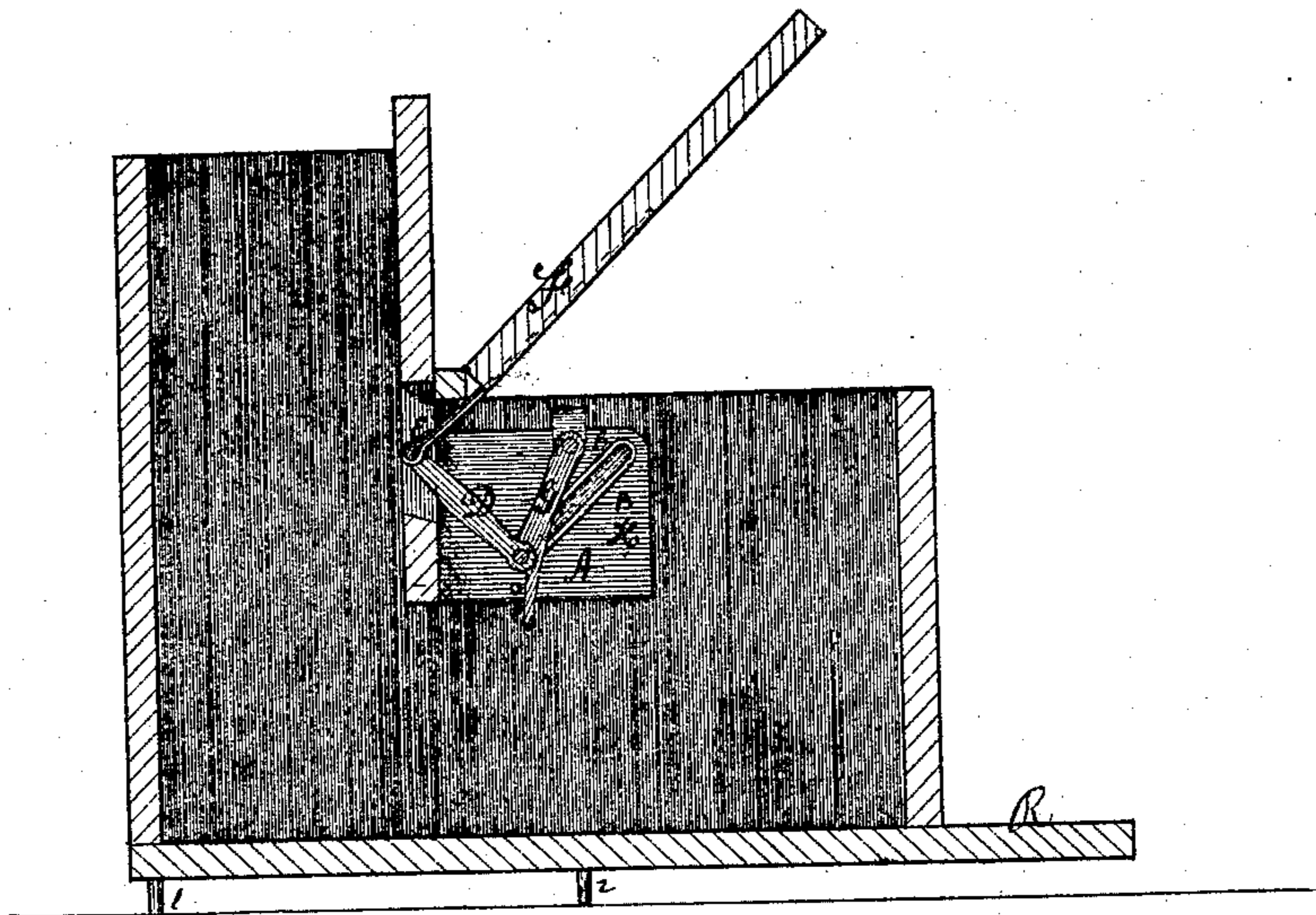


J. A. Drake,

Earth Closet.

No. 106,566.

Patented Aug. 23. 1870.



Witnesses.

H. N. Jenkins
A. R. Place

Inventor.

James Addison Drake

United States Patent Office.

JAMES ADDIZON DRAKE, OF NEW ORLEANS, LOUISIANA, ASSIGNOR TO
HIMSELF AND MARY E. B. CLARK, OF SAME PLACE.

Letters Patent No. 106,566, dated August 23, 1870.

IMPROVEMENT IN EARTH-CLOSETS.

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

I, JAMES ADDIZON DRAKE, of the city of New Orleans and State of Louisiana, have invented a certain Improvement in Earth-Closets, of which the following is a specification.

My invention consists of a simple mechanical arrangement for operating earth-closets through the medium of the covers of the seats of the same, my object being the same which is common to such improvements.

It also consists of a novel method of rocking the closet by placing it on legs, and providing a foot-board, which tilts the same whenever a person about to use it, the closet, steps on it.

My invention may be applied to any earth-closet in which the delivery or precipitation of the deodorizing substance follows after each use of the closet, and is made through the medium of a rectangular, horizontally-placed chute, connecting with the hopper in which such substance is stored at the bottom of said hopper.

The drawing presents a side view of my contrivance, in connection with an earth-closet, there being, however, no hopper shown thereon.

A is a rectangular chute, which we may suppose is united at its rear end with a hopper, of any proper form, for securing the descent of the dry earth or other substance into said chute.

On an axis, B, outside of the chute A, I secure a grooved crank-arm, C, to which I connect, by means of a pin that enters into the groove in said arm, a pitman, D.

The connection is such that, while the pin remains securely within said groove, it will move easily in said groove from one end of it to the other.

At the opposite end to which it is connected to the crank-arm C, the pitman D connects, by means of a hinged or pivot joint, with an arm, E, which, projecting from the cover of the seat of the closet, the same being marked F on the drawing, at the rear edge thereof, and, in the same line or plane with the seat, is securely fastened thereto by any proper means.

A little within the radius of the two opposing sections of the crank-arm C, by which I mean the two parts of it on either side of its axis B, and a little behind a vertical line drawn through the center of said axis, I secure to the frame of the closet, a pendent pawl, G. This pawl hangs between the crank-arm C and the pitman D, and subserves a very important function in the operation of the device, which is as follows:

When the cover F of the seat is closed, the pitman

D and the crank-arm C occupy the same, or very nearly the same line with each other, the pin connecting the two being at the rear end of the slot in said arm, the pawl G hanging down loosely in front of said pin. As the cover is raised the bar, E, being behind the axis of the vibration of the same, is, of course, lowered. This pushes the pitman endwise toward the front end of the crank-arm C, the pin connecting the two gliding along the groove in the said arm without turning the same in the axis B until it reaches the end of the same, at the same time pushing the pawl forward.

The parts are adjusted so that, at the moment the pin reaches the front end of the groove in the crank-arm the cover F attains its highest point of elevation, and the pawl G drops over said pin. When the cover is lowered the impingement of the pawl G against the pins maintains it at the front end of the groove, and hence compels the crank-arm to revolve. This rotates the axis B, which, inside the chute A, is provided with two or more wings, which, whenever any two of them occupy a transverse position with relation to the chute at right angles to its longitudinal lines, completely fill up the same, and prevent the escape of the deodorizing substance.

These wings may be straight, as shown at H by dotted lines, or they may be of scroll or any other suitable form, to fulfill their allotted function, which is to throw out a given quantity of the deodorizing agent whenever the closet is used.

I need hardly add that they perform this duty by a partial revolution whenever the cover F is shut down on the seat after the closet has been used.

I give a rocking motion to the closet by placing it on short legs, 1 2 3, the last being hidden by 2 on the drawing, and providing a projecting front foot-board, R, which, whenever stepped on, will cause the closet to tilt forward and to fall backward suddenly whenever the person removes his weight therefrom.

What I claim is—

The grooved crank-arm C, when secured on an axis, B, provided with wings H, and connected with a pitman, D, which is pivoted to a bar, E, that is attached to the cover F, in combination with a pawl, G, and a chute, A, for delivering dry earth or its equivalent, when the several parts are constructed, arranged, and operate as described, for the purpose set forth.

JAMES ADDIZON DRAKE.

Witnesses:

H. N. JENKINS,
F. R. PLACE.