Henry S. Campbell,

Closet Cistern.

No. 18,972. Patented Dec. 29, 1857.

Fig. 1.

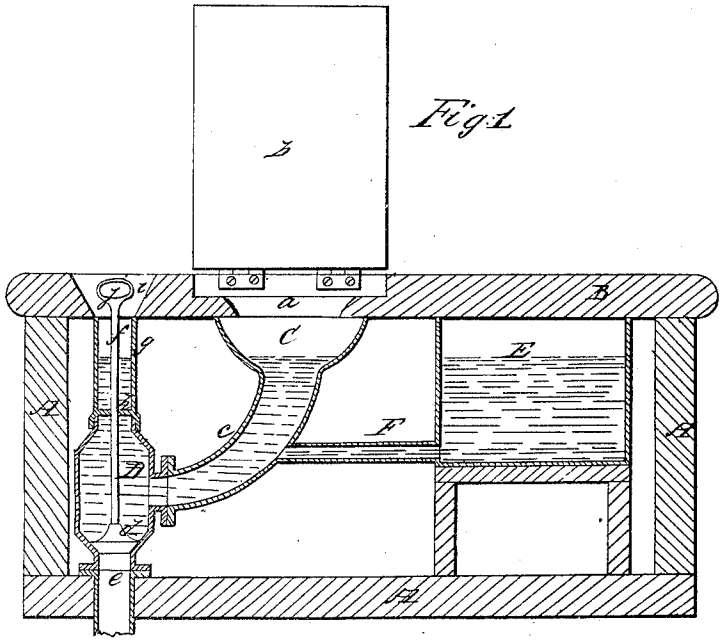
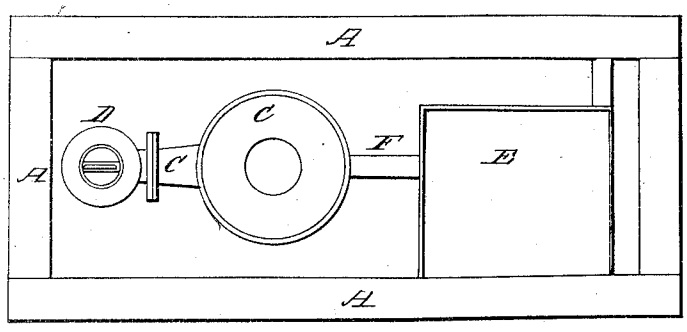


Fig. 2.



UNITED STATES PATENT OFFICE.

JAS. T. HENRY AND W. P. CAMPBELL, OF PHILADELPHIA, PENNSYLVANIA.

WATER-CLOSET.

Specification of Letters Patent No. 18,972, dated December 29, 1857.

To all whom it may concern:

Be it known that we, JAMES T. HENRY and WILLIAM P. CAMPBELL, both of the city of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Water-Closets; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

Our invention consists in so combining the basin of a water closet with a valved chamber, cistern, and communicating pipes, as fully set forth hereafter, that the soil may be readily and effectually disposed of, and all offensive smells obviated.

In order to enable others skilled in the art to make and use our invention we will now proceed to describe its construction and operation.

On reference to the drawing which forms a part of this specification, Figure 1 is a sectional elevation of our improved water closet, Fig. 2 a ground plan with the cover removed.

A is an oblong box, B its cover, *a* the usual opening in the same, and *b* the hinged lid for said opening. Within the box are situated the basin C, valved chamber D and cistern E. The basin C has a curved pipe *c* communicating with the chamber D. In the latter is a conical valve *d* arranged when down to stop the communication between the chamber D and exit pipe *e*. Attached to the valve *d* is a spindle *f* guided by a cross bar *h* in the pipe *g* which terminates at an opening *i* in the cover B, the spindle *f* being furnished at the top with a handle *j* by means of which the valve *d* may be lifted at pleasure. A pipe F forms a communication between the cistern E and the curved pipe *c* of the basin C.

The cistern is maintained nearly full of water and at a uniform level by means of the usual ball cock or other convenient apparatus connected with a water pipe and the cistern is so situated that the water therein is level with that in the basin C and pipe *g*.

The soil in the basin C is carried off by raising the valve *d* above the opening from the pipe *c* into the chamber D when the water and soil rush into the latter, and thence through the exit pipe *e*, an impetus being given to this discharge of the water and soil by the rush of water from the cistern E through the pipe F into the curved pipe *c*. The valve *d* is now closed when the water assumes its previous level as shown in Fig. 1. By the peculiar construction of the valve chamber D, and its position as regards the opening of the pipe *c* into the same, it will be seen that the valve *d* may be raised sufficiently high above the said opening to prevent the possibility of portions of the soil adhering to the valve, and when the latter is closed rendering the water in the basin foul and offensive as in other water closets. It will be also seen that when the valve is closed it is entirely covered with a supply of pure water which effectually prevents the passage of all noxious exhalations through the exit pipe *e*.

Disclaiming the discharging of a stream of water into the pipe communicating with the basin from a cistern, the level of water in which is the same as that required in the basin when the valve is closed, as such a device is shown in the English patent of John Ody sealed May 13th, 1835, we claim and desire to secure by Letters Patent—

The chamber D with its valve *d* in combination with the pipe *c* of the basin C the cistern E and communicating pipe F when the same are constructed, and arranged in respect to each other in the manner herein set forth and for the purpose specified.

In testimony whereof, we have signed our names to this specification before two subscribing witnesses.

JAMES T. HENRY.
WILLIAM P. CAMPBELL.

Witnesses:
HENRY HOWSON,
WILLIAM E. WALTON.