R. S. WILLIAMS.

EARTH CLOSETS.

No. 181,507. Patented Aug. 22, 1876.

Fig. 1.

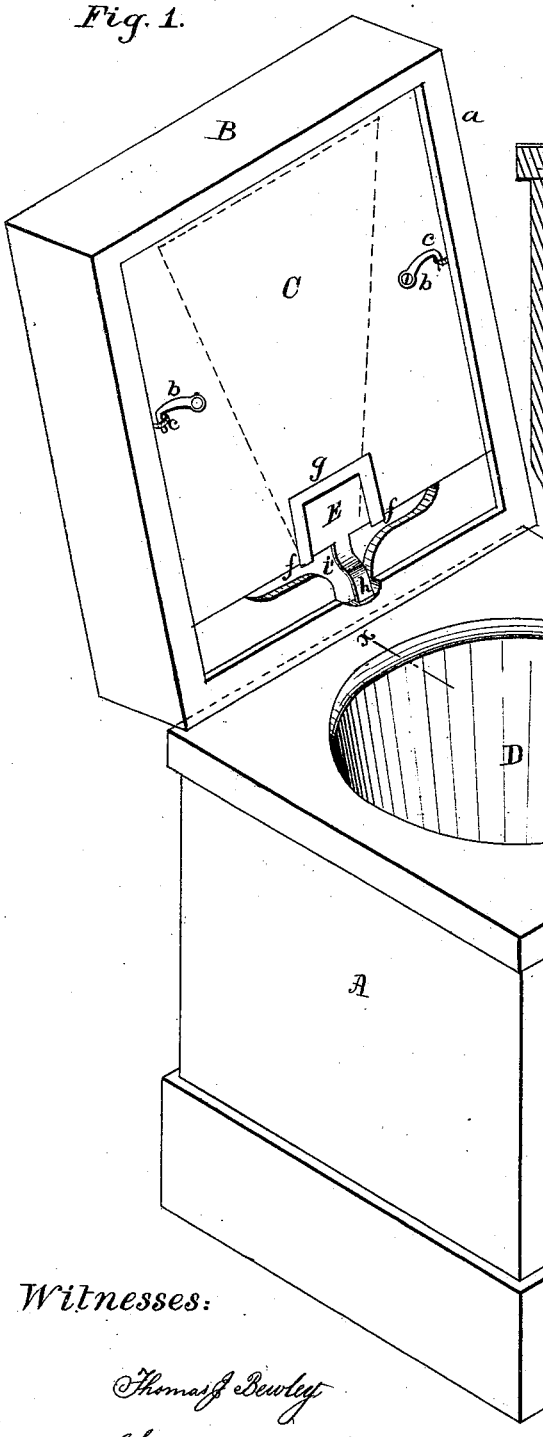


Fig. 2.

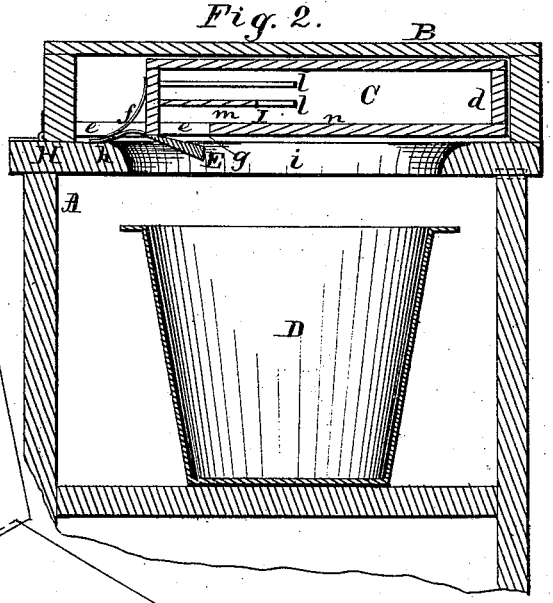
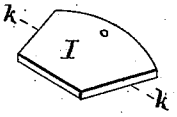


Fig. 3.



Witnesses:

Thomas J. Bewley

Charles W. Fourdrinier

Inventor:

Robert S. Williams

Stephen Ustick Attorney.

UNITED STATES PATENT OFFICE.

ROBERT S. WILLIAMS, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN EARTH-CLOSETS.

Specification forming part of Letters Patent No. **181,507**, dated August 22, 1876; application filed July 1, 1876.

To all whom it may concern:

Be it known that I, ROBERT S. WILLIAMS, of the city and county of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Earth-Closets, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The nature of my invention consists, in the first place, of a hinged valve, connected with the earth-reservoir in the lid of the closet, in such a manner that by a spring projection of the valve bearing upon the rear edge of the seat-hole as the cover is brought into its closed position, the valve is opened for the passage of a charge of earth into the pot.

In the second place, the invention consists of an adjustable slide, in combination with the earth-reservoir in the recess of the lid, for the regulation of the quantity of earth to be charged at each opening of the above-mentioned valve.

In the accompanying drawing, Figure 1 is an isometrical view of my improved earth-closet, with the lid thrown into its open position. Fig. 2 is a vertical section at the line *x x* of Fig. 1, with the lid B in its closed position. Fig. 3 is an isometrical view of the slide I.

Like letters of reference in all the figures indicate the same parts.

A is the body of my improved earth-closet. B is the lid, having a recess, *a*, for the insertion of the earth-reservoir C, which is held in place by means of the hooks *b* and staples *c*, (seen in Fig. 1,) or by any other suitable device. The reservoir has a hinged strip, *d*, at one edge, to be opened for filling it with earth, and an opening, *e*, at its other edge, for the passage of each charge of earth into the pot D. The opening is covered by the valve E when the lid is in its open position, (seen in Fig. 1,) the valve being hinged by means of projecting pins *f f*, which are held in place by the metallic strip *g*, which surrounds three sides of the valve, and is turned over the front corner of the reservoir, as represented. The valve has a spring projection, *h*, which bears against the seat H at the rear side of the hole *i*, when the lid is brought down to its closed position, whereby the valve is opened, as seen in Fig. 2, for the charge of earth into the pot D.

To give freedom to the action of the spring projection *h* of the valve, and room for the finger for the removal of the reservoir C from the lid B for refilling it, the strip *j* of the lid is cut away to form an opening, *i'*, as seen in Fig. 1.

For the purpose of regulating the requisite quantity of earth at each charge there is a slide, I, (shown in detail in Fig. 3,) the beveled edges K K of which are placed in grooves *l* in opposite edges of the reservoir, being removable to either pair, (of which there may be any desirable number,) to regulate the width of the space *m* between the slide and the side *n* of the reservoir, thereby measuring the quantity of earth to pass through the opening *e*.

I claim as my invention—

1. The hinged valve E, having a spring projection, *h*, in combination with the reservoir C and seat H, substantially as and for the purpose set forth.

2. The adjustable slide I, in combination with the reservoir C, for measuring each charge of earth, substantially as set forth.

ROBERT S. WILLIAMS.

Witnesses:

THOMAS J. BEWLEY,

STEPHEN USTICK.