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T. MACFARLANE.

DRY CLOSET.

APPLICATION FILED NOV. 28, 1903.

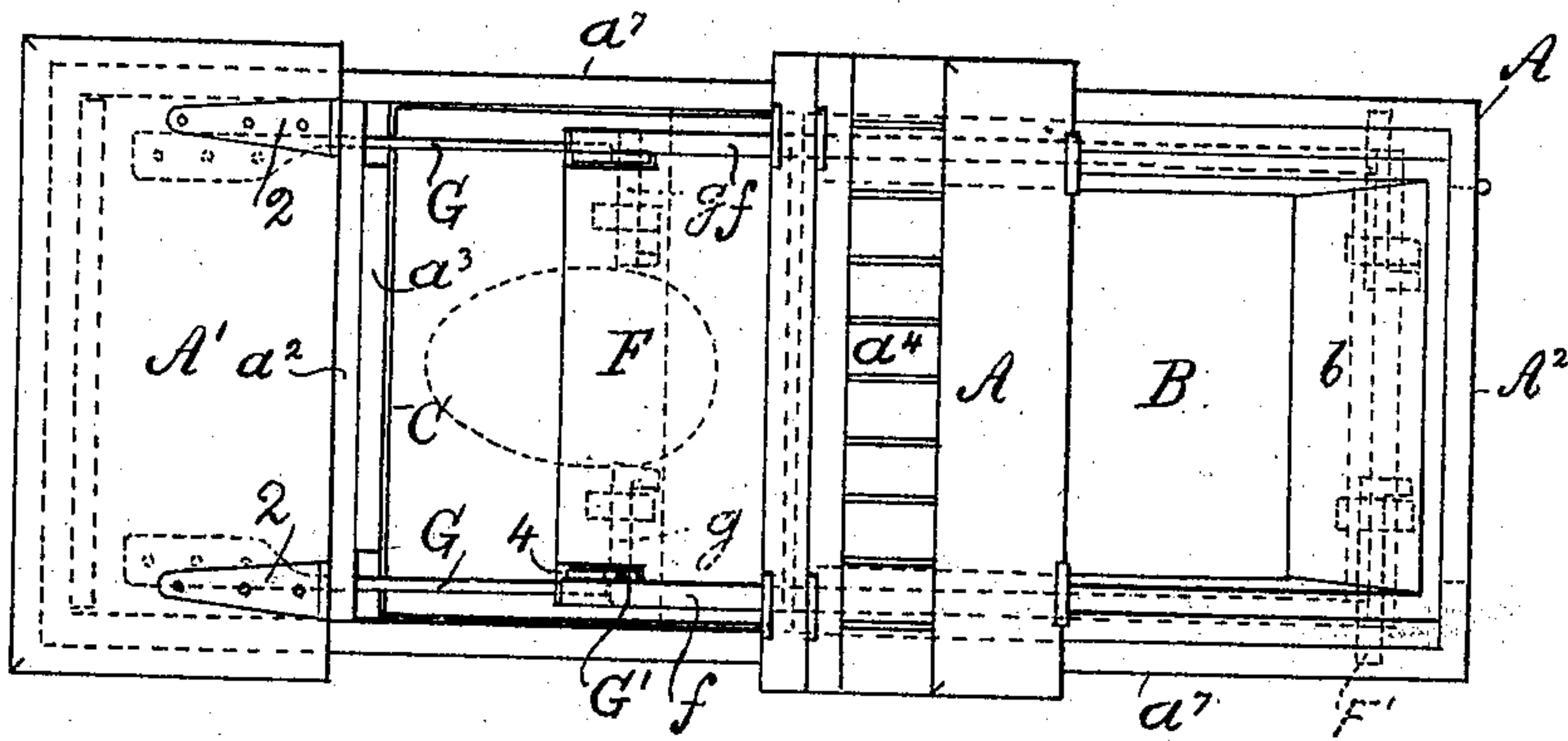
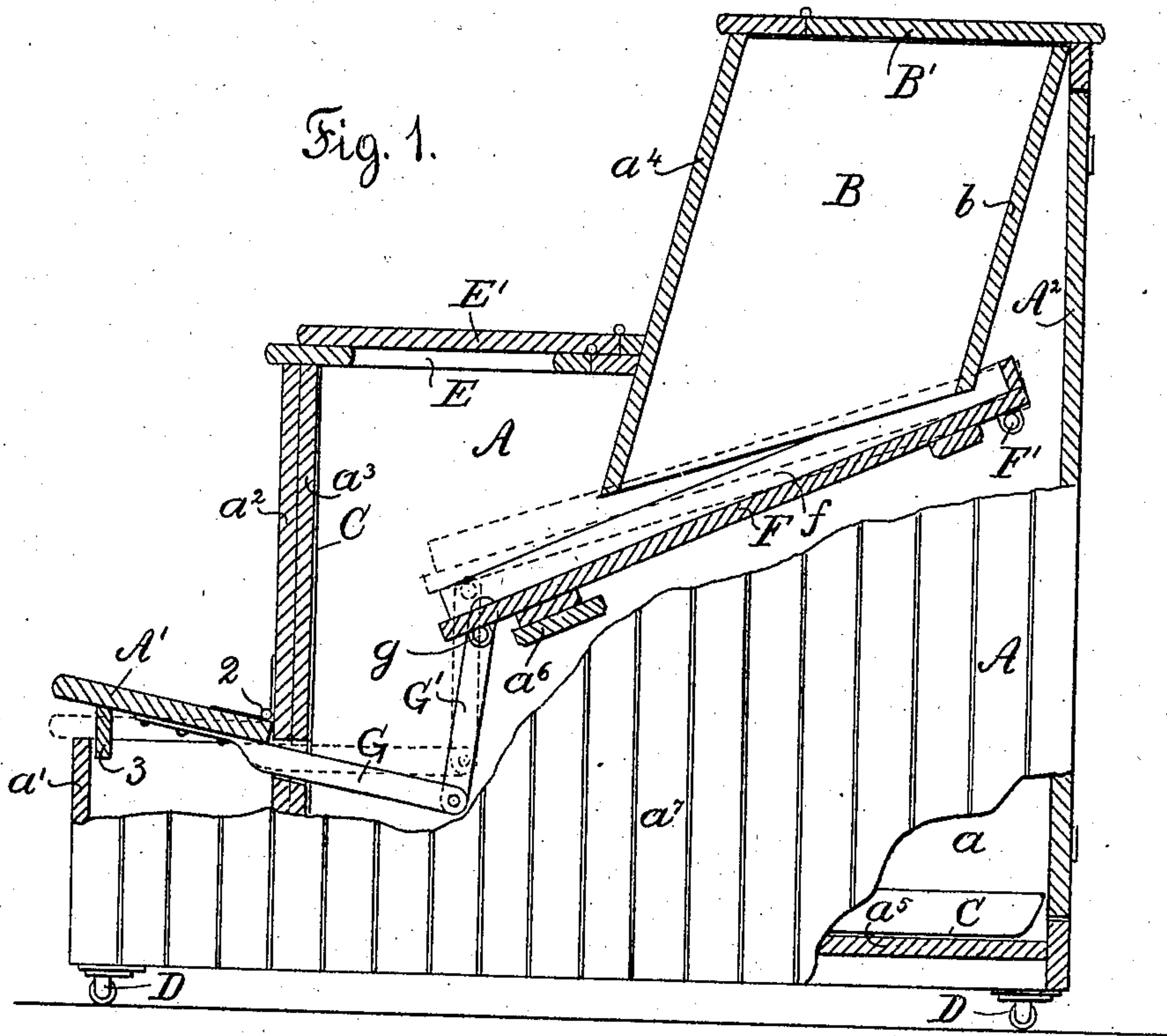


Fig. 2.

Witnesses:  
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# UNITED STATES PATENT OFFICE.

THOMAS MACFARLANE, OF OTTAWA, CANADA.

## DRY CLOSET.

No. 815,969.

Specification of Letters Patent.

Patented March 27, 1906.

Application filed November 28, 1903. Serial No. 183,000.

*To all whom it may concern:*

Be it known that I, THOMAS MACFARLANE, of the city of Ottawa, in the county of Carleton and Province of Ontario, in the Dominion of Canada, have invented certain new and useful Improvements in Dry Closets; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part hereof.

My invention, which will be hereinafter fully set forth and claimed, relates to sanitary devices for the reception and retention of excreta.

The object of my invention is a device in which human feces or excreta may be deposited and retained without their retention causing objectionable odors and unhealthy contamination of the surrounding atmosphere.

Figure 1 is a longitudinal vertical section of my improved device shown in its normal condition, part being in elevation; and Fig. 2 is a top view of the same, seat, seat-cover, and top lid being removed.

The necessary convenience for a seat E, a step  $a'$ , storage-room B for a supply of absorbing material, and deposit-space  $a$  for holding the used part of the latter containing the feces is provided in a box-like structure or receptacle A of such width as to afford seating capacity. The rear part is made higher than the seat to afford space for a hopper B, provided at the top with a hinged lid  $B'$ , giving access for filling and the front  $a^4$  affording incidentally a sloping back to the seat. The rear end contains a large door  $A^2$  to permit access to the main cavity  $a$  or interior of the receptacle for the purpose of mixing and emptying. The bottom  $a^5$  is preferably covered with sheet-lead or the like, forming a pan-like lining C, the front of which runs up a lining  $a^3$  of the seat-riser  $a^2$  to prevent saturation of the wood with urine.

The structure may be made portable by providing it with casters D, or one or both sides  $a^7$  of the box may be replaced by the permanent walls of an apartment.

E is the perforated hinged seat, and  $E'$  the seat lid or cover, also hinged.

The hopper B, of which the seat-back  $a^4$ , extending below the seat and the rear wall  $b$ , forms, respectively, the front and back, is preferably made to slope from the top and rear forward and somewhat narrower in width at

the lower end than at the top, though this is not essential. The lower end of the rear wall  $b$  extends close to the tray below, while the lower end of the partition  $a^4$  leaves a sufficient space above the tray for the discharge of absorbent.

F is a tray provided at the sides and rear end with a rim  $f$ . It is disposed in a position slanting from the rear forward and downward and supported at the highest and rear end upon pivots  $F'$ , secured to said tray and having bearings in the sides of the receptacle A. Its rear end extends well past the lower end of the rear wall  $b$  of the hopper B and close to the door  $A^2$ . The front edge extends to within a few inches of the riser-lining  $a$ , so as to receive the excrements and leave a convenient space for the absorbent and excrement to slide off and drop into the space  $a$  below. The forward end is supported on a fixed support  $a^6$  and adapted to be raised by mechanism which will be hereinafter described. When at rest, it has an elevation not too near the seat and yet leaving ample space below and providing a convenient slope for the movement of the absorbent, an angle of thirty degrees being found operative.

For giving a vibratory motion to the tray F different mechanical devices may be applied. One that is found effective is shown in the drawings and is as follows: The tread  $A'$  of the step  $a'$  is hinged to the riser  $a^2$  of the seat, (strap-hinges 2 being shown,) a curtain-board 3 being provided (shown in Fig. 1) to prevent an open gap when the tread is partly raised. A bar G, secured to the bottom of the tread  $A'$  near each end, projects through a slot in the partition  $a^2$  under or near the front edge of the tray F. To these bars are pivoted at the ends links  $G'$ , having pivotal connection with said tray by pins  $g$ , which may be conveniently in the shape of bolts secured slidingly to the bottom of said tray. In Fig. 2 the upper ends of these links  $G'$  are shown in a slot 4 in the tray; but this disposition is of course not essential. The relative disposition of the bars G, which become levers, and the links  $G'$  are such that when the tray is in its normal position, resting on the cross-bar  $a^6$ , the tread  $A'$  is partly raised, as shown in Fig. 1. When the tread  $A'$  is depressed, as by the foot of a person pressing upon it, the forward end of the tray F is raised, and when the pressure upon the tread  $A'$  ceases the tray F drops on the sup-



port  $a^6$ , giving a jarring shock or vibrating motion to the tray, which causes the contents of the tray to slide forward and a part of it to fall over the edge and at the same time release more absorbent from the hopper and become free upon the tray.

Prepared moss or moss litter, such as fibrous peat is, intended to be used as an absorbent and deodorizer. It possesses very extensive absorbing qualities and can be used over and over again, for which purpose the contents of the lower receptacle are stirred up or mixed from time to time with a shovel or other implement and placed again in the hopper B. This may be repeated many times and results finally in a highly-concentrated manure.

I claim as my invention—

1. In a dry closet, the combination of a receptacle partly formed of a step, a seat and a raised rear portion, a hopper for an absorbent in the upper portion of the rear part, sloping forward and forming the sloping back to the seat, a hinged lid at the top of said hopper, a door at the rear of the receptacle giving access to the interior, a perforated hinged seat with hinged lid or cover adjacent to the sloping front of the raised rear part, a sloping tray extending with its raised end under the hopper and with its lower end

partly under the seat, pivotal supports secured to the raised rear end of said tray and a fixed support under the lower forward end, a tread to the step hinged to the riser of the seat, bars secured to said tread and extending toward the front edge of said tray and links connecting said bars pivotally with the forward end of said tray, substantially as set forth.

2. In a dry closet, the combination with a suitable receptacle providing a seat and access to its interior, of a sloping tray pivoted at its higher and rear end to suitable supports and resting with its forward lower end free on a fixed support and extending from the rear of the receptacle partly under the seat, a step in front of the seat, a tread upon said step hinged to the seat-riser, levers secured to the under side of said tread and projecting toward said tray and links pivotally connected to said levers and said tray, so as to raise the latter when the tread of the step is depressed, substantially as set forth.

In testimony whereof I have signed in the presence of the undersigned witnesses.

THOMAS MACFARLANE.

Witnesses:

A. HARVEY,  
I. G. CONNOLLY.