

No. 620,039.

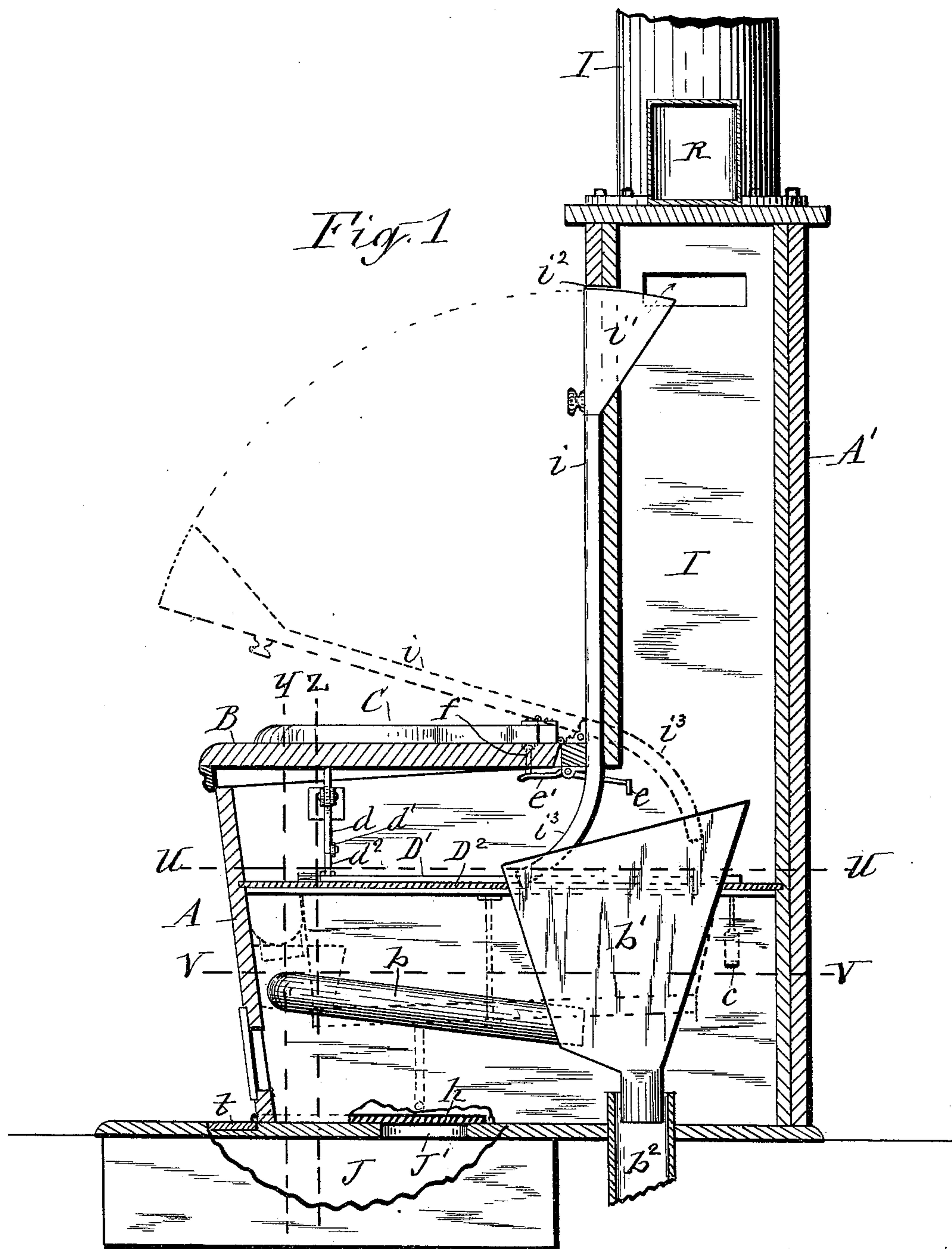
Patented Feb. 21, 1899.

H. H. KENDRICK.  
SANITARY CLOSET.

(Application filed Nov. 22, 1897.)

(No Model.)

4 Sheets—Sheet 1.



WITNESSES:  
H. B. Smith. y z  
J. J. Laass

INVENTOR  
Hiland H. Kendrick  
By E. Laass  
his ATTORNEY



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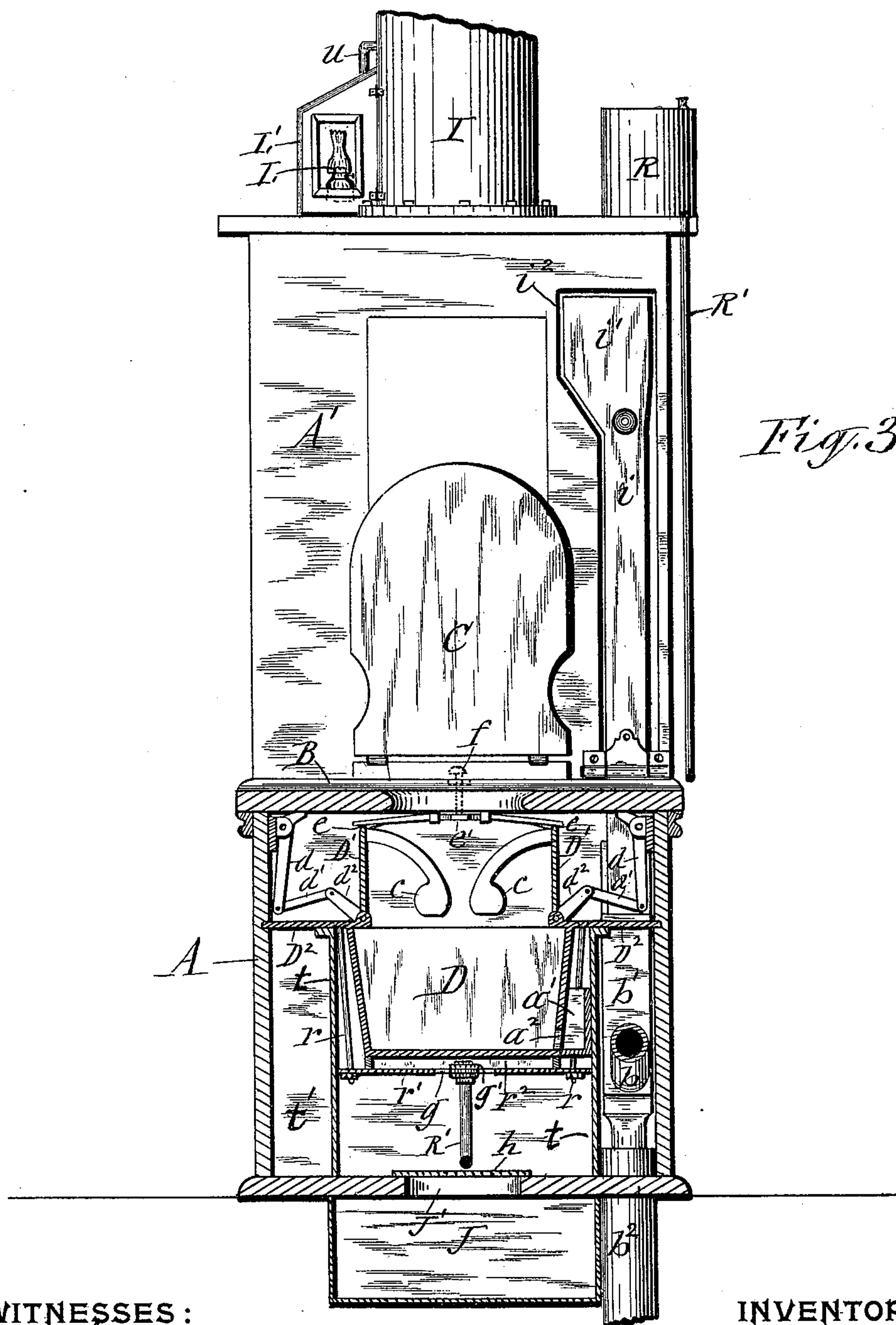


Fig. 3

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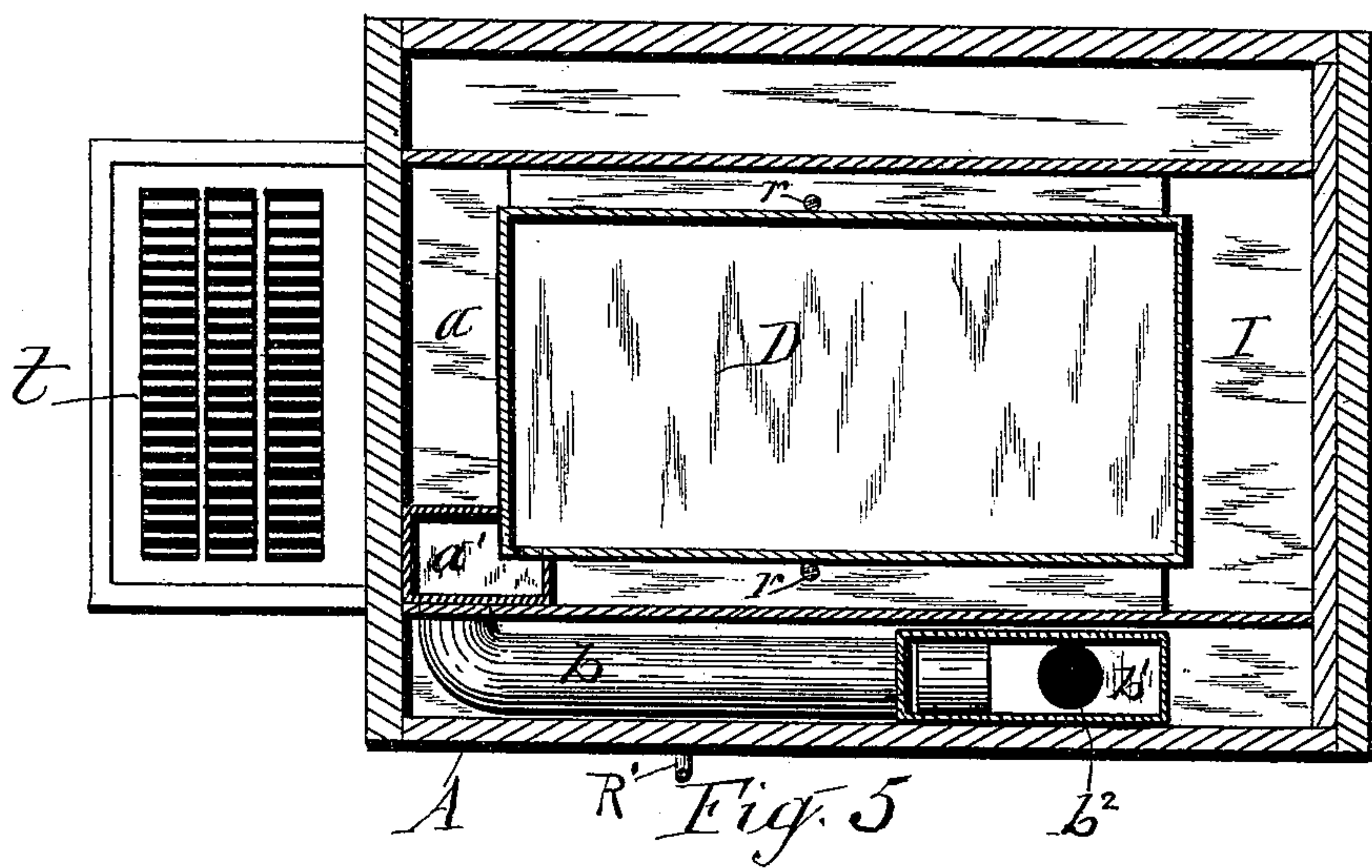
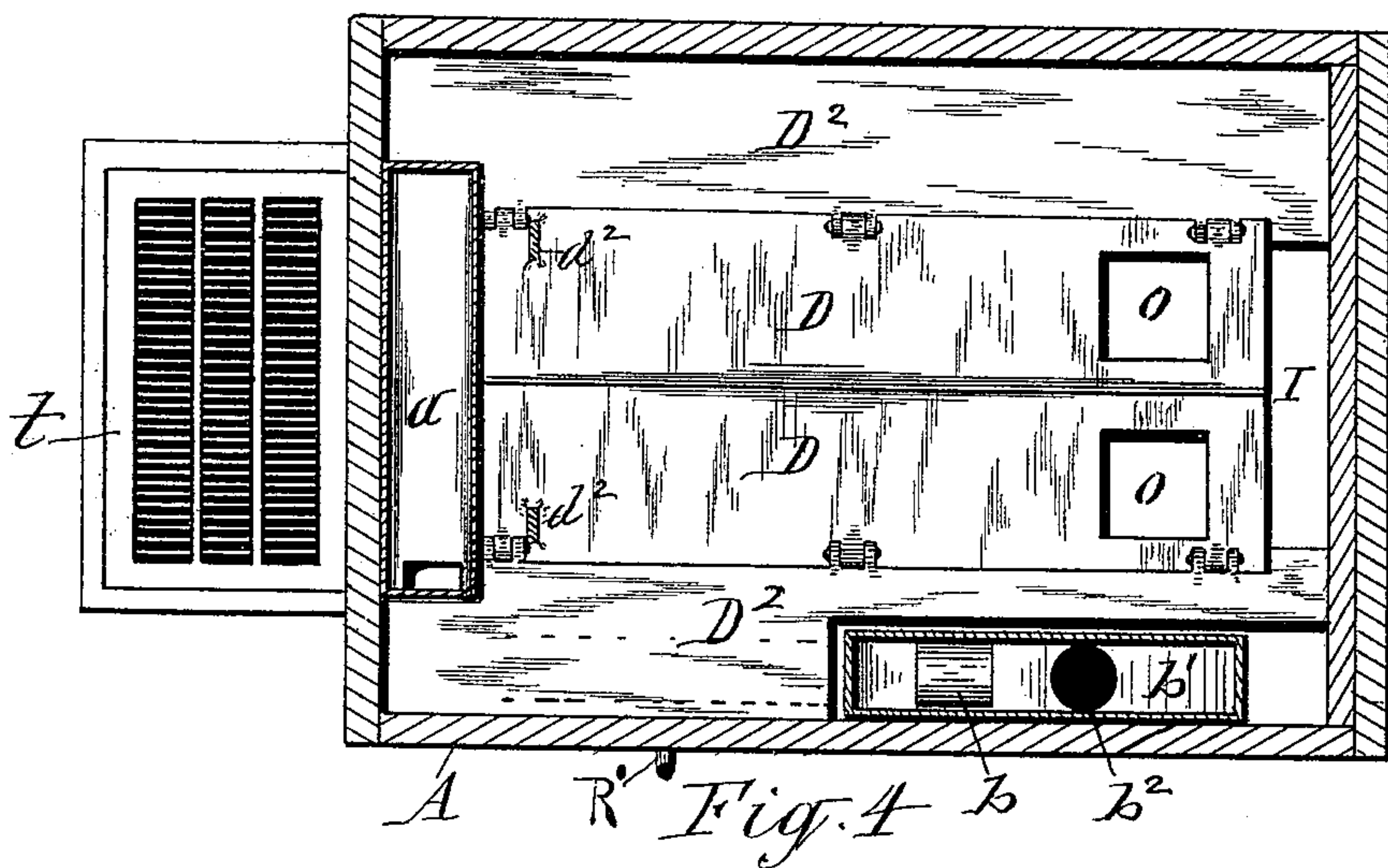
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# UNITED STATES PATENT OFFICE.

HILAND H. KENDRICK, OF FULTON, NEW YORK.

## SANITARY CLOSET.

SPECIFICATION forming part of Letters Patent No. 620,039, dated February 21, 1899.

Application filed November 22, 1897. Serial No. 659,357. (No model.)

*To all whom it may concern:*

Be it known that I, HILAND H. KENDRICK, of Fulton, in the county of Oswego, in the State of New York, have invented new and useful Improvements in Sanitary Closets, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

The object of this invention is to provide a dry sanitary closet which shall be equipped with an automatic deodorizer without the use of dust or other deodorizing material; and to that end the invention consists, essentially, in the combination, with the seat, of a pan under the said seat and a heater under the pan to desiccate the contents thereof; and the invention also consists in novel features of the construction of the closet and devices connected thereto, as hereinafter described, and set forth in the claims.

In the accompanying drawings, Figure 1 is a vertical longitudinal section on line X X in Fig. 2. Figs. 2 and 3 are vertical transverse sections on lines Y Y and Z Z, respectively, in Fig. 1 and showing the closet in two different operative positions. Figs. 4 and 5 are horizontal transverse sections on lines U U and V V, respectively, in Fig. 1.

Similar letters of reference indicate corresponding parts.

A represents the case of the closet, the rear end of which is formed with a vertical extension A', which serves as a ventilating-flue from the interior of the case.

B denotes the seat, which is hinged to the top of the case in the usual manner or otherwise arranged to yield vertically, and C is the cover of the seat, which cover is hinged to the rear portion of the seat in the usual manner. Under the seat is a receptacle D for the excrement, which receptacle is formed separate from the case to more effectually guard against fouling the case by moisture and odor from said receptacle. I preferably form said receptacle of a metallic pan separated from the case by vertical plates *t t*, extending along the sides of the pan and forming between the pan and the sides of the case A ventilating-flues *t'*, as shown in Figs. 2 and 3 of the drawings. The bottom of the pan is inclined toward the front of the case. Between the front end of the said pan and front

of the interior of the case A is a gutter *a*, leading to one side of the case, where it is provided with an outlet communicating with a box *a'* inside of the case. With this box also communicates the front end of the pan D, as shown at *a*<sup>2</sup> in Fig. 3 of the drawings. From the said box leads a pipe *b* along the inner side of the case A to a hopper *b'* in the rear portion thereof, as shown in Fig. 1 of the drawings, said hopper having its discharge end communicating with a drain-pipe *b*<sup>2</sup>, which may lead either to a sewer or cesspool or other suitable place for the reception of the liquid conducted to said hopper from the gutter *a* and pan D by the pipe *b*.

The top of the pan D is provided with a removable lid D', preferably divided longitudinally into two equal parts and hinged to the top of the pan at opposite sides thereof. The ventilating-spaces *t'*, which are formed along the sides of the exterior of the pan by the vertical partition *t*, are covered by a plate D<sup>2</sup>, extending into horizontal grooves in the sides of the case A, as shown in Figs. 2 and 3 of the drawings, and from said plate depend rods *r r*, carrying on their lower ends a plate *r'*, by means of which a flue *r*<sup>2</sup> is formed directly on the bottom of the pan and separate from the walls of the case A. Said flue extends the entire length and preferably also across the entire width of the pan, for the purpose hereinafter explained. The two lid-sections are held normally in a closed position over the pan, preferably by means of weights *c c*, attached to the lid-sections. To open said lid-sections automatically by the depression or downward movement of the seat, I employ suitable levers, preferably of the form of bell-cranks *d d*, pivoted to the sides of the case A and each having one of its arms bearing on the under side of the seat. The other arm of each of said levers is connected by a link *d'* to an arm *d*<sup>2</sup>, fastened to one of the lid-sections. The weights *c c* are sufficiently heavy to hold the lid D' closed and the seat B in its raised position, as shown in Figs. 1 and 2 of the drawings, and when the closet is in use the depression of the seat causes the aforesaid levers to lift the lid D' into its open position, as shown in Fig. 3 of the drawings.

Inasmuch as it is sometimes desired to examine the excrement, I employ means for



temporarily retaining the lid in its open position after the seat is relieved from downward pressure. This I effect by means of suitable catches *ee*, pivoted to the under side of the case A, back of the seat B, and engaging the edges of the open lid-sections, as shown in Fig. 3 of the drawings. Said catches are united at their pivot and are formed with a forward projection *e*, directly over which is a tripper *f*, consisting of a vertically-movable pin passing through a guiding-hole in the seat B and of sufficient length to cause it to be pushed down by the seat-cover C when closed. Said movement of the pin throws the catches *ee* out of engagement with the lid D', which is then caused to automatically drop into its closed position by the weights *cc*. It will therefore be observed that the lid is maintained in its open position until the cover C is closed.

The object of the invention is to separate the liquid from the solid matter and to desiccate the latter within the closet. Said separation is effected by the inclination of the pan D and the gutter *a*.

For desiccating the excrement or solid matter I employ a suitable heater directly under the pan, and for this purpose I preferably employ the flue *r*<sup>2</sup>, hereinbefore described. The rear end of this flue communicates with a ventilating-flue I, extending vertically through the vertical extension A' of the case A. Said flue and pan are tightly inclosed in the case A to prevent escape of odor from the case. The bottom of the flue *r*<sup>2</sup> is provided with an opening *g* for the introduction of a suitable burner *g'* for either natural or artificial gas. The burner shown in the drawings pertains to the type used for burning gas generated from gasolene. The flame from this burner impinges the bottom of the pan D, and in passing through the flue *r*<sup>2</sup> to the ventilating-flue I it heats the bottom of the pan to such a degree as to cause the contents of the pan to be rapidly desiccated. The dry substance can subsequently be readily removed from the pan.

In order to adapt the closet for use in localities where it is necessary to use kerosene-oil as fuel for the heater of the pan, I provide the case A with a subjacent case or box J, extending a short distance in front of the case A and provided in its top with a grating *t*, through which to admit air to the interior of the said box J, said grating to be removable to permit the introduction of a lamp (not shown) to be placed under an opening J' in the bottom of the case A and directly under the opening in the bottom of the flue *r*<sup>2</sup>. The opening J' is provided with a slide *h* for closing it in case a gas-burner is used in the flue *r*<sup>2</sup> instead of a kerosene-lamp in the box J.

The rear end portions of the lid-sections D are provided with ventilating-openings *oo*, communicating with the flue I, and thereby ventilating the interior of the pan.

*i* represents a urinal consisting of a spout or pipe formed with a flaring mouth *i'* on its upper end and hinged near its lower end preferably to the front of the case extension A', immediately back of the seat B. Said spout swings in a vertical plane and when not in use is placed erect and into a vertically-elongated recess *i*<sup>2</sup>, formed in the front of the case extension A', and when in said position the mouth *i'* of the spout communicates with the ventilating-flue I, as shown by full lines in Fig. 1 of the drawings. When to be used, the upper end of said spout is thrown forward into an inclined position, as indicated by dotted lines. The discharge end of the spout extends below the pivot and into the top of the hopper *b'*. To maintain said end of the spout in the hopper in the different positions in which the spout may be placed, the discharge end thereof is curved as shown at *i*<sup>3</sup> in Fig. 1 of the drawings.

L represents a lamp placed in a case L', mounted on top of the case extension A' and communicating with the ventilating-flue I, as shown at U in Fig. 3 of the drawings. The purpose of this lamp is primarily to throw light in front of the closet; but aside from this it may also be used for burning disinfectants at the time of desiccating the contents of the pan D, and it also serves to promote the draft through the flue I.

R denotes the gasolene-can, and R' the pipe leading from said can to the burner.

What I claim as my invention is—

1. The combination with the inclosing case formed with a ventilating-flue extending therefrom, and the seat provided with a cover, of a pan formed separate from the case, a lid hinged to the top of the pan, a gutter extending across the interior of the case in front of the pan and communicating with bottom of said pan and a pipe located between the side of the pan and adjacent side of the case and extending from the aforesaid gutter to the drain-pipe at the rear portion of the case, as set forth.

2. The combination with the inclosing case formed with a ventilating-flue extending therefrom, and the seat provided with a cover, of a pan formed separate from the case, a lid hinged to the top of the pan and provided with openings communicating with the aforesaid flue, a gutter extending across the interior of the case in front of the pan, a box communicating with the lower end of the gutter and with the bottom of the pan, and a pipe located between the side of the pan and adjacent side of the case and leading from the aforesaid box to the drain-pipe as set forth.

3. The combination, with the vertically-yielding seat, hinged seat-cover and a receptacle under said seat, of a divided lid over said receptacle and having its sections hinged respectively to the tops of opposite sides of the receptacle, weights attached to said lid-sections to hold them normally in a closed posi-



tion, levers actuated by depression of the seat and thereby moving the lid-sections to their open position, catches retaining said sections in open position, and a tripper actuated by the seat-cover in moving to its closed position and thereby throwing the said catches out of engagement with the lid-sections, as set forth.

4. In a sanitary closet the combination with the vertically-yielding seat and its hinged cover, of a pan under said seat, a movable lid sustained normally in its closed position upon the pan, mechanism actuated by the seat in its downward movement and automatically opening the said lid, catches retaining the lid in its open position, a tripper actuated by the seat-cover in moving to its closed position and throwing said catches out of engagement, a heater under the pan to desiccate the contents thereof, and a ventilator communicating with the pan and heater, as set forth.

5. The combination with the closet-case and the hinged seat and its cover, of a pan under said seat formed separate from the case, a lid hinged to the top of said pan, mechanism opening and closing said lid automatically with the movement of the seat and its cover, a flue formed directly on the bottom of the pan and separate from the case, a heater communicating with said flue, and a ventilating-flue extending from the case as set forth.

6. The combination with the closet-case and the hinged seat and its cover, of a ventilat-

ing-flue extending vertically from said case and provided with a vertical recess, a pan under the seat, a desiccator under said pan, a hopper in the case separate from the pan and a urinal-spout hinged to the case separate from the seat-cover to swing to and from the aforesaid recess without moving said cover and having its discharge end maintained in the aforesaid hopper as set forth.

7. The combination with the closet-case and hinged seat and its cover, of a ventilating-flue extending vertically from said case and provided with a vertical recess, a pan under the seat formed separate from the case, a lid hinged to the top of the case, mechanism opening and closing said lid automatically with the movement of the seat and its cover, a flue formed directly on the bottom of said pan, a heater communicating with said flue, a hopper in the case separate from the pan, a gutter in front of the pan and inside of the case and communicating with the pan, a pipe leading from the gutter to the aforesaid hopper, and a urinal-spout hinged to the case and movable to and from the aforesaid recess and having its discharge end maintained in the aforesaid hopper as set forth.

In testimony whereof I have hereunto signed my name this 15th day of November, 1897.

HILAND H. KENDRICK. [L. S.]

Witnesses:

J. J. LAASS,

H. B. SMITH.