

G. H. VROOM.
Earth-Closet.

No. 133,071.

Patented Nov. 12, 1872.

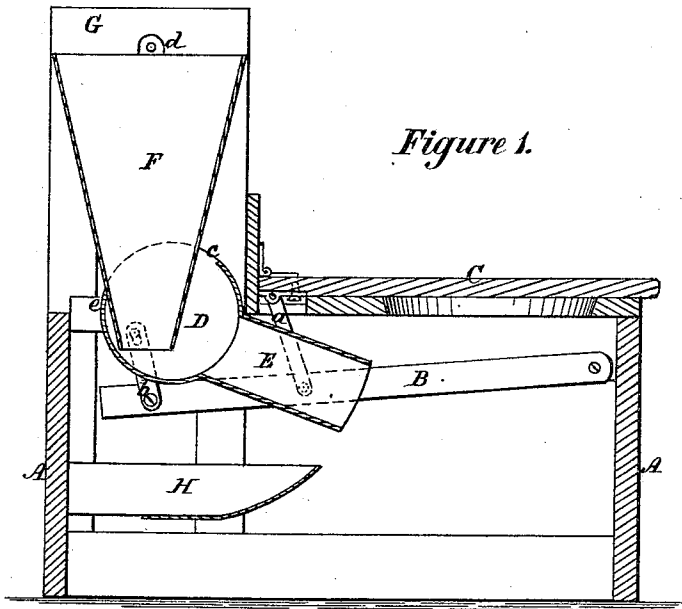


Figure 1.

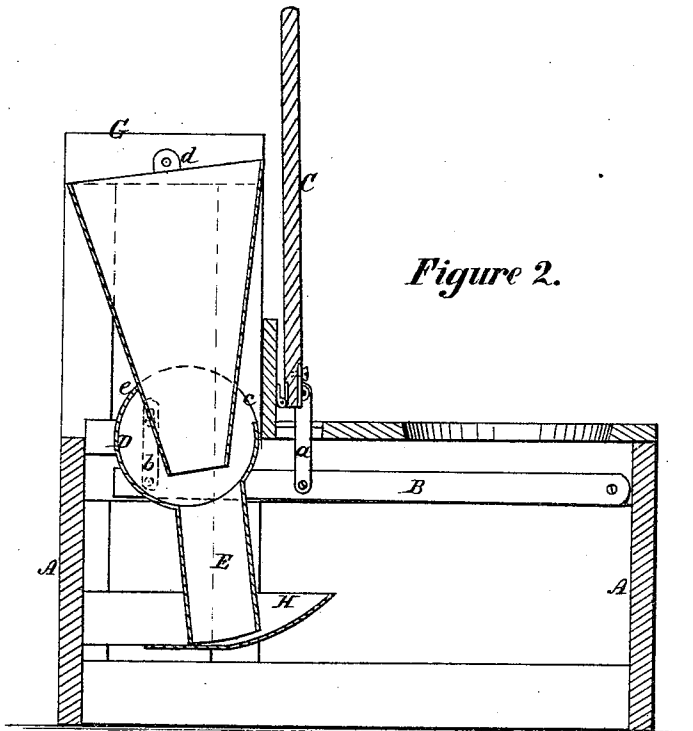


Figure 2.

Witnesses:

Annie E. Dyer.
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Inventor:

George H. Vroom
by Johnson, Klauke & Co
his Attorneys.

UNITED STATES PATENT OFFICE.

GEORGE H. VROOM, OF ZANESVILLE, OHIO.

IMPROVEMENT IN EARTH-CLOSETS.

Specification forming part of Letters Patent No. 133,071, dated November 12, 1872.

To all whom it may concern:

Be it known that I, GEORGE H. VROOM, of Zanesville, in the county of Muskingum and State of Ohio, have invented certain new and useful Improvements in Earth-Closets, of which the following is a specification:

My invention relates to closets or commodes wherein the excrementitious matter from the person is covered and deodorized by earth or other deodorizers thrown into the stool; and my said invention consists in the combination and arrangement of the several operating parts and their connections with each other and the seat, the construction and mode of action of which will be more fully hereinafter described.

The accompanying drawing represents views, in section, of my improved earth-closet, the parts being in different positions, and illustrate the invention.

The closet may be of any desired construction best adapted to my improvements.

To the frame A, near the seat, is pivoted a lever, B, which is connected to the seat-cover C by a link, *a*, so that by lifting the seat-cover the lever B is made to oscillate the semi-cylindrical receiving and discharging chamber D, by means of a link, *b*, attached eccentrically to the end of said chamber and to the end of the lever. Attached to and forming part of this chamber D, which is mounted upon journals in the frame, is a measuring-chute, E, which serves to discharge and distribute the proper quantity of earth, or other deodorizer, from the oscillating receiver over the excrement in the stool. This chamber D, being semi-cylindrical, the opening *c* thereof receives the mouth of the hopper F, which is pivoted at *d* in the upright boxed frame G, so that its mouth will extend to near the bottom of the said chamber. A waste-pan, H, is attached to the frame under the discharging-chute, and acts also as a seal to the mouth of said chute when the cover is raised.

The operation of my improved earth-closet is as follows: When the lid is raised the lever B is made to oscillate the receiving and discharging chamber D in one direction, by means heretofore described, so as to bring the chute

E within the sealing-pan, and thereby agitate the pivoted hopper F, which is filled with the deodorizing substance, by striking against its side; this agitation fills the chamber D and chute E, and the lid being closed the reverse motion of the chamber takes place, so as to bring the chute over the stool, and they empty the substance therein beneath the seat. When the lid is closed the lever B operates to render the chamber D a perfect seal to the hopper, which is a highly advantageous feature, as shown in Fig. 1 of the drawing.

It will be observed that the hopper, by its weight, will always seek a vertical position within the oscillating chamber, and that when the cover is raised the rear side *e* of the receiving-chamber will strike the rear side of the hopper and give it a sudden jar, which causes the earth to fall out into the same cylindrical chamber into the chute, which has by this movement been brought into line with the mouth of the hopper, as shown in Fig. 2, but being sealed by the waste-pan, it is held therein until the lid is closed, when the filled chute is unsealed and its contents discharged by being turned to a position nearly at right angles to the hopper, which position of the chute brings the bottom of the semi-cylindrical chamber beneath the mouth of the hopper, and opens it; in this way both the chute and the hopper are sealed and opened alternately, as shown in the drawing. The chamber is about four inches in diameter and five inches long, and from the center of the chamber to the lower end of the measure-chute is about seven inches.

For commodes having no hinged seats the cylinder may be operated by a pull-up as used in water-closets, the lever being connected to the pull-up instead of the seat.

Heretofore earth-closets have been excessively complicated in construction, and really have required the exercise of some little trouble and skill to operate them decently and properly. My present improvements obviate every objection and difficulty which has hitherto been encountered in the use of these articles. The apparatus is very simple and cheap in its construction and absolutely automatic in its action.

Having described my invention, I claim—
In an earth-closet, the combination of the lever B, semi-cylindrical chamber D with its distributing-chute E, the hopper F, connecting-links *a* and *b*, and the cover C, the several parts being constructed and arranged to operate as and for the purpose described.

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

GEO. H. VROOM.

Witnesses:

DANIEL B. GARY,
ELLIS BALLOW.