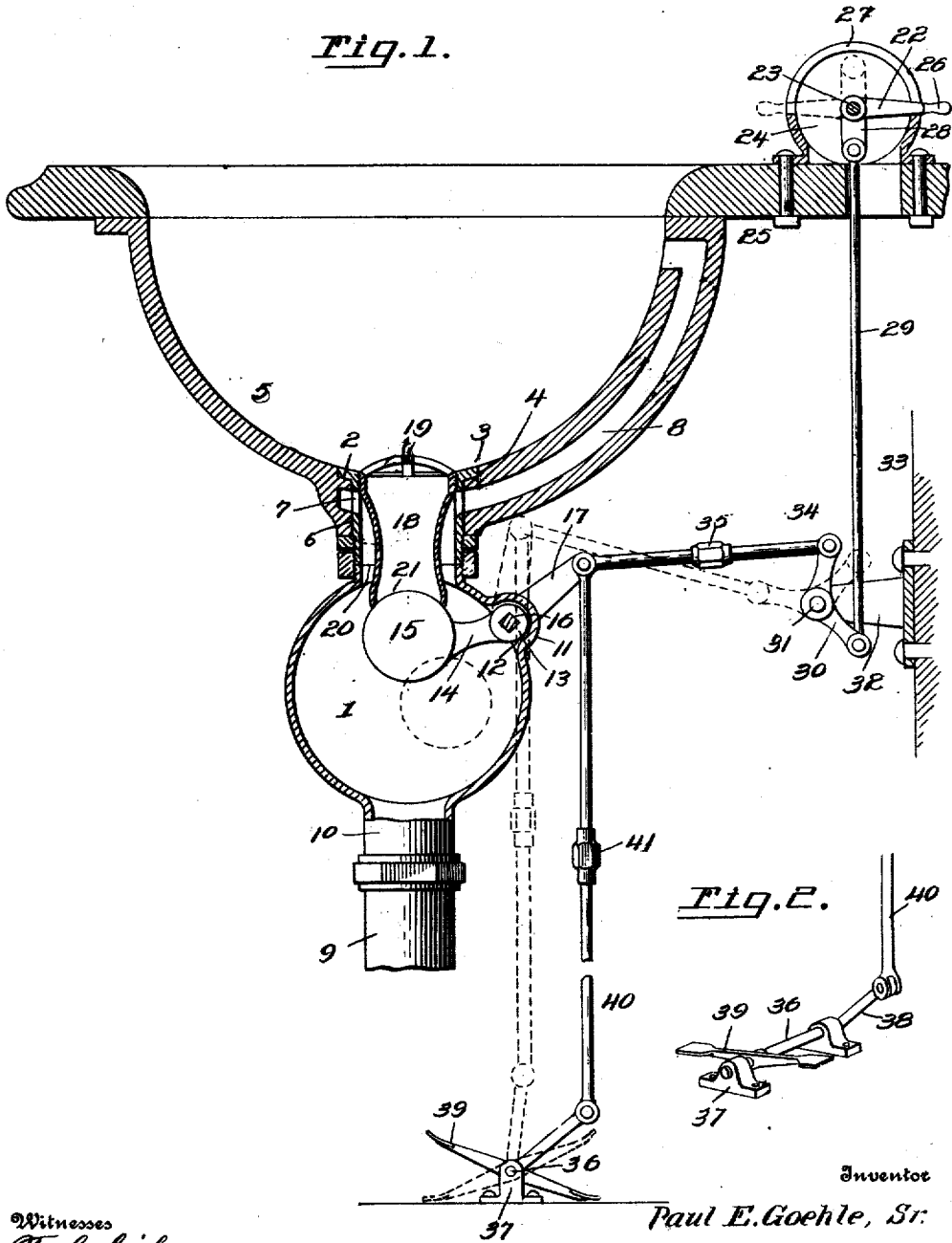


Fig. 2.

Witnesses
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PAUL E. GOEHLE, SR., OF SAULT STE. MARIE, MICHIGAN, ASSIGNOR OF ONE-HALF TO JOHN KILLACKY, OF SAULT STE. MARIE, MICHIGAN.

VALVE.

No. 921,230.

Specification of Letters Patent.

Patented May 11, 1909.

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To all whom it may concern:

Be it known that I, PAUL E. GOEHLE, SR., a citizen of the United States of America, residing at Sault Ste. Marie, in the county of Chippewa and State of Michigan, have invented new and useful Improvements in Valves, of which the following is a specification.

This invention is an improved valve adapted for use in connection with stationary wash basins, bath tubs, sinks and the like and the said invention consists in the construction, combination and arrangement of devices hereinafter described and claimed.

The object of this invention is to provide an improved form of valve to be used in connection with stationary wash basins, bath tubs and sinks, and to employ novel means for operating the said valve.

In the accompanying drawings which illustrate one of the embodiments of the invention:—Figure 1 is a vertical sectional view of a valve constructed in accordance with my invention showing the same applied to a stationary wash stand and provided with my improved operating means, such valve operating means being shown in side elevation. Fig. 2 is a detail perspective view of the foot operating means for moving the valve.

Referring particularly to the form of my improved valve shown in Fig. 1, the casing 1 is globular in form and is provided at its upper side with a neck 2 at the upper end of which is an annular outwardly extending flange 3 to fit in a seat 4 in the bottom of the wash basin 5, the said neck 2 extending through the opening 6 in the bottom of said basin. The said neck is provided with openings 7 which register with the overflow duct 8 with which, as is usual, the wash basin is provided. The usual drain pipe 9 is connected to the neck 10 which extends from the lower side of the globular casing 1. In one side of the said casing near its top is formed an offset or boss 11 which provides a recess 12 on its inner side which recess communicates with the interior of the said globular casing and provides for the reception of the sleeve 13 of an arm 14, which arm is provided at one end with a valve 15 which is here shown as spherical in form. The bore of the said sleeve is angular cross sectionally and through the same extends a rock shaft 16 which has its bearings at the sides of the offset 11 and has that portion which is within

the bore of the sleeve cross sectionally angular to fit in the cross sectionally angular bore of the sleeve so that the sleeve and, hence, the arm 14 of the valve 15 are locked to the said rock shaft for movement therewith when said rock shaft is turned. To one end of the said rock shaft at a point on the outer side and at one end of the boss 11 is attached a rock arm 17.

Within the neck 2 of the casing 1 is a tube 18 the upper portion of which is screw-threaded and has threaded engagement with the upper end of said neck and is provided with a strainer 19. The lower portion of the said tube 18 is reduced in diameter to form a space in the neck surrounding the said tube 18 which space forms a by pass 20 establishing communication between the overflow duct 8 of the wash basin and the interior of the valve casing 1 and, hence, enabling the overflow of water from the wash basin to be discharged when the valve 15 is closed, as shown in full lines in Fig. 1, against the lower end of the tube 18, which lower end of the said tube provides a seat 21 for the said valve. The said seat conforms to the shape of the said valve so that the latter, when in closed position, is enabled to fit tightly in such seat and effect a water tight joint therewith, and thereby I am enabled to entirely dispense with any packing material, rubber or the like for use in connection with the valve, and moreover, owing to the shape of the valve, the latter exerts wedge like action in the valve seat and maintains the latter, as it wears, in the required shape to at all times maintain a water tight connection between the valve and the seat when the valve is in closed position.

It will be understood that the rock shaft 16 and the bearings therefor provide a pivotal mounting for the valve 15 and that, hence, said valve may be moved to closed or open position by partially turning the rock arm 17 to actuate the said valve. Within the scope of my invention any suitable means may be employed for turning the valve. In the embodiment of my invention shown in Fig. 1, I provide a bell crank 22 which is mounted pivotally as at 23 in a casing 24 that is bolted on the upper side of the table 25 or stand of the wash basin. The said bell crank provides a lever arm 26 which operates in a vertical slot 27 in the casing 24 and forms a handle and said bell crank also

has an arm 28 which is connected by a rod 29 to one arm of the bell crank 30 which bell crank is mounted pivotally as at 31 on a bracket 32 which is secured to the wall 33 or other supporting object. The other arm of the said bell crank 30 is connected by a rod 34 to the rock arm 17. The said rod 34 is provided with a turn buckle 35 whereby it may be lengthened or shortened. It will be understood that by turning the lever arm 26 the valve 15, through the connection hereinbefore described will be moved to open or closed position as may be required according to the direction in which said lever is turned.

In the said Fig. 1 I also show foot operated means for actuating the valve. The same comprises a rock shaft 36 which is mounted in bearings 37 fastened on the floor and an arm 38 which projects from said shaft, a pedal 39 for turning said shaft and a rod 40 for connecting the arm 38 to the valve operating arm 17. The said rod 40 also includes a turn buckle 41 whereby it may be lengthened and shortened as may be required.

I do not desire to limit myself to the precise construction and combination of devices herein shown and described as modifications can be made therein within the scope of the appended claims.

Having thus described the invention, what is claimed as new, is:

1. In combination with a receptacle having a discharge opening in its bottom and an

overflow duct communicating with said discharge opening, a valve casing having a neck secured in said discharge opening and provided with an opening into which said overflow duct discharges, a tube in said neck spaced therefrom, open at its upper and lower ends and having its upper end communicating with the receptacle, the lower end of said tube forming a valve seat, a valve in said casing mounted for movement to and from said seat, a rock arm, a lever, and an adjustable rod connected with the lever and with said rock arm respectively.

2. In combination with a receptacle having a discharge opening in its bottom and an overflow duct communicating with such discharge opening, a valve casing having a neck secured in said discharge opening and provided with an opening into which said overflow duct discharges, an elongated tube removably mounted in said neck and provided with an intermediate contracted portion, and a lower reduced portion, said intermediate contracted portion being provided to form a space between the neck and said tube, said lower reduced portion forming a valve seat, and a valve in the casing mounted for movement to and from said valve seat.

In testimony whereof I affix my signature in presence of two witnesses.

PAUL E. GÖEHLE, Sr.

Witnesses:

JAMES KELLEHER,
FRANK MILLER.