

(No Model.)

G. W. HUNTER.

WATER CLOSET.

No. 346,997.

Patented Aug. 10, 1886.

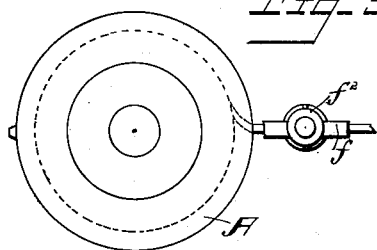
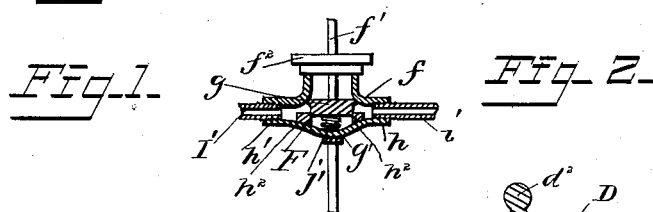
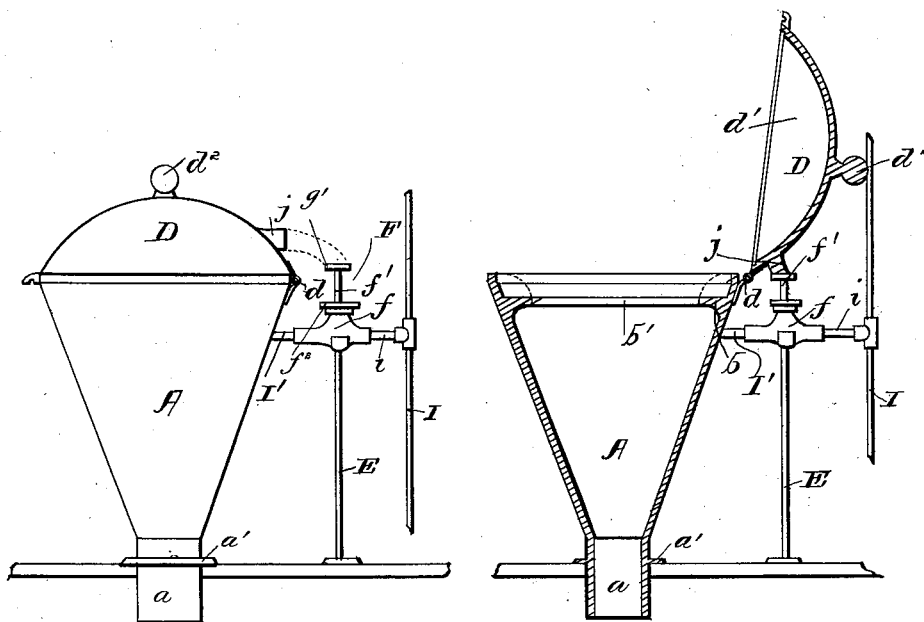


Fig. 4.

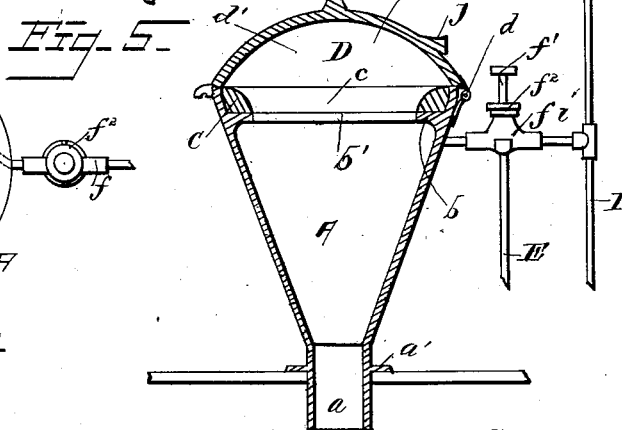


Fig. 3.

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Witnesses

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UNITED STATES PATENT OFFICE.

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WATER-CLOSET.

SPECIFICATION forming part of Letters Patent No. 346,997, dated August 10, 1886.

Application filed March 19, 1886. Serial No. 195,836. (No model.)

To all whom it may concern:

Be it known that I, GEORGE WASHINGTON HUNTER, a citizen of the United States, residing at Logansport, in the county of Cass and State of Indiana, have invented new and useful Improvements in Water-Closets, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to improvements in water-closets; and it consists of the peculiar and novel construction and combination of parts, substantially as hereinafter fully set forth, and specifically pointed out in the claim.

The primary object of my invention is to provide a water-closet with improved means whereby all odors or stench is prevented from arising when the closet is either in or out of use, to provide a cover which shall cut off the escape of foul odors when the closet is not in use or the cover closed, and when the closet is used and the cover thrown back to expose the seat-opening water is caused to flow into the bowl to wash away the waste and prevent odors from arising, and to provide means which shall be simple and durable in construction, thoroughly effective and reliable in operation, and cheap.

In the accompanying drawings, Figure 1 is an elevation of a water-closet embodying my invention. Fig. 2 is a vertical longitudinal section through the apparatus with the cover thrown back to operate the plunger of the valve. Fig. 3 is a similar sectional view with the cover closed. Fig. 4 is a plan view with the cover removed. Fig. 5 is a sectional view of one form of valve or cock.

Referring to the drawings, in which like letters of reference indicate corresponding parts in all the figures, A designates the bowl of my improved water-closet, which is made in the shape of a cone. The bowl is provided at its lower end with a contracted discharge-throat, *a*, to which is connected in any suitable manner a pipe to carry off the waste material, water, &c., and this discharge-throat passes through the floor, and is provided with an annular flange, *a'*, that bears on the floor, and through this flange passes screws or other suitable fastenings, to maintain the bowl in its proper vertical position. Near its upper free edge the bowl is provided with an annular

flange, *b*, having an opening, *b'*, and on this flange is supported a removable seat, C, having the usual hole or opening, *c*, the diameters of the openings *b'* *c* being preferably equal. The removable seat C has the edges of the hole *c* beveled or curved, as shown in the sectional view, Fig. 3, and it is fitted in the bowl so that it lies flush with the upper edges thereof, so as to provide a support for the person without hurting the body.

D designates a cover that is hinged or pivotally connected at one edge to the bowl A, as at *d*, and this cover is adapted to lie in a horizontal position over the seat C, and wholly conceal the same, to prevent foul odors from the bowl from arising or escaping into the room, or it can be turned to an upright or vertical position to expose the seat and permit the closet to be used. This cover D is made curved, so as to provide a chamber, *d'*, on its under side, which is out of contact with the seat when the cover is closed, and the under edges of the chambered cover are recessed, so as to permit it to fit tightly and snugly over the edges of the bowl, the cover being further provided with knobs or catches *d''*, for its convenient manipulation by hand.

E designates a standard or support that is suitably secured to the floor and arranged at a point near the bowl, and on the upper free end of the standard is suitably secured the shell *f* of a cut-off valve or cock, F, that is provided with a vertically-movable plunger or valve-stem, *f'*, that works through a perforated guide-lug, *f''*, and this stem or plunger carries a valve, *g*, at one end and an enlarged head or knob, *g'*, at its opposite end. The shell *f* is provided with inlet and outlet ports *h* *h'* at opposite sides, and between these ports is arranged a valve-seat, *h''*, on which the valve *g* normally rests, to prevent the flow of water through the shell. To the inlet-port *h* of the valve-shell is connected a pipe, *i*, that communicates with a water-supply pipe, I, suitably arranged and held in place; and to the outlet-port *h'* is connected a pipe, I', that leads into the bowl A at a point beneath the seat C therein, the inner end of this pipe I' being bent or curved to properly direct or discharge the water from the valve against the surface of the bowl, to wash away all waste matter and prevent the escape of foul odors.

The cover D carries an arm or lug, *j*, near its pivoted end and on the outer face thereof, and when the cover is adjusted to its vertical position, as shown in Fig. 2, the arm will strike the head of the plunger or valve rod *f'*, and serve to depress the same, the said plunger being normally held in its upright position by means of a spring, *j'*, so that the water from the main supply pipe is prevented from passing through the valve and the pipe *I'* when the cover is closed or the plunger is relieved from the impact of the lug or arm *j*.

The operation of my invention is as follows: When the cover is closed, as shown in Figs. 1 and 3, it lies in a horizontal position over the seat, so as to conceal the same and prevent the escape of foul odors, and the plunger or valve rod is elevated or closed, so as to cut off the flow of water into the bowl from the valve *F* and the supply-pipe. When the closet is to be used, the hinged cover is turned to its vertical position to expose the seat *C*, and the arm or lug *j* on the cover comes in contact with the head of the plunger, so that the latter is depressed to permit communication between the ports *h h'* of the valve-shell. The supply of water from the pipe *I* is thus permitted to flow through the valve-shell and the pipes *i I'* into the bowl to wash away all waste matter, and when the cover *D* is again closed to conceal the seat the supply of water is automatically cut off by the plunger being elevated by the spring.

Various slight changes in the form and proportion of parts and details of construction may be made without departing from the spirit of my invention.

It will be understood that I do not limit myself to the particular valve herein shown and described, as I am aware that valves of other constructions can be substituted therefor.

I am aware that it is not broadly new to automatically operate a water-supply valve to a water-closet by the raising of the lid thereof, and hence I disclaim this broad feature.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a water-closet, the combination of a bowl provided with an annular flange, *b*, and a seat, *C*, resting thereon and lying flush with the edges of the bowl, a cover, *D*, hinged to the bowl, and having an arm or lug, *j*, on its outer face, and completely concealing the seat when closed, a water-supply pipe, *I*, a standard, *E*, a valve supported on the standard intermediate of the pipe *I* and the bowl, and having a spring-pressed plunger normally held in the path of movement of the arm of the cover, a pipe, *i*, connecting the supply-pipe *I* and the valve, a pipe, *I'*, intermediate of the valve and the bowl, whereby when the lid is elevated the arm thereof will actuate the plunger of the valve to supply water to the bowl, and when the lid is closed the plunger will cut off the water supply, all combined and arranged substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

GEORGE WASHINGTON HUNTER.

Witnesses:

JOHN H. SCHWERDMAN,
JOHN M. BLISS.