

W. R. C. Clark,

Earth Closet.

No. 102495.

Patented May 3. 1870.

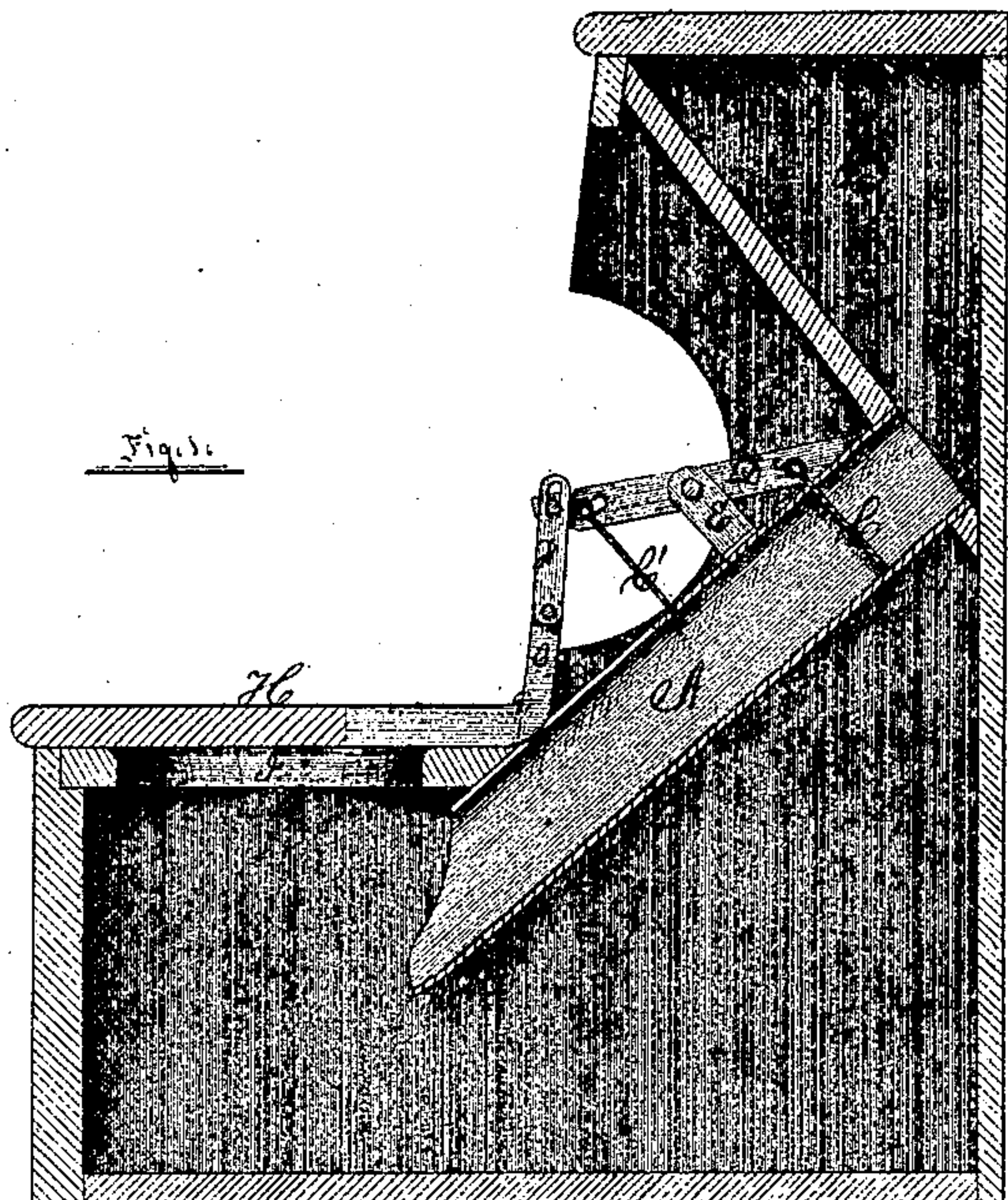
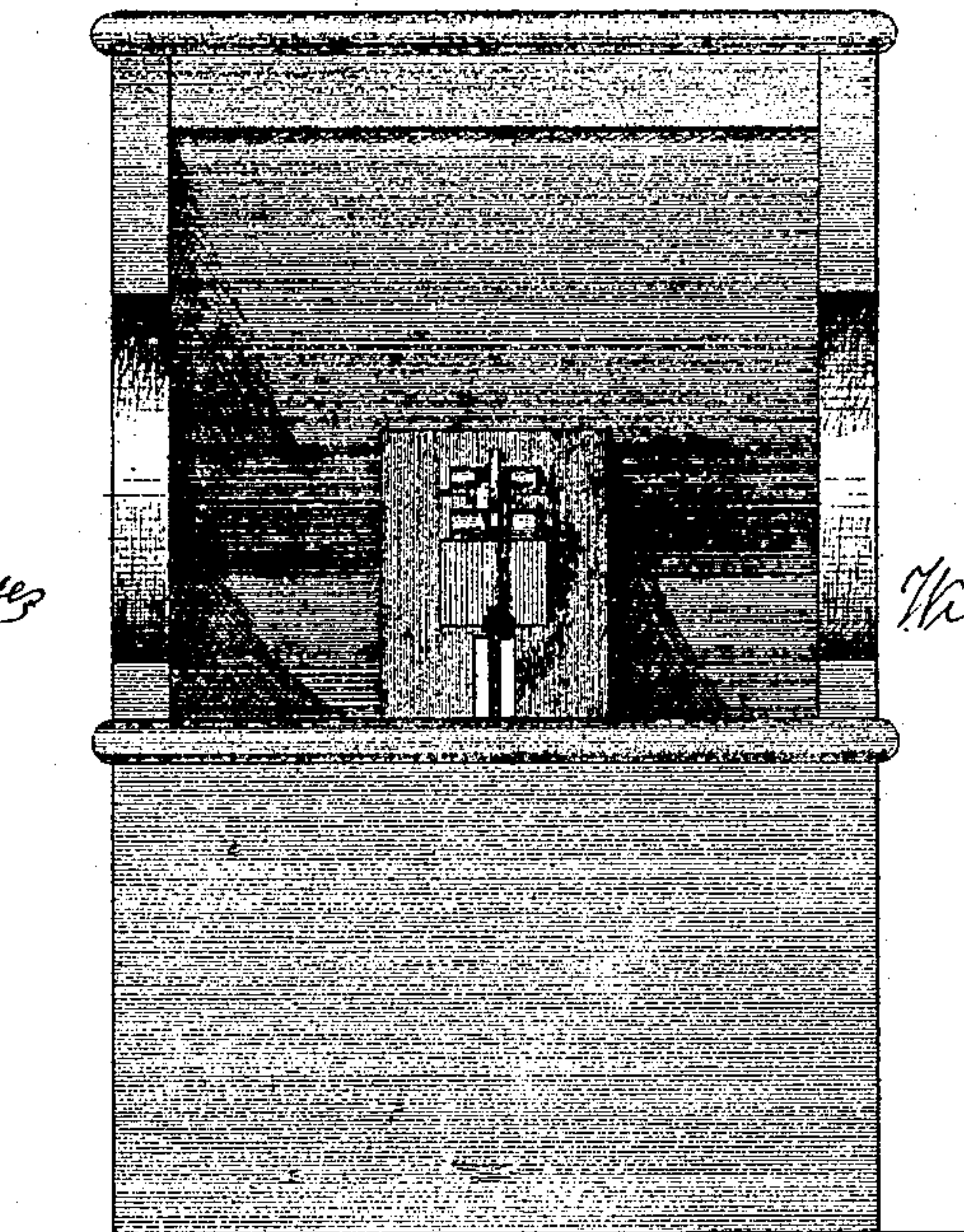


Fig. 2.



Witnesses.

Rufus R. Rhodes  
J. S. Bond

Inventor.

William Robert Cotton Clark



# United States Patent Office.

WILLIAM ROBERT COTTON CLARK, OF NEW ORLEANS, LOUISIANA.

Letters Patent No. 102,495, 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 New Orleans, Louisiana, have invented a certain Improvement in Earth-Closets or Commodes, of which the following is a specification.

The object of my invention, as is the case with all improvements in earth-closets, whether stationary or portable, is to precipitate a given quantity of dry earth, pulverized or powdered charcoal, or other equivalent substance, on each deposit of excrement, with the view of deodorizing the same, and thus destroying its power of injuriously affecting the atmosphere, while, at the same time, preparing it for immediate use as a fertilizer.

A reference to the drawing will at once disclose the nature of my invention,

Figure 1 on the same being a cross-section of an earth-closet, in which it has been placed, and

Figure 2, a front view of the same closet.

An inspection of the figures will show that my improvement consists of a mechanical arrangement for operating, in a positive manner, and without the use of springs, which are always objectionable in such relations, two gates or stoppers, at a proper distance apart, that are placed in the tube or conduit leading from the hopper, in which the deodorizing substance is kept, down to a point which will insure the precipitation of the said substance on the excreta, whenever it falls therefrom.

On the drawing, the conduit to which I refer is marked A.

Connecting with the hopper B, near the bottom of the latter, as is shown, it extends at a downward angle sufficient to cause the rapid descent of the deodorizing substance, which passes into it from the hopper, to a point which will cause the said substance to fall on the excreta which has been deposited in the closet.

This conduit may be of any suitable form in its cross-sections.

Not far below the point of connection, between the hopper B and conduit A, two incisions are made, to receive the two gates or stoppers C C'.

The space between these gates should be regulated with reference to the quantum of earth to be delivered on each deposit of excreta, so as to insure a sufficiency thereof to deodorize said deposits as they are from time to time made.

The gates C C' are pivoted to a rock-arm, D, that is sustained by a standard, E, projecting midway between said gates from the conduit A, substantially as shown.

The connection between the gates C C' and the rock-arm D is established by means of pins in the upper end of the former passing through slots in the latter, in order to prevent strain in the vibration of said arm and the up-and-down movement of the gates which that vibration causes.

To the front extremity of the rock-arm D, by an articulating joint, is secured a link, F, which, in its turn, is connected by a similar joint to another link, G, that is secured to the rear edge of the cover H of the seat, by a rigid connection, and so as to be at right angles with the plane of the surface of said cover.

The length of the two links F G united is so adjusted that when the cover H is down on the seat I, they will be in the same line with each other, as shown, or nearly so.

Under this arrangement, the lifting of the cover H will throw back and depress the link G, and cause it to carry down the link F, and, through the agency thereof, the front end of the rock-arm D.

The depression of the front end of the rock-arm will, of course, elevate its rear end, and hence withdraw the gate C, while, at the same time, depressing the gate C', and closing the conduit at that point, so that, if we suppose the hopper B and the conduit down to the gate C to be filled with dry earth or other equivalent substance, when the cover H is down on the seat I, it will at once be seen that, by lifting the cover, and, through the intermediate parts which I have described, by doing so, withdraw the gate C, we necessarily close the conduit with the gate C', and, at the same time, cause the said earth to descend upon the latter gate, where it will remain until the cover is again lowered on the seat.

When this is done, the operation as to the gates is reversed, that is to say, the gate C' is withdrawn from the conduit, while the gate C closes it, which permits the earth between them, to rush down the conduit and fall on the excreta.

The operation is repeated every time the closet is used and the cover H raised and lowered.

My improvement, it will be perceived, converts the cover H into a lever, of which the link G is the short arm, that in a direct and positive manner operates the rock-arm D and the gates C C', and hence always is an effectual way, which is never the case when springs are relied upon to actuate said parts.

My invention is simple, costs relatively less than any arrangement for accomplishing the same end with which I am acquainted, and is more effective in practice and less liable to get out of order.

I claim as my invention—

The links G and F, the rock-arm D, and the gates C' and C, in combination with a cover, H, a conduit, A, and a hopper, B, when the parts are constructed, arranged, and operate as described, for the purpose set forth.

WILLIAM ROBERT COTTON CLARK.

Witnesses:

RUFUS R. RHODES,  
H. B. BOND.