

WILLIAM J. BRADSHAW.

Earth Closets.

No. 116,015.

Patented June 20, 1871.

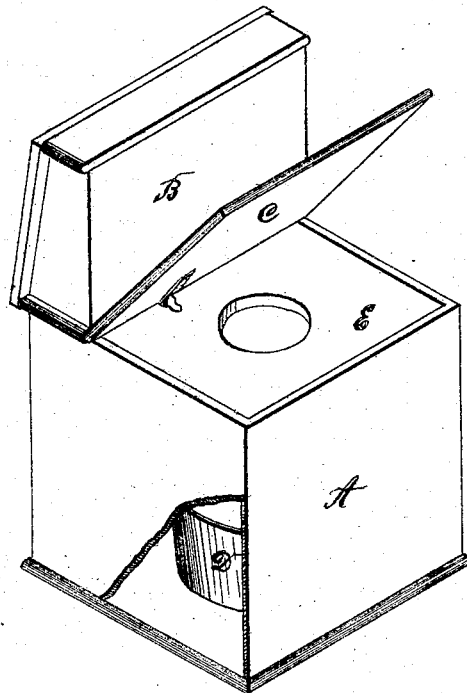


Fig 1

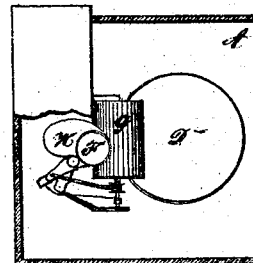


Fig 2

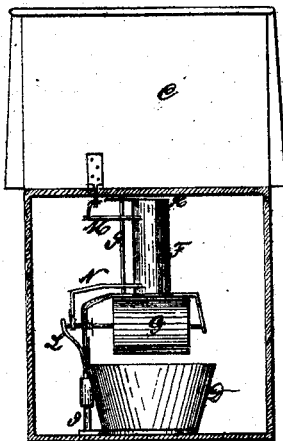


Fig 3  
WITNESSES  
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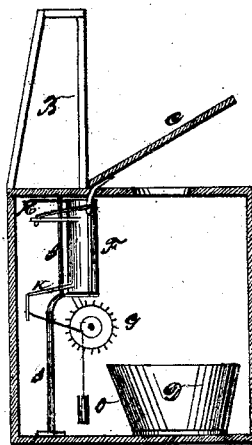


Fig 4

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WILLIAM JOSEPH BRADSHAW, OF CLEVELAND, OHIO.

## IMPROVEMENT IN EARTH-CLOSETS.

Specification forming part of Letters Patent No. 116,015, dated June 20, 1871.

*To all whom it may concern:*

Be it known that I, WILLIAM JOSEPH BRADSHAW, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain Improvement in Earth-Closets, of which the following is a specification:

My invention relates to the combination of horizontal roller and an upright hinged hollow cylinder in such a manner that the said hinged cylinder shall be able to receive and discharge earth from a reservoir above. The said roller spreads the earth over the excrements in the pail at every opening and closing of the cover of the earth-closet. The object is to prevent the odorous fumes arising and mixing with the atmosphere of the room.

Figure 1 is a perspective view of an earth-closet. Fig. 2 is a plan of the attachment embodying the invention. Fig. 3 is an end elevation, showing the attachment or inner construction of the earth-closet; Fig. 4, side elevation of the same.

A is a square box or closet containing the pail D. The cover of closet is formed out of the lid C hinged onto the box B, which is to be the reservoir to hold the earth. The same reservoir B is a separate box setting on main box, made high enough to serve as a support for the back of the person. The iron rod I, which serves as a frame for the attachment, is screwed to the bottom of main box or closet A. It is extended upward about two-thirds of the height of main box A; it then takes a horizontal turn sufficiently long to take the length of roller G; then downward again to form a bearing for the shaft of roller G to run in. The other end of the shaft of the roller G is supported by an arm, L, extending from the main rod I, as shown in Fig. 3. Onto the horizontal bend of the rod I is a piece welded on, extending upward into the bottom of the earth-reservoir just outside of the circle of aperture through which the earth escapes into the hollow cylinder F. The said cylinder F is hinged to rod I by means of a couple of loops fastened onto the side of hollow cylinder F, which will enable the cylinder to swing around the rod I. The said cylinder F is supported by a plate of sheet-iron fastened onto the horizontal bend of rod I. This sheet-iron plate serves to keep the end of hollow cylinder F closed

and the earth from running out when not wanted. On the upper edge of cylinder F, immediately under the bottom of earth-reservoir, is an elliptic-shaped plate, H, Fig. 2, fastened, which serves to close the aperture in reservoir when cylinder F is swung around on rod I. The relative position of the plate fastened to horizontal bend of rod I, to the elliptic-shaped plate H fastened on the edge of cylinder F, is such that when the cylinder F is swung around on rod I the aperture in bottom of reservoir B is either opened and the lower end of cylinder F closed, which will permit the earth to run into cylinder F; or the cylinder F is swung off from the stationary plate on horizontal bend of rod I, and the elliptic-shaped plate H on the side of cylinder F is swung under the aperture in bottom of reservoir B, thus to discharge the quantity of earth taken in in the other motion. The movement of cylinder F will only be a quarter motion, and must be a quick one, and is produced by opening and closing of the lid C of the main box or closet A.

The motion is transferred in the following manner: A small iron plate fastened on the under side of lid C is connected by an iron wire to an arm, M, on the side of hollow cylinder F. The consequence is, when lid is raised the lever or arm M is brought forward, and cylinder F, being hinged, will swing under the aperture in reservoir B and fill with earth. By closing the lid C the end of arm M will be pushed back, and cylinder F will swing forward and empty its contents onto the roller G, from there into pail D.

In order to spread the earth more completely over the whole surface of the bottom of pail the roller G is made to revolve in a forward direction, so that the earth falling upon it will be thrown forward. It is accomplished in the following manner: In the first place, the wooden roller G is provided with sheet-iron flanges, as shown in Fig. 4; next, a cord running from arm N on side of cylinder F is passed several times around the shaft of roller G. Onto the end of cord a weight, O, is attached. By raising the lid the arm N swings back. The cord being kept tight around the shaft by weight O will cause the roller to turn backward. By closing of lid C the weight falling will revolve the roller G forward. The collars placed upon

the shaft of roller G will act as guides for the cord and prevent chafing of the same.

I claim as my invention—

1. The hinged hollow cylinder F, in combination with the elliptic plate H, substantially as and for the purpose hereinbefore set forth.

2. The combination of the roller G and

weight O with arm N and cylinder F, substantially as described.

W. J. BRADSHAW.

Witnesses:

JNO. J. CLAUSE,  
FRANK NORCROSS.