

UNITED STATES PATENT OFFICE.

ISAAC EDELMAN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO G. W. EDELMAN, JR.,
OF SAME PLACE.

WATER-CLOSET.

Specification of Letters Patent No. 21,294, dated August 24, 1858.

To all whom it may concern:

Be it known that I, ISAAC EDELMAN, of the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Water-Closets; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

My invention consists in surrounding the pipe, which contains the basin, with a casing attached to and communicating with a ventilating pipe or flue, and this flue with the exterior atmosphere, the whole being arranged substantially in the manner set forth hereafter, for the purpose of effectually ventilating both the soil pipe and the well for receiving the soil, thereby obviating the offensive smells and noxious exhalations common to other water closets, and this without the necessity of employing the usual valve beneath the basin.

In order to enable others to make my invention, I 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 view, illustrating my improvement in water closets. Fig: 2, a plan view. Fig. 3, a sectional plan, on the line 1, 2 (Fig. 1).

A represents the floor, on which the closet is situated, and B the well, which serves as a reservoir for the soil. On the floor A is erected the box C, in the cover of which is the usual opening D. Immediately beneath the latter is situated the basin E, of porcelain or other material usually employed in their construction. This basin rests in the enlarged portion of the tapering pipe F, which is secured to the top of the casing G, and which projects into and communicates with the interior of the casing G. To the small end of the latter is attached the soil pipe H, surrounded by a pipe I, which is attached to the casing G, and which, together with the soil pipe, terminates in the well B. A branch pipe *a* communicates with the interior of the casing G at a point near the top of the same, and to this branch is connected a ventilating pipe, *d* which may either be carried up to a suitable height outside the building, or may communicate with a neighboring chimney or with a flue leading to the same. The space between the soil pipe H

and exterior pipe I, also communicates with the branch *a*, through a pipe *b*.

After the basin has been cleansed in the usual manner, by a stream of water discharged from a coiled pipe *c*, portions of the soil are apt to adhere to the interior of the soil pipe H, which, but for my improved ventilating arrangement would impregnate the air of the apartments in the neighborhood of the water closet, with offensive gases.

The rarefied air in the neighborhood of the closet however, will, by my improvements, pass down the basin and pipe F into the casing G and upward, through the branch *a* to the ventilating pipe or flue, the foul air from the soil pipe passing upward into the same casing and out in the same direction.

The peculiar form of the casing G, and its position as regards the pipe F, branch pipe *a* and soil pipe H, facilitates this free discharge of all noxious exhalations through the ventilating pipe into the exterior atmosphere.

In order to avoid all offensive effluvia, it is necessary that the well, which forms a reservoir for the soil, should be effectually ventilated. This is accomplished by the above described arrangement, as the foul gases generated in the well, pass into the space between the soil pipe H and exterior pipe I, and from thence to the ventilating pipe or flue through the pipe *b*.

It will now be seen, that, by my improvement the offensive smells common to ordinary water closets may be obviated, and this without employing the usual valve beneath the basin.

I claim and desire to secure by Letters Patent,

The casing G, pipe F, soil pipe H and exterior pipe I, when constructed and arranged with respect to each other, and when communicating with a ventilating pipe or flue, substantially as and for the purpose herein set forth.

In testimony whereof, I have signed my name to this specification before two subscribing witnesses.

ISAAC EDELMAN.

Witnesses:

HENRY HOWSON,
HENRY OERIORNE.