

(No Model.)

2 Sheets—Sheet 1.

C. D. LANE.
EARTH CLOSET.

No. 303,023.

Patented Aug. 5, 1884.

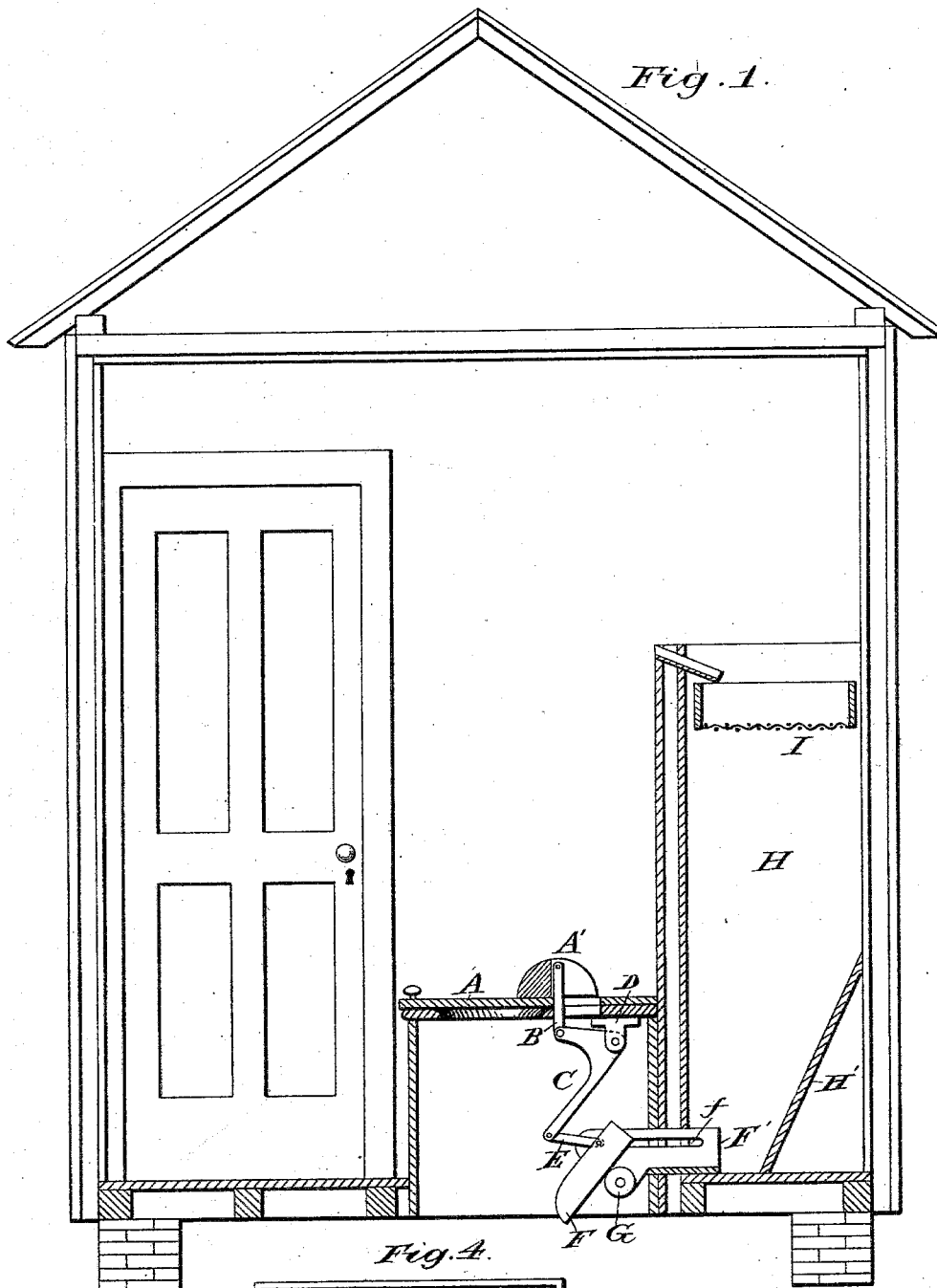
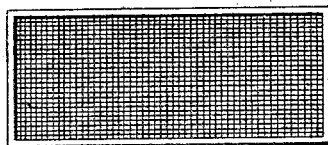


Fig. 4.

Witnesses:

St. Strong
Wm. H. Newey



I

Inventor:

Cyrus D. Lane
by J. W. Ford Atty.

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Fig. 2.

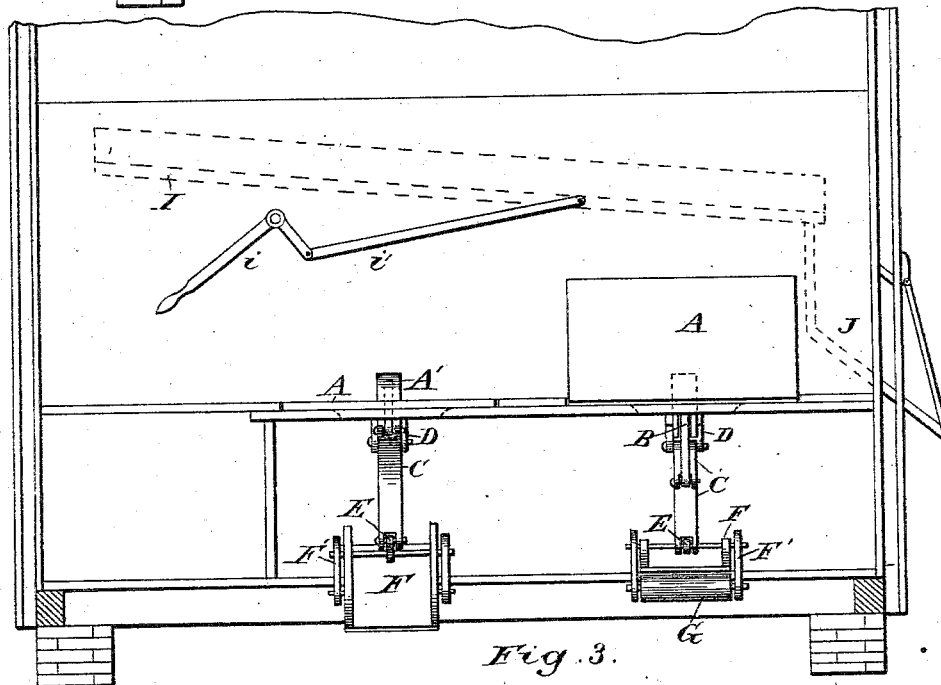
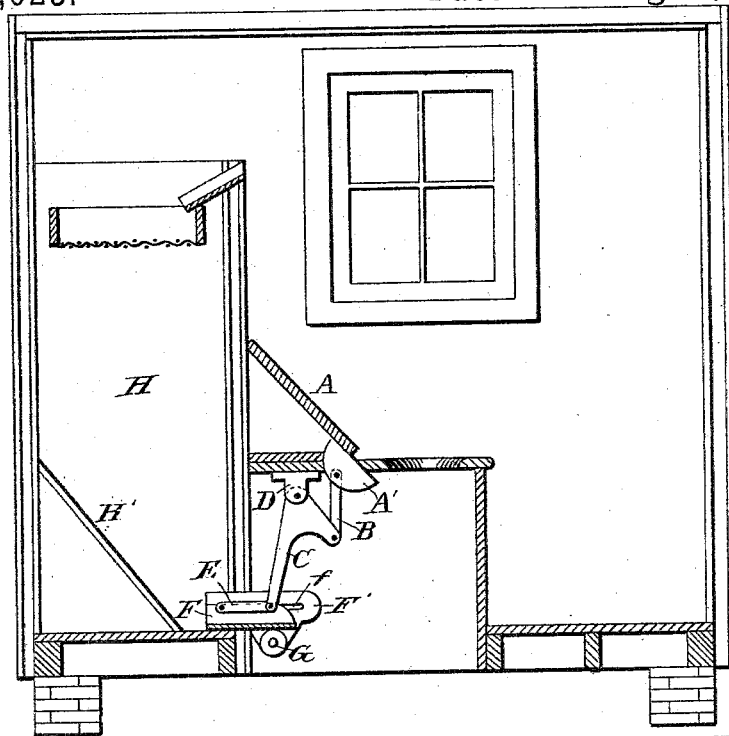


Fig. 3.

Witnesses:
Wm. Strong
Wm. H. Neway

Inventor:
Cyrus D. Lane
By *J. W. Bond Atty.*

UNITED STATES PATENT OFFICE.

CYRUS D. LANE, OF BATAVIA, NEW YORK.

EARTH-CLOSET.

SPECIFICATION forming part of Letters Patent No. 303,023, dated August 5, 1884.

Application filed April 2, 1884. (No model.)

To all whom it may concern:

Be it known that I, CYRUS D. LANE, a citizen of the United States, residing at Batavia, in the county of Genesee and State of New York, have invented a new and useful Improvement in Earth-Closets, of which the following is a specification.

My invention relates to improvements in closets in which a powdered deodorizing agent is used in conjunction with a hinged seat-cover; and the objects of my improvements are, first, to provide a simple arrangement whereby the closing of the seat-cover will cause a deposit to be made of the deodorizing material; second, to render the fecal matter odorless by the use of coal-ashes, so that the whole can be used as a fertilizer. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a vertical sectional view taken through the center of the seat-cover, with the lid in a closed position, also showing a section of the ash-box and sifter. Fig. 2 is a transverse section of the closet and ash-receptacle, with a vertical section taken through the seat, showing the cover in a raised position. Fig. 3 is a vertical longitudinal section of the closet, exhibiting two seats, the cover of one being open, the other closed, with a side view of the sifter and its operating device; and Fig. 4 is a top plan view of the ash-sifter detached, which is herein shown and described, but is not claimed, as the sifter is made a subject of a separate application.

Similar letters refer to similar parts throughout the several views.

A represents the seat-cover, carrying a semi-annular casing, A', within which is pivoted a connecting-link, B.

C is an elbow-lever having one limb longer than the other, and pivoted at the elbow with the down-hanger D. The short arm of this elbow-lever is pivotally connected with the semi-annular casing upon the seat-cover through the intervention of the link B. To the longer and lower end of the lever C is pivoted the swinging bail E, which in turn is hinged to the scoop F. This scoop F has both of its ends open, but with raised sides, for a purpose hereinafter explained.

F' is a discharge-spout, within which the

scoop is given a longitudinal movement, for a purpose hereinafter explained.

G is a roller having its top surface level with the bottom of the discharge-spout, for the purpose of reducing the friction as well as to assist in the manipulation of the scoop.

f are longitudinal slots through the sides of the delivery-spout at a point near the top edge, for a purpose hereinafter described.

H is a receptacle for the deodorizing compound, and H' an inclined back to the same, to conduct the material to the opening and within reach of the scoop.

As a deodorizer, sifted coal-ashes are used in preference to dry earth or other material, for the reason that they are produced in nearly every household, and heretofore have been a waste product, but in utilizing and mixing with the feces the matter is rendered odorless and a good fertilizer is produced.

I is an ash-sifter, which, as hereinbefore mentioned, is to be embodied in a separate application, suspended in any well-known manner within the ash-receptacle near the top, and so arranged that a vibratory motion can be given it by the use of the crank-lever i and connecting-rod i', as clearly shown in Fig. 3.

J is a delivery-spout for carrying off the waste, such as cinders and other refuse of the burned coal. This ash-box is placed in the rear of the seat, forming the back and creating one side of the closet, and may extend up to the ceiling overhead by providing a door for the reception of the unsifted ashes. If desired, the ashes may be placed within the sifter through an opening from the outside. The slots f in the discharge-spout are for the purpose of securing the scoop in place vertically and yet allow of a free movement horizontally to the extent necessary for performing the required work. The ends of the bail E may pass through these slots, or any other mode of pivoting may be adopted.

The operation is as follows: Upon the raising of the seat-cover A, the scoop, through the intervention of the system of levers, will be thrown back and in the position shown in Fig. 2, with its rear end reaching within the ash-bin, and as this scoop is open at each end, it will by the uplifting of the said cover receive a sufficient quantity of material for

mixture with the fecal matter to render it odorless. In the act of closing the cover the scoop, with the charge, is drawn forward and made to assume the position shown in Fig. 1, and of course the contents are deposited upon the excrement, rendering it odorless and ready for use as a fertilizer.

The coal-ashes can be sifted daily, or as may be desired, and deposited in the ash-bin ready for use, while the cinders are by the reciprocation of the sifter made to gravitate toward the lower end and discharged through the spout J, all of which will be understood without further description.

15 Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the seat-cover, the con-

necting-link, the pivoted elbow-lever, and the scoop having the bail, all these parts arranged 20 and operating substantially as described.

2. The combination of the scoop having a bail, the slotted delivery-spout, the scoop being pivotally connected with the spout, the friction-roller, and means for operating the 25 scoop, substantially as described.

3. The combination of the ash-bin, the discharge-spout, the scoop pivotally connected thereto, as described, the elbow-lever, the down-hanger D, the link B, the annular part 30 A', and the seat-cover, all arranged and operating substantially as specified.

CYRUS D. LANE.

Witnesses:

G. W. FORD,

E. J. MOCKFORD.