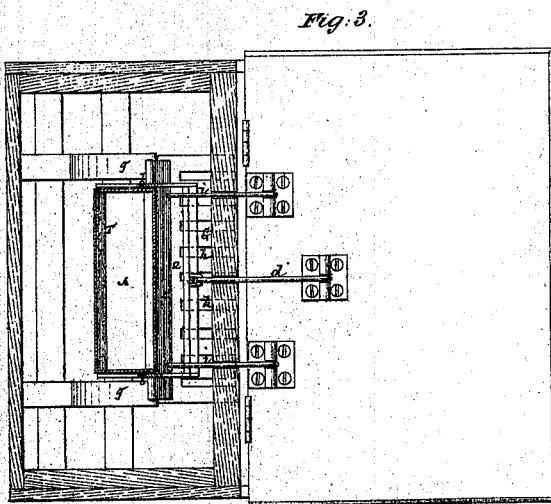
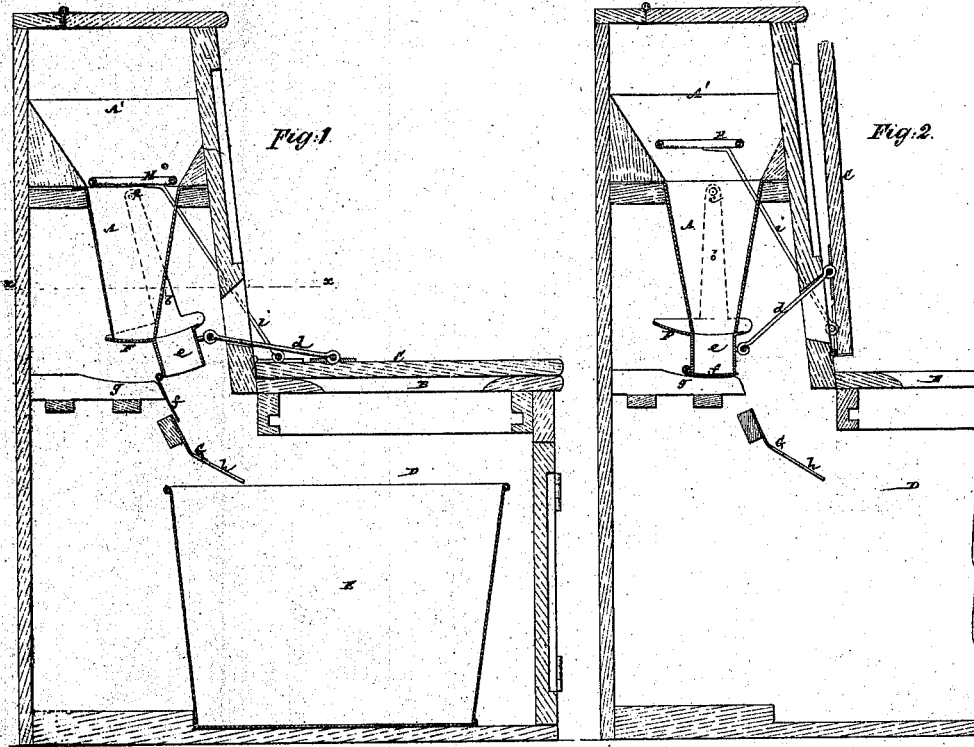


C. A. Wakefield,

Earth Closet.

No. 115,256.

Patented May 23. 1871.



Witnesses:
Fred Haynes
Fred Church

Charles A. Wakefield
per Brown & Co. & Co.
Attorneys

UNITED STATES PATENT OFFICE.

CHARLES A. WAKEFIELD, OF PITTSFIELD, MASSACHUSETTS.

IMPROVEMENT IN EARTH-CLOSETS.

Specification forming part of Letters Patent No. 115,256, dated May 23, 1871.

To all whom it may concern:

Be it known that I, CHARLES A. WAKEFIELD, of Pittsfield, in the county of Berkshire and State of Massachusetts, have invented a new and useful Improvement in Earth-Closets, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figures 1 and 2 represent vertical sections of an earth-closet constructed in accordance with my invention, showing the operative portions in different positions; and Fig. 3, a horizontal section through the line *x x* in Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention is applicable to both indoor and outdoor closets, but is here shown as applied to a closet for indoor use. In certain of its features it resembles the earth-closet for which Letters Patent of the United States were issued to me May 17, 1870; but, apart from other additions and differences, instead of using an earth-slide arranged to form the bottom of the hopper, and provided with a series of opening and closing flaps that in the operation of the slide work on or over a series of steps to discharge the earth at different and advancing points, I use a pendent hopper-bottom arranged to swing backward and forward, and provided with a front chamber fitted with a drop valve or flap forming its bottom, that in the back swing of the pendent bottom is closed by its travel over suitable guides or ways, but that opens to discharge its load of earth when swung forward. A pendent hopper-bottom operating to discharge earth as required works more freely or with less friction than a slide, and a single flap, instead of a series of flaps, one in advance of the other, suffices, thereby making the construction simpler and less expensive.

The invention also includes a slotted chute arranged to receive the earth as it is discharged from the hopper, and to project a portion of it forward over the excrement to be covered and to sprinkle the remainder of it in the rear, for the purpose of effecting a more general or perfect distribution of the earth over the whole surface of the deposit.

Referring to the accompanying drawings, A represents the hopper for the deodorizing ma-

terial or earth, and A' an upper extension thereof or reservoir connected therewith; B, the closet-seat, and C its lid.

D is the soil pit or chamber, in which a pan, E, may be placed to catch the soil and deodorizing material.

F is the pendent hopper-bottom, arranged to swing, as by arms *b*, from pivots *c* at either side of the hopper, and of a curved form corresponding to the lower end of the latter, and in conformity with the motion described as swinging from the pivots *c*. Thus hung, the movable hopper-bottom is relieved of objectionable friction and interference to its motion by earth getting under it, as is apt to occur with a slide. This pendent bottom F, accordingly as it is swung backward or forward, and which may be done in an automatic manner through a rod, *d*, by the opening and closing of the lid C, or otherwise, serves to close and establish egress for the earth from the hopper A, egress therefrom being established when said bottom is swung backward, as represented in Fig. 2, when a charge of earth is deposited through an outlet in front of the pendent bottom to or within what may be termed a "charging-chamber" or lower swinging section, *e*, of said hopper, that is fitted with a flap, *f*, forming its bottom. This flap is closed when the chamber *e* is receiving a charge of earth by (in the back swing of the hopper-bottom, to which said chamber is attached) its being dragged over ways or guides *g*, but drops or opens, preferably to an inclined position, in a forwardly and downwardly direction when the hopper-bottom is swung forward to close the bottom of the main hopper A, and the flap *f* falls over the ends of the ways *g* to dump or project the charge of earth conveyed or taken from the hopper by the pendent chamber *e* to and over the soil in the pit D or pan E. To effect a more general or perfect distribution of the earth, however, over the excrement in the pit or pan, the earth is caused to pass as it is delivered by the pendent chamber down a rear chute, G, arranged to receive the earth from the flap *f* and to conduct it over the deposit in front. This chute is formed with slots *h* in it, extending rearwardly from its front edge, so that as the earth slides down over it a portion thereof is sprinkled or falls through the said slot in the chute to cover the rear surface of

the deposit, while the remainder of the earth is shot forward to cover the more advanced portion or surface.

To break up the earth and prevent it from caking or arching over the hopper, so that it shall freely work its way there down when required, I provide said hopper A or reservoir A' with an agitator, H, of a bar or any other suitable construction, and which is set in motion by the lid C, as through rods *i*, or otherwise, and so that as said lid is raised and lowered in the use of the closet the agitator is worked to break up the earth.

What is here claimed, and desired to be secured by Letters Patent, is—

1. The combination, with the hopper A, of the pendent swinging hopper-bottom F, provided with a charging-chamber, *e*, having a valve or flap bottom, for operation as shown and described.

2. The fingered sprinkling-chute G, constructed and arranged for operation in relation with the earth-hopper and soil pit or chamber, delivering the earth between and beyond their ends, essentially as shown and described.

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