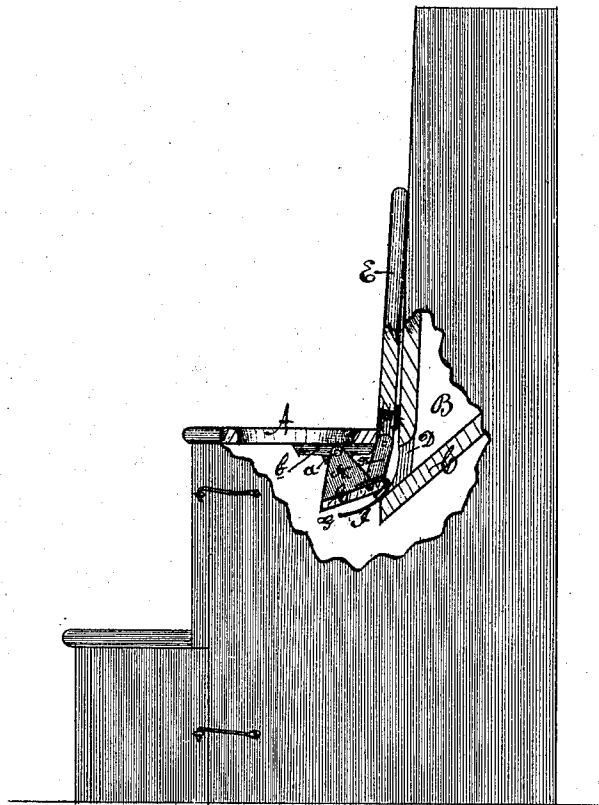


No. 110,989.

PATENTED JAN. 17, 1871.

P. MALONE.
EARTH CLOSET.



Witnesses.

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AND CHARLES C. LANDRY, OF SAME PLACE.

Letters Patent No. 110,989, dated January 17, 1871.

IMPROVEMENT IN EARTH-CLOSETS.

The Schedule referred to in these Letters Patent and making part of the same.

I, PATRICK MALONE, of New Orleans, Louisiana, have invented a certain Improvement in Earth-Closets, of which the following is a specification.

My invention, as is the case with all improvements in earth-closets, is designed to precipitate dry earth, pulverized charcoal, or other equivalent deodorizing substance, in regular and proper quantity and at the proper time, in order to deodorize the excreta deposited therein by the neutralization or absorption of the gases given out thereby, and thus to promote human health and comfort.

My improvement consists of a simple and cheaply-constructed mechanical arrangement, by which, through the agency of the cover of the seat of the closet, the hopper containing the deodorizing substance is opened and closed at the proper time, and the exact quantity of said substance that is necessary to accomplish the end in view is precipitated on the freshly-deposited fecal matter with unfailing certainty.

The precise character of my improvement, with respect alike to its separate parts or members and as when considered as a complete organism, will be at once and clearly understood by referring to the drawing, which presents a side elevation of an earth-closet provided with my improvement, with a part of the former broken away in order to expose the latter to view.

Behind the seat A of the closet, and rising above it, as in ordinary cases, is the hopper B, for storing the deodorizing substance, which, at the bottom, inclines downwardly from rear to front, as shown at C, in order to throw forward the said substance by means of its own gravity. The opening for the escape of this substance is made at the bottom of the hopper, on its front side, and this opening is flanked or faced on each of its sides by thin metallic strips D. These strips subserve an important object, as will be seen hereafter.

The hopper is curved at the point at which the opening for the escape of the deodorizing substance is made, and hence the strips D are also curved, as shown on the drawing.

The seat A is provided with a cover, E, which is hinged at its rear edge to the back edge of the seat, a little behind the point at which the cover is hinged and has its articulation. Links F are pivoted to it by means of side-bars, which are secured on each side of said cover in such manner that they extend rearward from the back edge of it.

These links are secured at their lower extremities, by pivot-joints, to a tilting or dumping-platform, G, which is sustained by a wide bracket, H, at each of its ends on pins or pivots a, which in their turn are sustained by cleats b fastened underneath the seat A.

The brackets H are just long enough to swing the platform G just sufficiently below the pins A to cause the upper and lower edges of the platform G alternately to come as close to the curved front of the hopper B as is compatible with the provision of a sufficient open space between said edges and said front for the metallic gate I as the platform is vibrated backward and forward on the pins a by the raising and lowering of the cover E.

The platform G should extend transversely across the whole curved portion of the front of the hopper, and be wide enough to receive and hold a sufficient quantity of the deodorizing agent completely to cover each deposit of fecal matter.

Underneath the platform G, and secured to it at its rear edge, is a metallic gate, I, that is curved on the same radius or arc as the section of the hopper through which the opening is made for the eduction of the deodorizing agent therefrom.

The gate I impinges against the edges of the metallic strips D, which latter, therefore, cut off the outward flow of the deodorizing agent, whenever the gate closes the opening, in the most effective manner, whilst at the same time making the movement of the gate far easier than would otherwise be the case.

The gate I may or may not be hinged at the point of its connection with the platform G. In either case its operation is efficient.

To insure the falling off of any portion of the deodorizing agent which may chance to flow out on the sides of the opening upon the curved section of the hopper, grooves may be cut down the said portion just outside the strips D; but as a general thing this will not be necessary in consequence of the inclination of this portion of the hopper.

The operation of my invention is as follows:

When the cover E is down on the seat A the platform G will be thrown backward, through the agency of the links F, sufficiently to cause the gate I to overlie, and thus close the discharge-opening in the hopper; but when, on the contrary, the cover is raised, the effect is to swing down the platform into the position shown on the drawing. This uncovers the opening and permits the deodorizing substance to flow by its own gravity through the same upon the platform G, which now occupies a position nearly horizontal, until the desired quantity is collected thereon, when, by its banking up, all further flow from the hopper is stopped. The quantity flowing out is easily and exactly regulated by increasing or diminishing the size of the opening, by means of sliding panels or other equivalent means, with the greatest facility.

The deodorizing agent that has found its way on the platform G remains thereupon until the person using

the closet rises and closes the cover down on the seat, and thus again, through the medium of the links F, throws back the platform G, and by so doing closes the opening once more by means of the gate I, tilts the platform, and precipitates said substance thereby on the *excreta* just deposited.

It will be perceived from this description that my invention is of very simple construction, and that all its movements being positive and compulsory, it must necessarily be effective in its operation. I have, in fact, demonstrated the thorough efficiency of its operation in practice by repeated experiments.

What I claim is—

The combination of the curved strips D and the metallic gate I with the platform G, the links F, and the cover E, when these parts are constructed, arranged, and operated substantially as described for the purpose set forth.

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Witnesses:

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