

(No Model.)

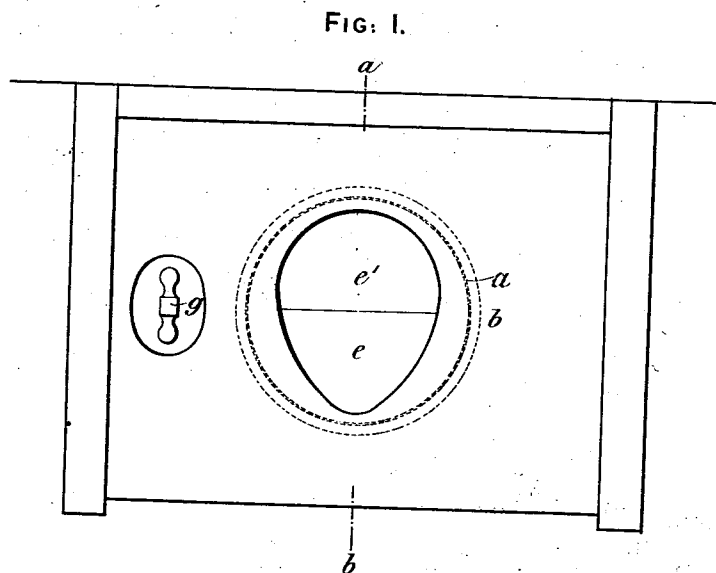
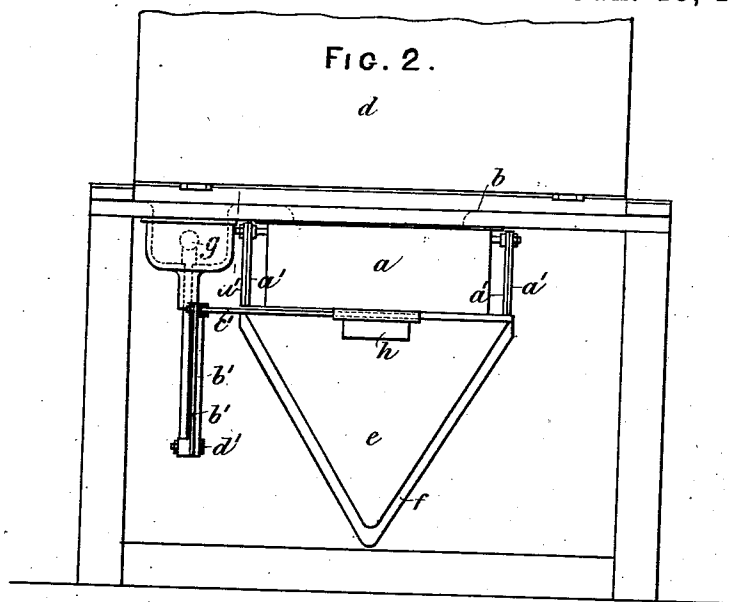
3 Sheets—Sheet 1.

T. HAWKSLEY.

DRY SYSTEM OF DISPOSING OF SEWAGE, &c.

No. 334,436.

Patented Jan. 19, 1886.



Witnesses

Percy White
Chas. R. Abell

Inventor.

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By John J. Valster for
his Atty.

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FIG. 3.

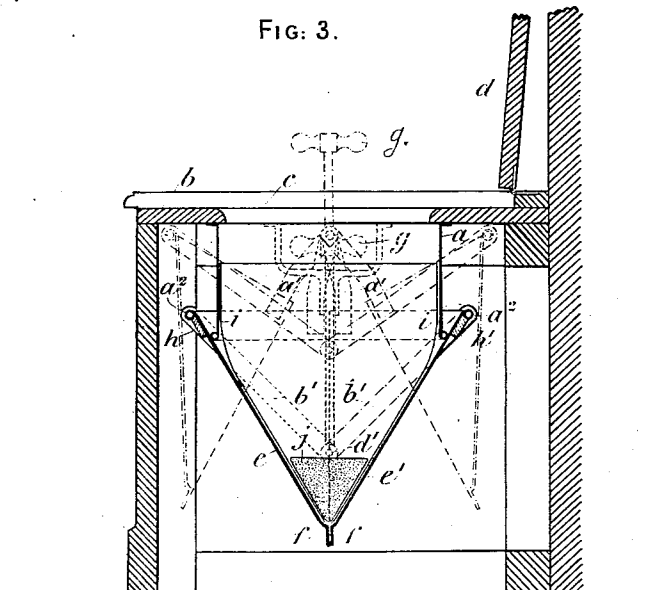
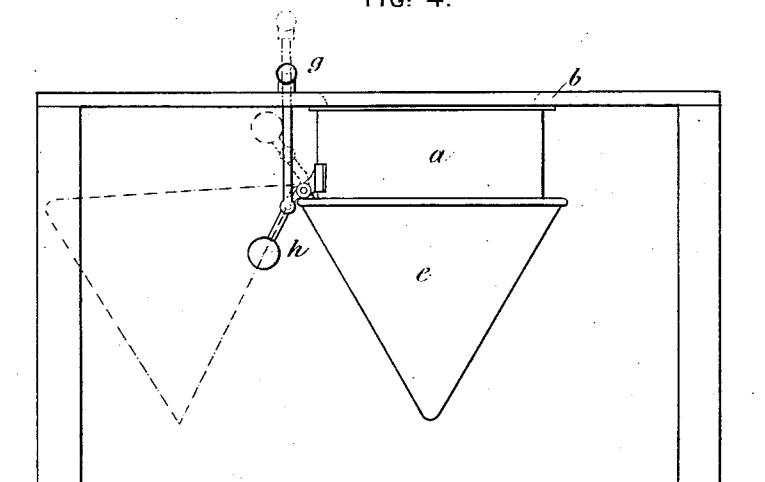


FIG. 4.



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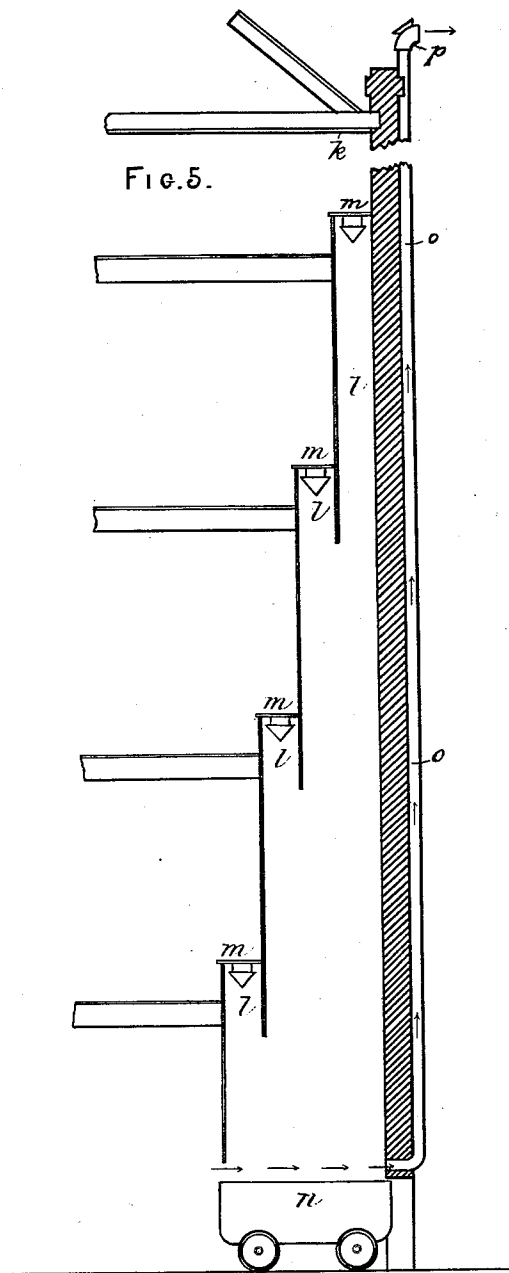
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UNITED STATES PATENT OFFICE.

THOMAS HAWKSLEY, OF BRIGHTON, COUNTY OF SUSSEX, ENGLAND.

DRY SYSTEM OF DISPOSING OF SEWAGE, &c.

SPECIFICATION forming part of Letters Patent No. 334,436, dated January 19, 1886.

Application filed December 6, 1884. Serial No. 149,694. (No model.) Patented in England August 30, 1884, No. 11,780; in Belgium November 21, 1884, No. 66,961; in France November 22, 1884, No. 165,526; in Italy December 31, 1884, XVIII, 17,657, XXXV, 80; in India January 12, 1885, No. 196; in Austria-Hungary March 5, 1885, No. 44,656, and No. 11,952, and in Canada June 13, 1885, No. 21,867.

To all whom it may concern:

Be it known that I, THOMAS HAWKSLEY, a subject of the Queen of Great Britain, residing at Brighton, in the county of Sussex, England, have invented a new and useful Improved Dry System of Disposing of Sewage or Refuse Organic Matter in Dwellings or Elsewhere, of which the following is a specification, and which invention has been patented in the following countries, viz: Great Britain, No. 11,780, dated August 30, 1884; Belgium, No. 66,961, dated November 21, 1884; France, No. 165,526, dated November 22, 1884; Italy, XVIII, 17,657, and XXXV, 80, dated December 31, 1884; India, No. 196, dated January 12, 1885; Austria-Hungary, No. 44,656 and No. 11,252, dated March 5, 1885, and in Canada, No. 21,867, dated June 13, 1885.

This invention relates, first, to an improved construction of dry earth or other deodorant closets; second, to the adaptation to and use with the said closet of a paper lining provided with a suitable portion of dry earth or other suitable deodorizing medium; and, thirdly, to the combination, with the said closet, of a shaft adapted to convey the refuse matters from the closet to a suitable receiver or tank placed at the basement of the house or other convenient position, the said receiver being provided with a ventilating-shaft for conveying a constant current of air upward from the receiver to above the roof of the house.

The improved closet consists of a pan in two parts—videlicet, an upper part in the form of a short cylinder or ring, and a lower conical part divided vertically and provided with suitable mechanism, whereby the divided parts of the pan can be moved apart for the purpose of effecting the discharge of any matter therein; or the conical part of the pan, in place of being divided, may be adapted to be moved hingewise upon and away from the upper part of the pan. Within the said pan I place a loose bag or lining of suitable material—such as paper—and provided at the bottom with a portion of dry earth, so that when anything has been deposited within the paper or other lining and the parts of the divided pan are suddenly moved asunder (or the lower part of

the pan moved from under the upper part) the said lining, with its contents, will, by gravity, be discharged into the shaft underneath the bottom of the pan and into the receiver below.

In order to enable my invention to be fully understood, I will proceed to describe the same by reference to the accompanying drawings, in which—

Figure 1 is a plan, Fig. 2 a front elevation, and Fig. 3 a transverse section, (on line *a b* of Fig. 1,) of a closet constructed according to my invention, and with a pan having its lower or conical portion vertically divided. Fig. 4 is a front view of a closet with the lower or conical portion of the pan formed in one piece; and Fig. 5 is a sectional elevation showing the arrangement of the closets, shafts, and receiver for a series of four closets on different floors.

Similar letters in all the figures represent similar or corresponding parts.

In the arrangement shown in Figs. 1, 2, and 3 the closet pan consists of a short cylinder or ring, *a*, fixed under the usual seat, *b*, having the usual opening, *c*, and lid *d*. The lower or conical part of the pan is divided vertically into halves *e* and *e'*, formed with flanges *f f* at the line of junction of the two parts. The two halves of the lower part of the pan are connected or suspended to the upper part, *a*, by means of bars *a' a'* at each side thereof. Each of the two halves *e* and *e'* is provided with a lever or arm, *b'*, jointed at its upper part at *a²* to a rod, *c'*, fixed on the said halves. The other ends of the levers or arms *b'* are jointed together at *d'*.

g is an ordinary pull-handle, also jointed at *d'* to the levers or arms *b'*, so that when the said handle *g* is raised into the position shown in dotted lines in Fig. 3, the two halves *e e'* of the conical or lower part of the pan will be drawn away from one another, as clearly shown in dotted lines in Fig. 3. The divided parts *e e'* of the pan are counterweighted at *h h'*, or in any other suitable part, so that when the handle *g* is released the parts automatically retake their normal position.

i represents the loose bag or lining, of any suitable material—such as paper—which is

placed within the pan before any refuse is deposited therein, and *j* represents a portion of dry earth or other suitable deodorizing medium, preferably made into the form of a pyramidal packet, so as to conveniently fit the lower part or apex of the conical part of the pan. It will of course be understood that a supply of bags or linings and of packets of dry earth will be required to be kept in each closet ready for use. Each closet is placed over a shaft, as shown in Fig. 5, which represents the arrangement for four closets, one above the other on different floors.

k represents the wall of a house or building; *l, l, l, l*, the shafts, one for each closet *m*.

n is the receiver placed under the shafts *l*, and *o* is the ventilating pipe or shaft passing from the receiver *n* to above the top of the house, where it may be provided with a cowl, *p*.

The operation of the improved closet is as follows: If the parts are in the position shown in Figs. 1, 2, and 3 of the drawings, with a lining, *i*, and a portion of dry earth or other deodorizing medium, *j*, within the pan, and refuse matter be deposited in the pan, it is then merely necessary to raise the handle *g* and the halves *e e'* of the conical part of the pan will be moved away from one another, as shown in the dotted lines, Fig. 3, and the lining *i*, and with it the dry earth *j* and refuse matter, will be discharged or fall by gravity into the shaft *l*, directly underneath the closet, and into the receiver *n* below the lining *i*, preserving the pan from being soiled, as the refuse matter will not come in contact therewith, but with the paper lining only. The refuse matter which falls into the receiver *n* will be deodorized by the dry earth or other deodorizer which falls into the receiver with it, and any dangerous or offensive air is prevented from passing into the house by being drawn up the ventilating-shaft *o*.

The receiver *n* may be emptied of its contents at any convenient time and in any convenient manner.

In the arrangement shown in Fig. 4 the conical part of the pan, instead of being divided vertically, as hereinbefore described, and shown in Figs. 1, 2, and 3, is hinged to the upper part, *a*, so that to discharge its contents it has to be

moved into the position shown in dotted lines. I however prefer the arrangement shown in Figs. 1, 2, and 3.

Having now particularly described the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. In a dry-earth closet, a conical pan in two parts, each part having a counterbalance serving automatically to close these parts together, in combination with a single pull-handle, and levers jointed to such handle, serving to simultaneously draw the two parts away from each other, all substantially as set forth.

2. A dry-earth closet consisting of a conical pan in two parts combined with counterweights serving to keep the two parts normally closed, to hold in readiness earthy or deodorizing material, and arranged, substantially as described, in connection with a handle serving to quickly move the parts away from each other, to discharge centrally the contents of the pan.

3. In combination with a closet having a lower conical part or bowl divided into two halves, as set forth, and normally held closed together, a loose or unattached flexible lining or bag, *i*, of suitable material, adapted for holding a portion or packet of deodorizing material, as and for the purposes set forth.

4. In combination with a set of closets for different stories of a building, such closets having conical bowls divided into two halves normally held closed together, for the purposes set forth, the straight shafts *l* beneath the same, normally closed at their top, a receiver, *n*, beneath such shafts, and the fresh-air ventilating air-shaft *o* outside the building communicating directly with the shafts *l* at a point near and directly over the receiver, the combination serving to prevent the passing of foul odors into the house and to carry them off outside of the house.

THOS. HAWKSLEY.

Witnesses:

A. ALBUTT,

B. BRADY.