G. L. CAMFIELD & J. D. WHALEN.

CLOSET BOWL.

APPLICATION FILED MAR. 17, 1917.

1,232,767.

Patented July 10, 1917.

2 SHEETS—SHEET 1.

Fig. 1.

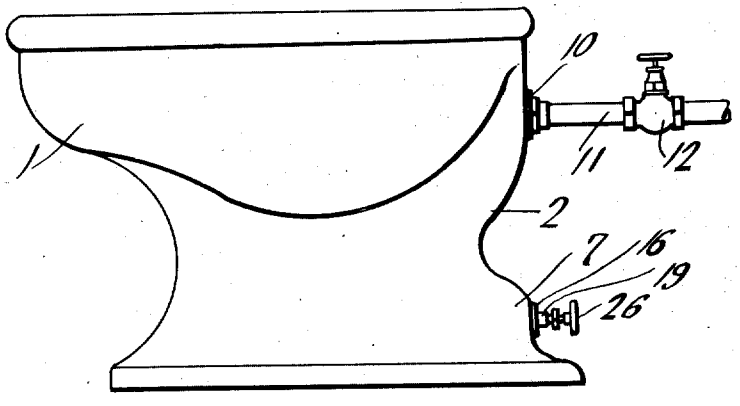
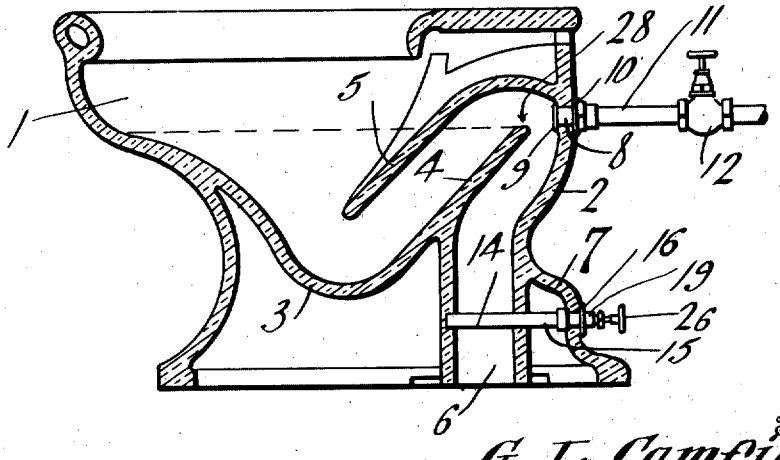


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

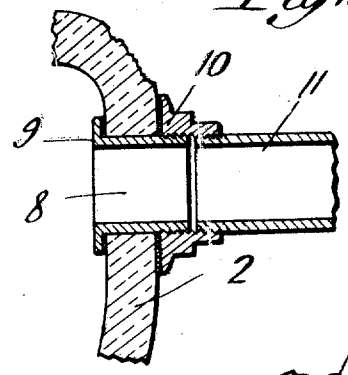


Fig. 4.

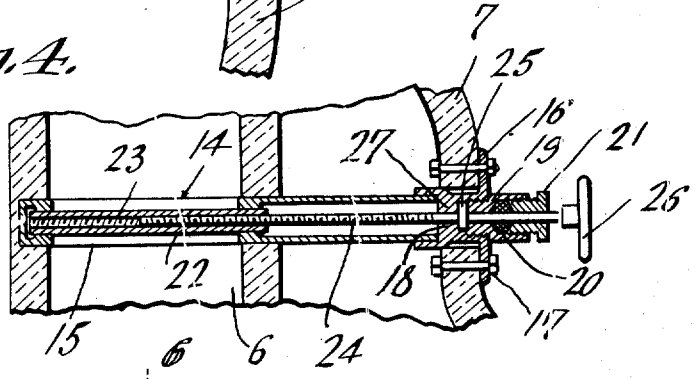


Fig. 5.

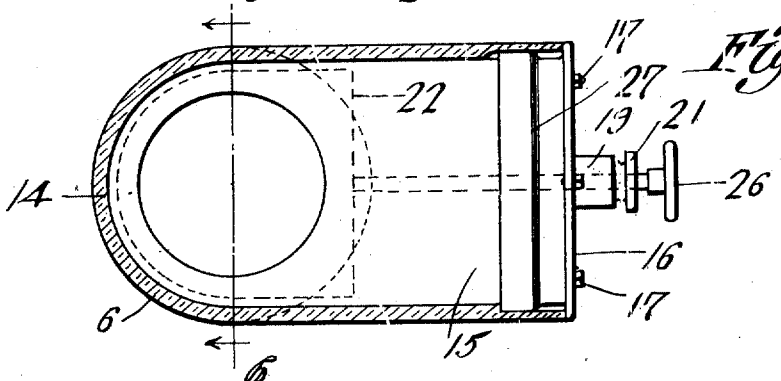
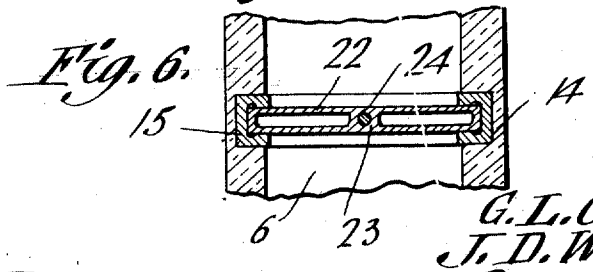


Fig. 6.



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UNITED STATES PATENT OFFICE.

GEORGE L. CAMFIELD AND JAMES D. WHALEN, OF COLORADO SPRINGS, COLORADO.

CLOSET-BOWL.

1,232,767. Specification of Letters Patent. Patented July 10, 1917.

Application filed March 17, 1917. Serial No. 155,581.

To all whom it may concern:

Be it known that we, GEORGE L. CAMFIELD and JAMES D. WHALEN, citizens of the United States, residing at Colorado Springs, in the county of El Paso, State of Colorado, have invented a new and useful Closet-Bowl, of which the following is a specification.

It is the object of this invention to provide novel means whereby the siphon of a closet bowl may be cleared of obstructions.

With the above and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed, without departing from the spirit of the invention.

In the drawings:—

Figure 1 shows in side elevation, a closet bowl embodying the present improvements;

Fig. 2 is a vertical section of the structure shown in Fig. 1;

Fig. 3 is a section taken through the means for supplying fluid under pressure to the siphon of the bowl;

Fig. 4 is a vertical section taken through the gate;

Fig. 5 is a horizontal section wherein the gate appears in plan; and

Fig. 6 is a section taken approximately on the line 6—6 of Fig. 5.

In the accompanying drawings, the numeral 1 indicates a closet bowl including a back 2, a bottom 3, a lip 4, a spoon 5 and an outlet 6, the back 2 being offset adjacent its lower end as shown at 7.

A thimble 8 is mounted in the back 2 below the spoon 5 and close thereto, the thimble 8 having a flange 9 which engages the inner surface of the back 2. A ring 10 is threaded onto the thimble 8 and engages the outer face of the back 2. Threaded into or otherwise connected with the ring 10 is a fluid supply pipe 11 in which is interposed a valve 12. Ordinarily, water is delivered to the pipe 11, for a purpose which will be set forth hereinafter.

Mounted in the outlet 6 and in the offset 7 is a composite casing 14 including a body 15 and a cap 27 in which the outer end of the body is received. The cap 27 has a flange 16 overlapping the outer face of the offset 7, the flange 16 being secured to the part 7 by bolts 17 or otherwise. The cap 17 has a transverse wall 18 against which the outer end of the body portion 15 of the casing abuts. A coupling 19 is threaded into the cap 27. Mounted in the coupling 19 is a packing 20. A gland 21 is threaded into the coupling 19 and engages the packing 20. A gate 22 slides in the body 15 of the casing. The gate 22 may be of hollow construction, embodying a longitudinal rib 23. A screw 24 is threaded into the rib 23. The screw rotates in the wall 18, in the coupling 19 and in the gland 21. The screw 24 carries a disk 25 located between the wall 18 and the inner end of the coupling 19, so that the screw cannot move endwise when it is rotated by means of an exterior hand wheel 26.

The spoon 5, the lip 4 and a portion of the back 2 define a siphon, and it is to be observed that, as indicated at 28, the crown of this siphon is of lesser diameter than either arm of the siphon. Further, the pipe 11 discharges into the siphon adjacent its crown, and across the upper edge of the lip 4.

In practical operation, should an obstruction of any kind pass into the siphon, this obstruction will lodge in the restricted crown 28 of the siphon, and any object which is small enough to pass by this restricted throat or crown, will move through the outlet 6 without clogging up the sewer. Let it be supposed, however, that an obstruction is lodged in the restricted throat or crown 28. Then the valve 12 is opened, and water is permitted to flow into the crown of the siphon, through the pipe 11. The gate 22 having been closed, a pressure will be created, which will force the obstruction back into the body of the bowl. Ordinarily, the water discharged through the pipe 11 directly against the obstruction, will force the obstruction back into the bowl even though the gate 22 has not been closed. If the obstruction is lodged with unusual tightness in the restricted throat or crown 28, it will be desirable to close the gate 22, in order to create a pressure below the obstruction.

Having thus described the invention, what is claimed is:—

1. A closet bowl embodying an outlet, and having a siphon discharging into the outlet, the crown of the siphon being of less diam-

eter than either arm of the siphon, the bowl being provided with means for discharging fluid into the siphon at the crown thereof.

2. A closet bowl embodying an outlet, and having a siphon discharging into the outlet, the bowl being provided with means for discharging fluid into the siphon at the crown thereof; and a gate operating in the outlet below said means.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures in the presence of two witnesses.

GEORGE L. CAMFIELD.
JAMES D. WHALEN.

Witnesses:
CONRAD LOESCH,
H. T. BROOKS.

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