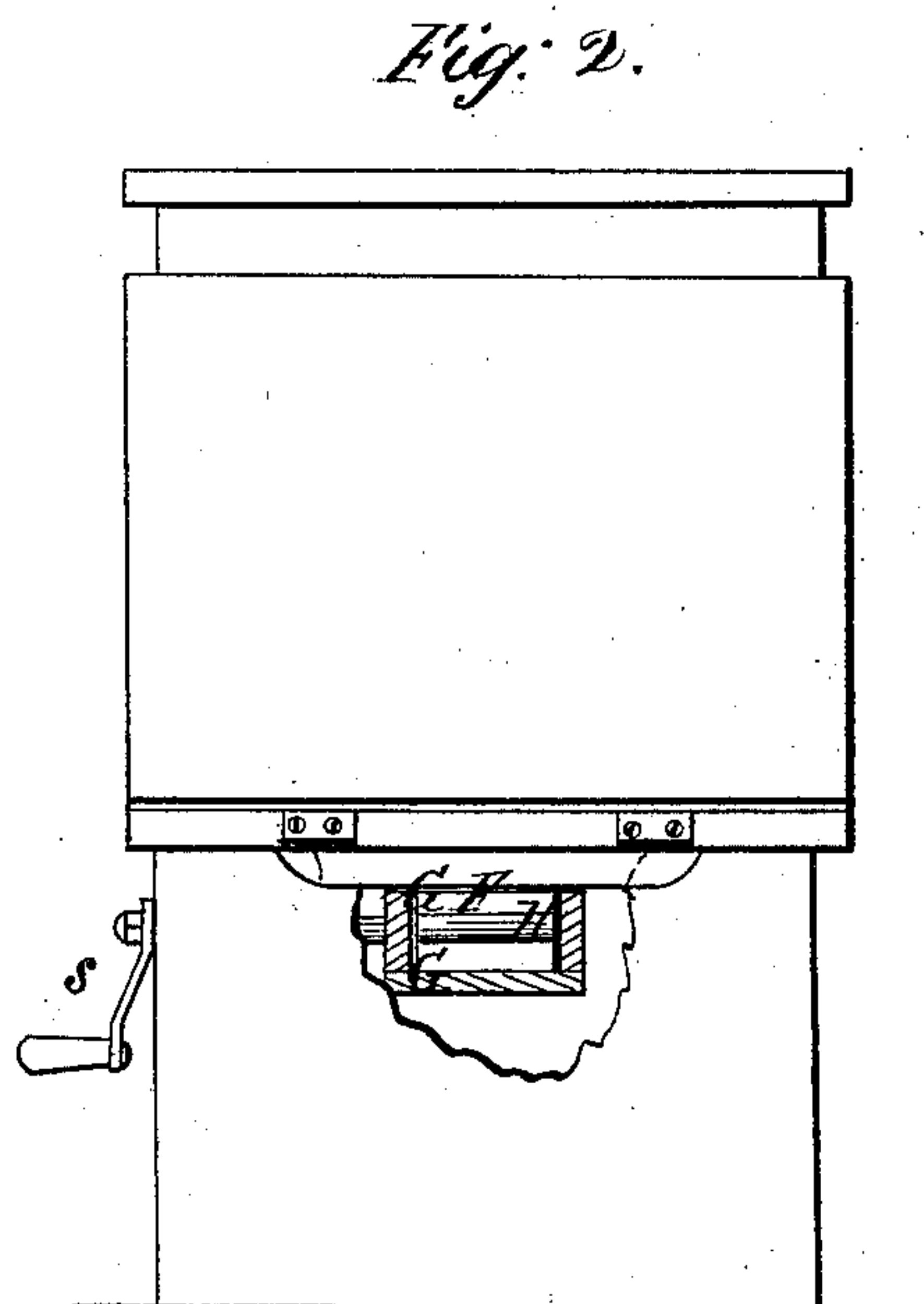
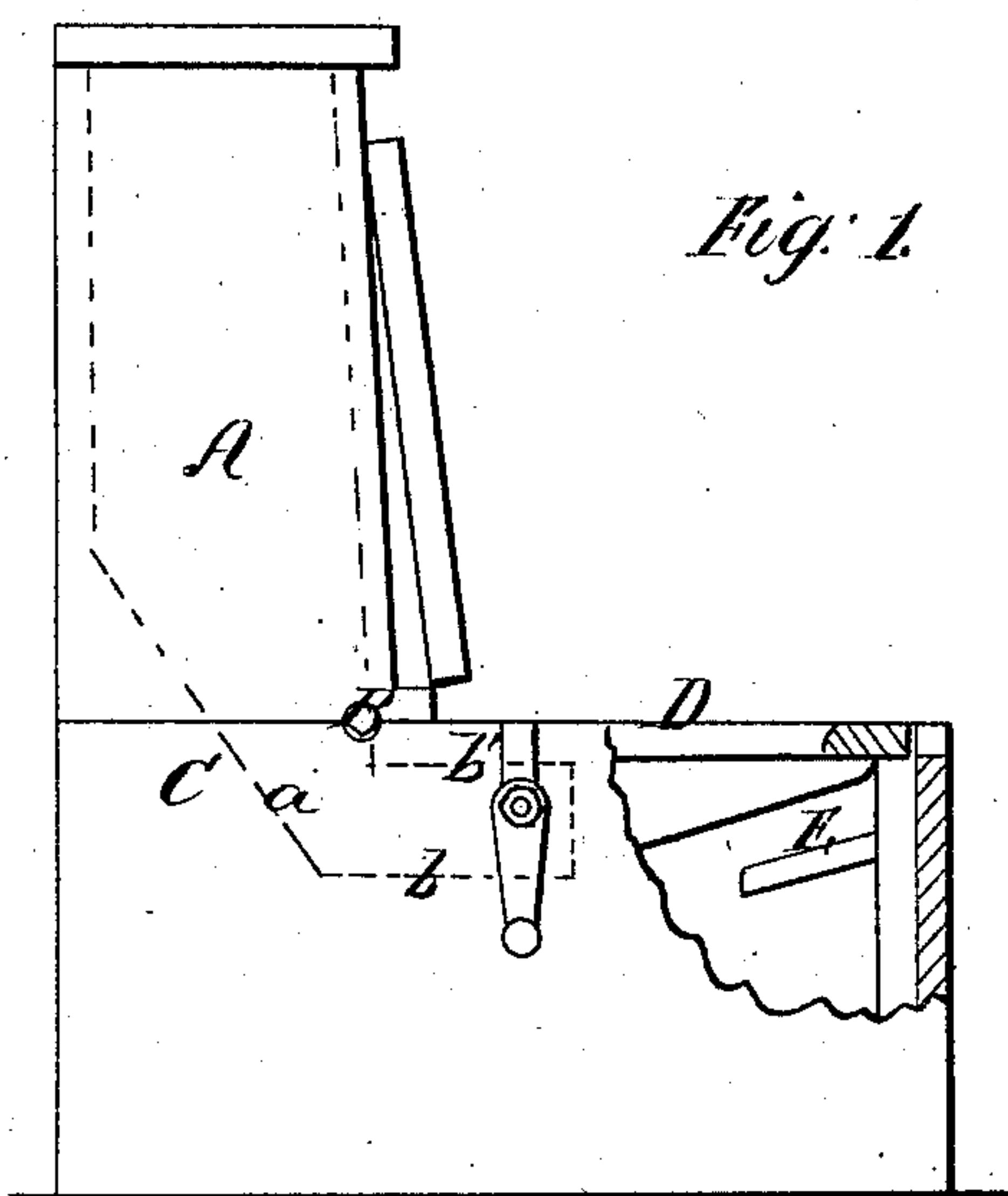


J. A. Drake,
Earth Closet,
N^o 106,565. Patented Aug. 23, 1870.



Witnesses;
H. A. Jenkins
J. R. Place

Inventor;
J. A. 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. 106,565, 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 New Orleans, Louisiana, have made a certain Improvement in Earth-Closets, of which the following is a specification.

My improvement consists of a device for precipitating in earth-closets dry earth or other deodorized equivalent, at proper times and in proper quantity, in combination with a rocking hopper to contain the dry earth, that is so constructed as to force the said earth upon the device as fast as it is thrown out by said device.

The objects attained by my improvement are the same sought to be accomplished by all improvements in earth-closets, and need not therefore be herein specified.

A reference to the drawing will at once disclose the nature and mode of operation of my invention.

Figure 1 is a side view of an earth-closet in which my improvement is incorporated, and

Figure 2, a front view of the same closet.

Portions of the interior walls are broken away in both views, in order to bring into view the interior arrangement of my improvement.

On the drawing—

A is the hopper to contain the deodorizing substance or powder, so constructed as to be sustained on an axis, B, and the rear portion of the compartment C, while yet extending below the upper edges of the same in an oblique direction forward, as shown by the dotted line *a*, sufficiently to provide a short horizontal section, as shown at *b b'* by dotted lines.

In front of the hopper A the seat of the closet is secured at right angles thereto, and in line with the upper edge of the compartment C, as clearly shown at fig. 1.

The seat is marked D.

Below the seat D stoppers or cleats E are fixed on the sides of the compartment C at a sufficient distance, say two or three inches, to permit said seat to go down that far whenever it is occupied, under the weight of the person who sits upon it.

The depression of the seat under the weight of the person who sits down on it, and its elevation to its normal position when he rises from it, rocks the hopper A on its axis B, and hence causes the deodorizing substance to flow into the horizontal and reduced section, which is shown by the dotted lines *b b'*, at fig. 1,

to which it is directed by the inclined rear *a* by its own gravity, and from which it is delivered in prescribed quantity upon each deposit of fecal matter within the closet by the device or winged valve F.

This valve consists of two wings, G, which are just wide and long enough to fill up the delivery horizontal sections *b b'*, as shown at fig. 2, that project from an axis or shaft, H.

This shaft is provided with journals in the sides of said horizontal section, which is rectangular in form, and in the right side or wall of the compartment C, through which it projects sufficiently to receive a crank, I, as shown at both figures.

The crank I is so placed on the shaft H as to hold the valve F in vertical position, and, therefore, in such position as to close the delivery section *b b'* whenever or at all times except when it is purposely turned out of that position.

The operation of my invention is as follows:

When the person who is about to use the closet sits down on the seat D it is depressed until it rests on the cleats E, and consequently throws the hopper A forward by a rocking motion on the axis B; this causes the dry earth to move forward, if it has not already done so, and fill up the delivery section *b b'*. As soon as the deposit has been made the occupant of the closet seizes the crank I, and, by turning it over in either direction, causes one of the wings G to throw out of the delivery section *b b'* a prescribed quantity of the deodorizing agent, which, falling on the excreta, accomplishes the desired object. When the occupant rises from the seat the weight of the hopper carries it back to its normal position, with a sudden and quick motion, which, being suddenly arrested, causes a downward flow of the dry earth, and a refilling of the horizontal section *b b'*, and so on indefinitely.

What I claim is—

The winged valve F, when constructed as herein described, and actuated by a hand-crank, I, in combination with a hopper, A, when the latter rests on an axis, B, and is otherwise constructed as specified, for the purpose set forth.

JAMES ADDIZON DRAKE.

Witnesses:

H. N. JENKINS.

F. R. PLACE.