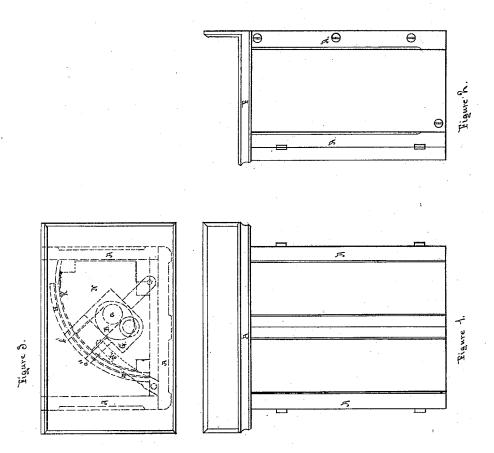
C. N. Roberts, steet. 1.

Earth Closet.

No. 109667.

Falented Nov. 29. 1870.



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Inventor Jes. O. Roberts

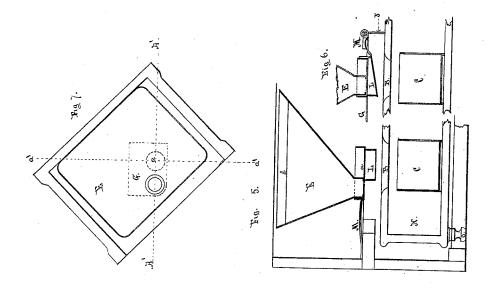
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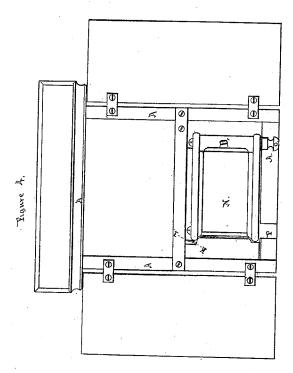
G.M. Roberts,

Earth Closet.

No. 109,667.

Patented Nov. 29. 1870.





Witness

6. D. Inelan Mit Chandler & mentor Geo. M. Roberto

## United States Patent Office.

GEORGE W. ROBERTS, OF WILMINGTON, DELAWARE, ASSIGNOR TO HIM-SELF AND JOHN H. GRAHAM, OF SAME PLACE.

Letters Patent No. 109,667, dated November 29, 1870.

## IMPROVEMENT IN EARTH-CLOSETS.

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

To all whom it may concern:

Be it known that I, GEORGE W. ROBERTS, of Wilmington, in the county of New Castle and State of Delaware, have invented a new and improved Earth-Closet; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 represents a front view of said closet when

closed.

Figure 2, an end view of the same.

Figure 3 is a plan or top view of the same through the top, showing the interior arrangement of working parts.

Figure 4 shows a front view of said closet with

doors open for use.

Figure 5 is a section through the middle of my improved closet and the parts beyond, looking into the further half on the line A'A'.

Figure 6 is a section through the middle of my closet and the parts beyond, on the line a' a'.

Figure 7 is a top view, with the cover removed, showing interior of hopper and the valve beyond.

My invention relates to that class of closets in which earth is used to absorb odor from the excrement by being mixed with it, deposited in a proper place or receptacle; and

The nature of the invention consists in the novel combination and arrangement of parts, as hereinafter set forth and claimed.

A is the stand or case inclosing the whole apparatus.

B is the seat-opening.

C, the pail or receptacle within a movable seat, and can be removed at will through the door D.

E, a hopper to contain dry earth, access being had by raising the cover F.

G is a sliding platform, moving under the hopper E on guide H. This sliding platform is made to move back and forth by means of connections, I and J, extending below guide H to a pin, K.

L is a valve, hung in balance under the platform G, this platform having a circular opening, a, through which the earth passes from the hopper E to valve L.

M is a spring, extending from the front of case A to rear of valve L.

N, a movable seat, (quadrant shape,) hinged to case A, supported at its outer corner by the foot O.

b indicates a sieve or screen, made of any suitable material, so constructed as to allow the passage of dry earth, and to retain any foreign matter accidentally mixed with the earth. The sifting may be facilitated by moving the earth from side to side of the hopper with any suitable instrument.

a" and b' are the points of connection between the

platform G and the guide H.

P is a slot or recess to receive the foot O when the closet is closed.

The operation of my invent on is as follows:

The position of parts shown by dotted lines in fig. 3 is that in which they are generally placed for use.

When the seat N is withdrawn for use, the bottom of hopper E being open, a portion of earth passing from E through a into valve L, after use, the excrement being deposited in the receptacle C, the seat N is replaced within the case A. The platform G, taking an inward motion, brings the solid portion of platform G under (directly) the hopper E, and cuts off the supply of earth. The spring M releasing the rear end of valve L, the seat-opening B having come immediately under the valve L, the earth is, of its own weight, dumped into receptacle C, covering the deposit of excrement.

A modification of my invention can be made so as to conduct the urine into the receptacle C, by placing a piece of any suitable metal, so curved as to accommodate it to the configuration of the seat N, immediately under the top of said seat and in front of receptacle C.

Another modification of my invention may be made by making the front of case A solid, (dispensing with doors,) and hinging the seat N to back corners of case A, to open from either end instead of from the front.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, of the movable seat N, with the sliding platform G, valve L, spring M, and hopper E, having the sieve b, whereby the quantity of earth to be used, and the time of passage is regulated, arranged to operate in the manner and for the purpose specified.

GEORGE W. ROBERTS.

Witnesses:

C. D. IRELAN, W. K. CHANDLER.