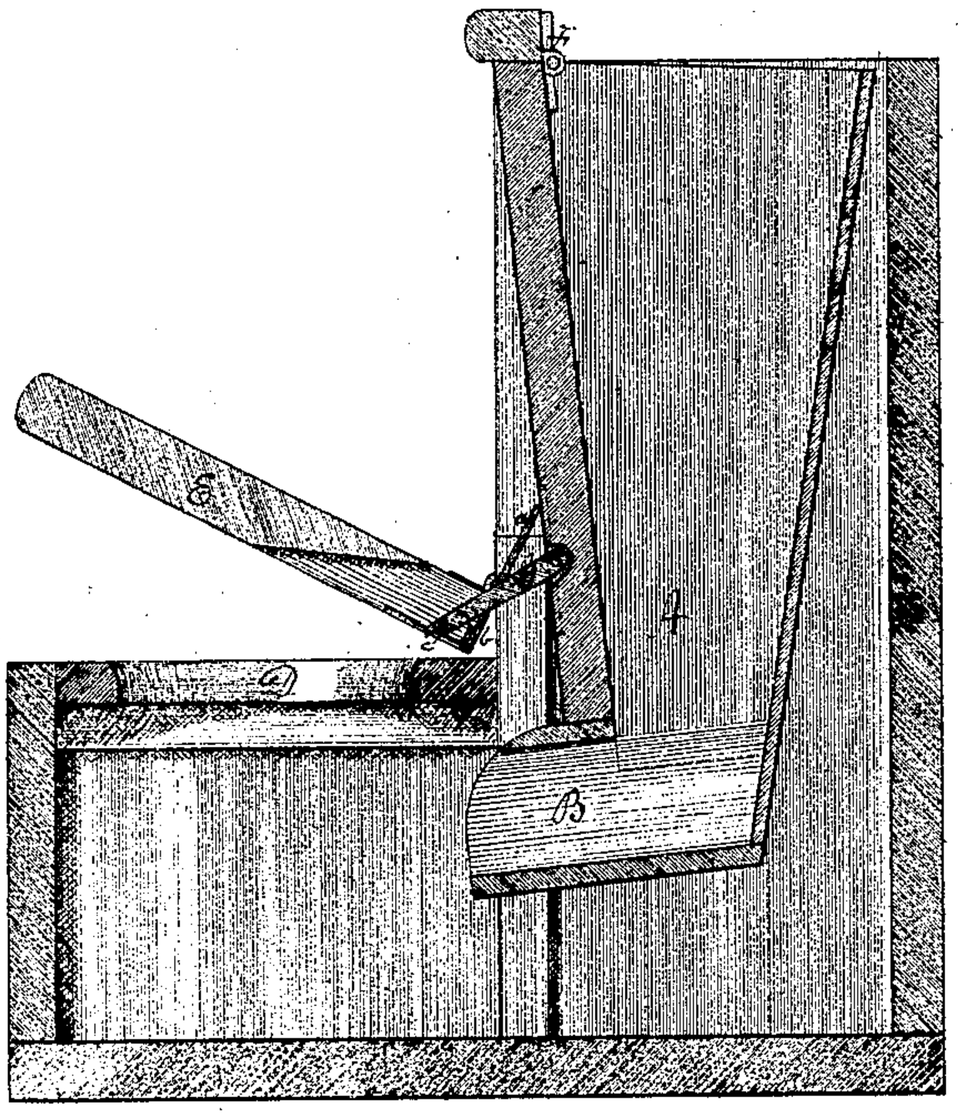
W. R. C. Clark,

Earth Closet.

No. 102,494. Patented May 3. 1870.



Witnesses.
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WILLIAM ROBERT COTTON CLARK, OF NEW ORLEANS, LOUISIANA.

Letters Patent No. 102,494, *dated May* 3, 1870.

IMPROVEMENT IN EARTH-CLOSETS.

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

I, WILLIAM ROBERT COTTON CLARK, of the city of New Orleans and State of Louisiana, have invented a certain Improvement in Earth-Closets and Commodes, of which the following is a specification.

My invention relates to the mechanical construction of those parts of earth-closets and commodes which are employed to contain and to precipitate, in regulated quantity, dry earth, or other absorbing and deodorizing substance upon the excreta deposited in such closets or commodes, with the object of utilizing the same as a fertilizer without delay, whilst, at the same time, destroying the bad odors thereof, and thus remedying the evil effects, resulting therefrom, to the health of cities, towns, and other places in which people are congregated in large numbers.

My invention is an improvement on all my other arrangements for accomplishing the same object, because it is far more simple, less liable to get out of order, and more efficient in operation.

The drawing is a sectional representation of my improvement, the line of bisection being through the center of an earth-closet in which it is placed, from the front to the rear.

On the drawing—

A is a hopper, to contain the deodorizing substance, which, tapering from its open top to its bottom, as shown, terminates in an open shoe or box, B, which is placed at right angles to its front side, and so connected with the hopper as to project under the seat C of the closet or commode a little beyond the rear of the hole D of the said seat, whenever the front side of the hopper occupies a vertical position, which is always the case when the cover E is down on the seat, for, the hopper A is suspended, by hinges or their equivalents, at F, in such manner that, whilst it may be oscillated backward with ease, it will always resume this position under the influence of its gravity the instant it is left free to do so, and with considerable rapidity of motion.

One good substitute for ordinary hinges for sustaining the hopper would be a circular iron bar, passing through eye-bolts fixed in the frame of the closet, and secured by means of any proper form of straps, to the hopper at its front upper corner.

The means for operating the hopper are very simple. I secure on the rear edge of the hinged cover E, two metallic plate angles or elbows, *a*, so as to provide a narrow space between them and have them project upwardly at right angles to the planes of the upper and lower surfaces of the cover, from six to twelve inches above the upper surfaces of the cover E.

Between these elbows I place two transverse bars, one at the angle, as shown at *b*, and one a little in advance thereof, as shown at *c*. The bar *b* extends upwardly for an inch or two, whilst *c* is merely a small square bar, as shown.

At a point a little above the upper surface of the cover E, when it is closed down on the seat, I pivot to the side of the hopper a pawl or trigger, G. This trigger is provided with a notch on its lower side at its extremity, as shown, which fits over the bar *c* whenever the cover E is up, off the seat D, the length of the trigger being adjusted so as to produce this result, and to keep the notch always directly impinging against the bar *c* until the cover is brought down on the seat, when the bar *b* strikes against the trigger behind the notch, throws the latter out of connection with the bar *c*, and permits the hopper to swing back against the rear edges of the seat and cover.

To prevent noise by the concussion, cushions of leather or other material may be placed on the said edges of the seat and cover.

The hopper is moved back by the upwardly-projecting ends of the elbows *a* in a gradual manner, by the raising of the seat, so that little or no earth is thrown out of the shoe B by the operation; but, in its rapid swing back and sudden stoppage by the rear edges of the seat and cover, all the earth near the open mouth of the shoe B is thrown out of the same, and precipitated on the excreta by its momentum merely. This is the mode in which my improvement operates, and I have found, by actual experiment, that it works with the utmost precision and certainty. The quantity of earth precipitated is regulated by the size of the shoe B; but, if necessary, double the prescribed quantity can be thrown out by repeating the operation, that is to say, by raising and lowering the cover a second time.

What I claim as my invention is—

The combination of a swinging hopper, A, provided with a shoe, B, and a notched trigger, G, with an earth-closet or commode, which is provided with a hinged cover, E, in connection with elbows *a*, bars *c* and *b*, when the parts are constructed, arranged, and operate as herein described, for the purpose set forth.

Witnesses: W. R. C. CLARK.

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