J. Brower,

Water-Closet Valve.

No. 45,135. Patented Nov. 22, 1864.

Fig: 1

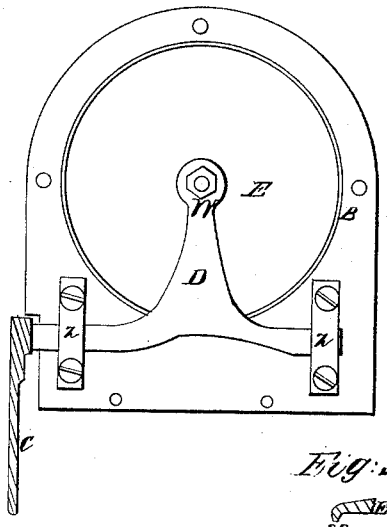


Fig: 2

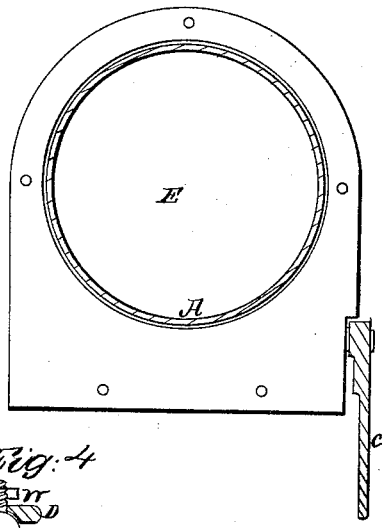


Fig: 3

Fig: 4

Fig: 5

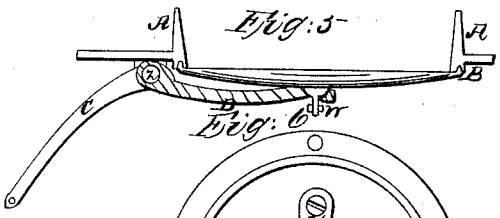


Fig: 6

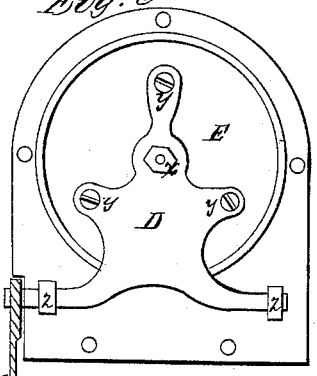
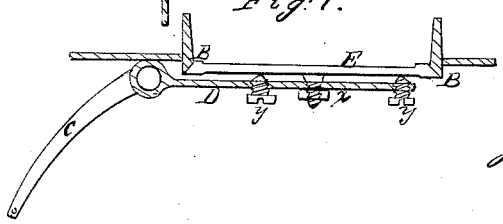


Fig: 7.



Witnesses:
C Curtis
Chas H Atkinson

Inventor:
John Brower

UNITED STATES PATENT OFFICE.

JOHN BROWER, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN WATER-CLOSET VALVES.

Specification forming part of Letters Patent No. 45,135, dated November 22, 1864.

To all whom it may concern:

Be it known that I, JOHN BROWER, of the city of Newark, in the county of Essex and State of New Jersey, have invented certain Improvements in Valves for Water-Closets; and I do hereby declare the following to be a full and exact description of the same, reference being herein had to the drawings that accompany this specification and which make part of the same.

The nature of my improvement consists in rendering the valve self-adjusting and water-tight by a peculiar construction of the same.

In the drawings, Figure 1 is a view of the under side of the valve and seat. Fig. 2 shows the upper side. Fig. 3 shows the outer edge of the valve and seat; Fig. 4, the connection of the valve with the closing-lever; Fig. 5, a sectional view of the valve and seat; Fig. 6, the ordinary way of adjustment now in common use in ships and steamboats; Fig. 7, the same in section.

The same letters refer to the same parts in each figure.

The sectional view, Fig. 5, shows the position of the valve when in use. The receiving-basin is attached to the flange A on the valve-seat B, and its contents are discharged by lifting a handle in the seat, the handle being on the top end of a rod connected to the lever *c*, said rod extending a distance below the lever and has a weight attached to its lower end by which the valve is held to its seat. The lever *c* is fast to a bar, D, that turns on journals in the bearings *z*, and the valve E is attached at its center to the bar D. In the usual way (shown in Fig. 7) the edge of the circular valve E is beveled, and the seat B has the same bevel, the valve E being held to the bar D by the screw and nut *x* at the center, and is adjustable by means of the three screws that are shown by *y* in Figs. 6 and 7.

To accommodate the workman, the valve E has to be removed when the valve-seat is being connected with the basin and discharge-pipe, and there is no certainty that the adjustment of the valve when replaced shall be correct, and no means, short of disconnection, of access to make needed alterations when the valve is constructed in the ordinary manner. To obviate this difficulty, I attach the valve to the bar D by a ball-and-socket joint, Fig. 4, and have a groove in the valve seat B, shaped as shown in Fig. 3, and the edge of the valve E turned to fit thereto. By leaving the nut *w* a little loose the valve adjusts itself accurately when replaced after removal.

It is desirable that the valve should be water-tight when closed, to retain water and prevent odor; also, to prevent the draft of cold air up the water-closets of sea-going and river vessels, which objects are attained by my improvement.

I do not claim, broadly, the adjustment of valves by semispherical attachments and V-shaped joints.

What I claim, and desire to secure, is—

A water-closet valve held to its place by a bar secured by a semispherical connection and rendered water-tight by means of a V-shaped joint, all substantially as shown and described.

JOHN BROWER.

Witnesses:

O. CURRIER,

CHAS. H. SKINNER.