

WILLIAM J. WARREN.

Water Closets.

No. 125,864.

Patented April 16, 1872.

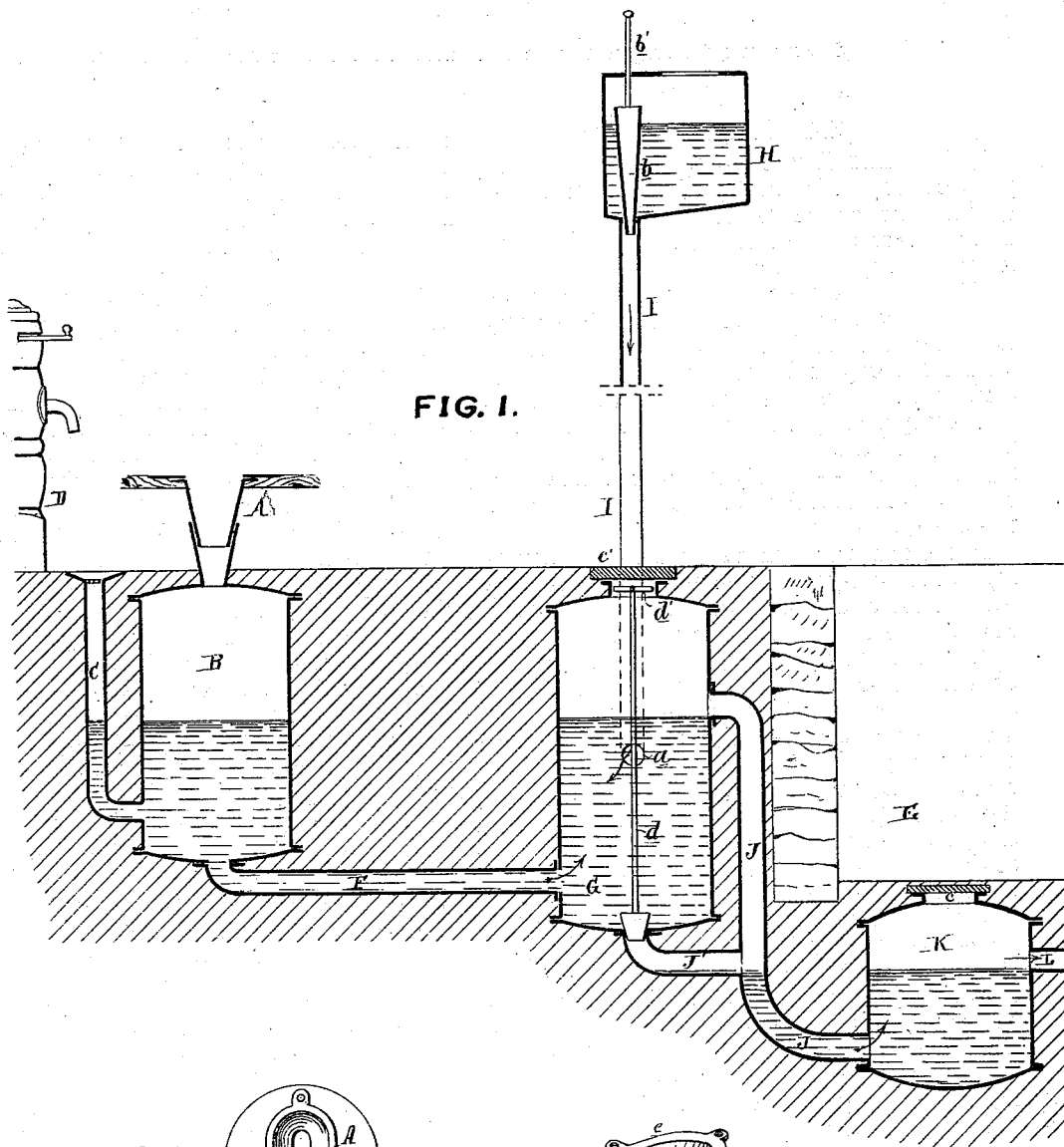


FIG. 1.

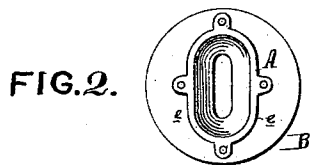


FIG. 2.

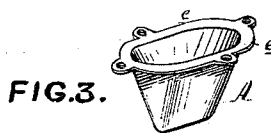


FIG. 3.

WITNESSES {

Wm. A. Steel
John Parker

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by his atty.
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UNITED STATES PATENT OFFICE.

WILLIAM JACOB WARREN, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN WATER-CLOSETS.

Specification forming part of Letters Patent No. 125,864, dated April 16, 1872.

SPECIFICATION.

I, WILLIAM JACOB WARREN, of Philadelphia, county of Philadelphia, State of Pennsylvania, have invented certain Improvements in Privies and Water-Closets, of which the following is a specification:

My invention consists of certain improvements, fully described hereafter, in the privy for which Letters Patent were granted to me on the 8th day of November, A. D. 1870, the said improvements being applicable to closets in the upper stories of buildings as well as to privies, and the object being the same as in my said patent—namely to afford a cheap and cleanly substitute for the usual expensive water-closets.

In the drawing, Figure 1 is a sectional view representing my improvements in privies and water-closets, and Figs. 2 and 3 detached views of a basin adapted to the privy-seat.

A represents an oblong and tapering basin, of cast-iron or other suitable material, secured to the under side of a privy-seat or to a plate arranged for attachment to the seat, and communicating at its lower end with a well or chamber, B, with which also communicates the waste-pipe C of a hydrant, D. The privy well or chamber B may be supposed to be situated at the lower end of a yard, or at a distance from the building, of which E represents the cellar; and the said chamber communicates at the bottom, through a horizontal or downwardly-inclined pipe, F, with the lower portion of a similar well or chamber, G, situated close to the building and as directly as possible beneath a box or chamber, H, contained within a closet in one of the upper stories of the building and arranged to receive the waste water from a bath-room, or to be otherwise supplied with water. The box H communicates with the interior of the chamber G, at the point *a*, through a pipe, I, and the upper end of the latter within the box is closed by a hollow plug or valve, *b*, provided with a handle, *b'*, by which it can be lifted from its seat in the said pipe. The chamber G, instead of being connected directly with a culvert, as in my aforesaid patent of November 8, 1870, communicates through a pipe, J, and branch J', with the lower portion of a vessel, K, situated beneath the floor of the cellar E, furnished with a

detachable cap, *c*, and communicating through a pipe, L, near its upper end, with the adjacent culvert. The chamber G is also furnished with a detachable cap, *c'*, which is removed in order to gain access to a rod, *d*, connected to a valve, *d'*, adapted to a seat in the mouth of the branch pipe J' at the bottom of the said chamber G. So long as this valve *d'* remains closed and the waste water from the hydrant and bath-room are permitted to pass through the pipes C and I into the chambers B and G, the latter will remain filled to the height shown in the drawing, the pipe J serving as an overflow and carrying off the water, when it rises above this point, into the vessel K, and thence to the culvert. The soil from the privy is received by the well B or chamber, and that from the closet or box H by the chamber G, the water in these chambers serving to dilute the soil and other offensive matters, and preventing the exhalation of noxious vapors. Before the contents of either of the chambers become foul the valve *d'* should be raised, when the water will at once rush through the pipes F, J', and J, into the vessel K, and thence to the culvert, carrying with it the offensive matter. The vessel K prevents the entrance of noxious gases from the culvert into either of the chambers G or B, the water in the said vessel serving as a trap to prevent the rearward passage of the said gases. The vessel K also serves as a receptacle for sediment or solid matter which might otherwise find a lodgment in one or other of the chambers, it being readily removed from the said vessel on detaching the cap *c*. The water in the chamber G also serves as a trap to prevent the escape of gases from the said chamber through the pipe I to the closet above, and the soil which is dropped into the box H is diluted with and deodorized by the water contained in the same, this water overflowing and passing through the hollow plug *b*, and being from time to time entirely emptied from the box H by raising the plug *b* from its seat in the pipe I.

In many instances the privy can be arranged to communicate with the chamber G, in which case the pipe F and chamber B can be dispensed with and the waste water from the hydrant be discharged directly into the chamber G. The chamber B, in other words, is only

necessary where it is inconvenient to arrange the privy at a point directly beneath the water-closet. Where an elevated water-closet, however, is not required, one or other of the chambers B or G can be connected directly to the vessel K, but I prefer in all cases to use the latter.

The tapering and oblong basin A, before referred to, has a flange, *e*, by means of which it can be secured to the under side of the privy-seat or to a plate adapted to the top of the latter, and the said basin is made in the peculiar shape shown in order to prevent refuse or solid foreign matters from being thrown into the well, as such matter would choke up and interfere with the operation of the apparatus. It will be evident, also, that the said basin can be used with advantage in connection with ordinary privies to prevent refuse, &c., from being thrown into the well.

I claim as my invention—

1. The combination of the well G, waste-pipe I communicating with a water-closet, discharge-pipe J communicating with the well above the mouth of the pipe I, and through a branch with the bottom, and valve *d'* closing said branch pipe, as set forth.

2. The arrangement, substantially as described, of the privy, water-closet, chambers B, G, and K, and pipes or channels F, I, J, and L, for the purpose set forth.

3. A privy or water-closet basin, contracted at the lower end to form an oblong or elongated opening, as set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

WM. J. WARREN.

Witnesses:

WM. A. STEEL,
HARRY SMITH.