

(No Model.)

W. HEAP.
EARTH CLOSET.

No. 345,053.

Patented July 6, 1886.

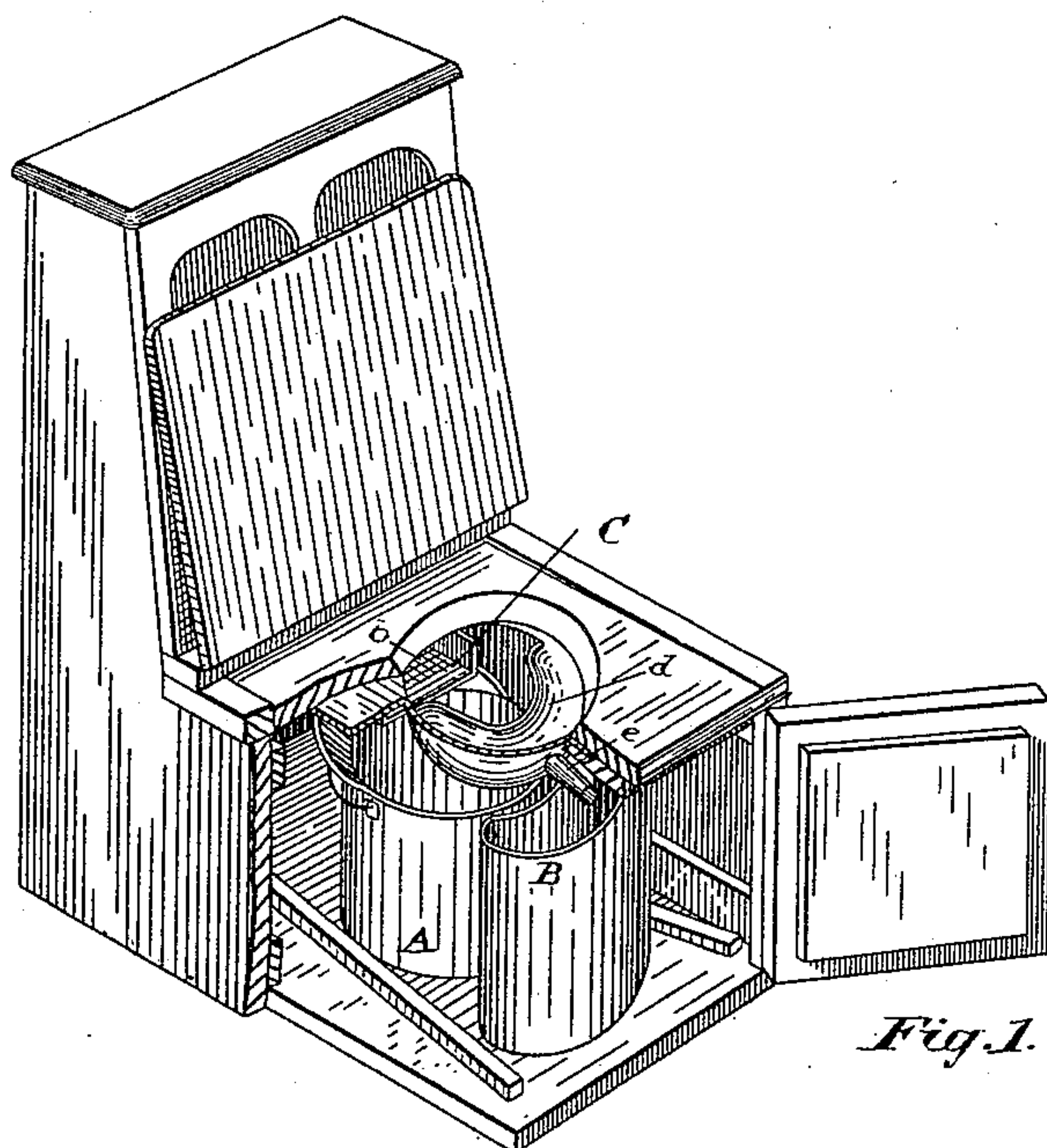


Fig. 1.

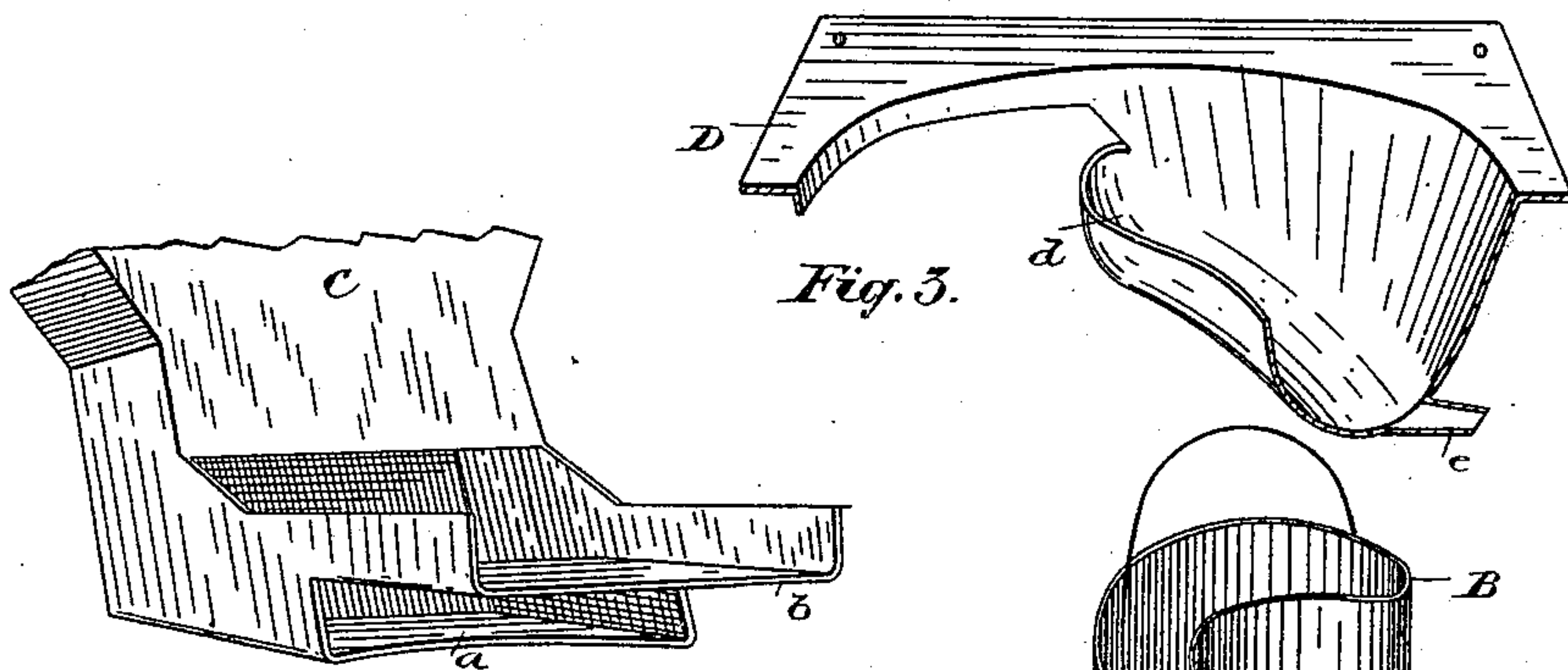


Fig. 2.

Fig. 3.

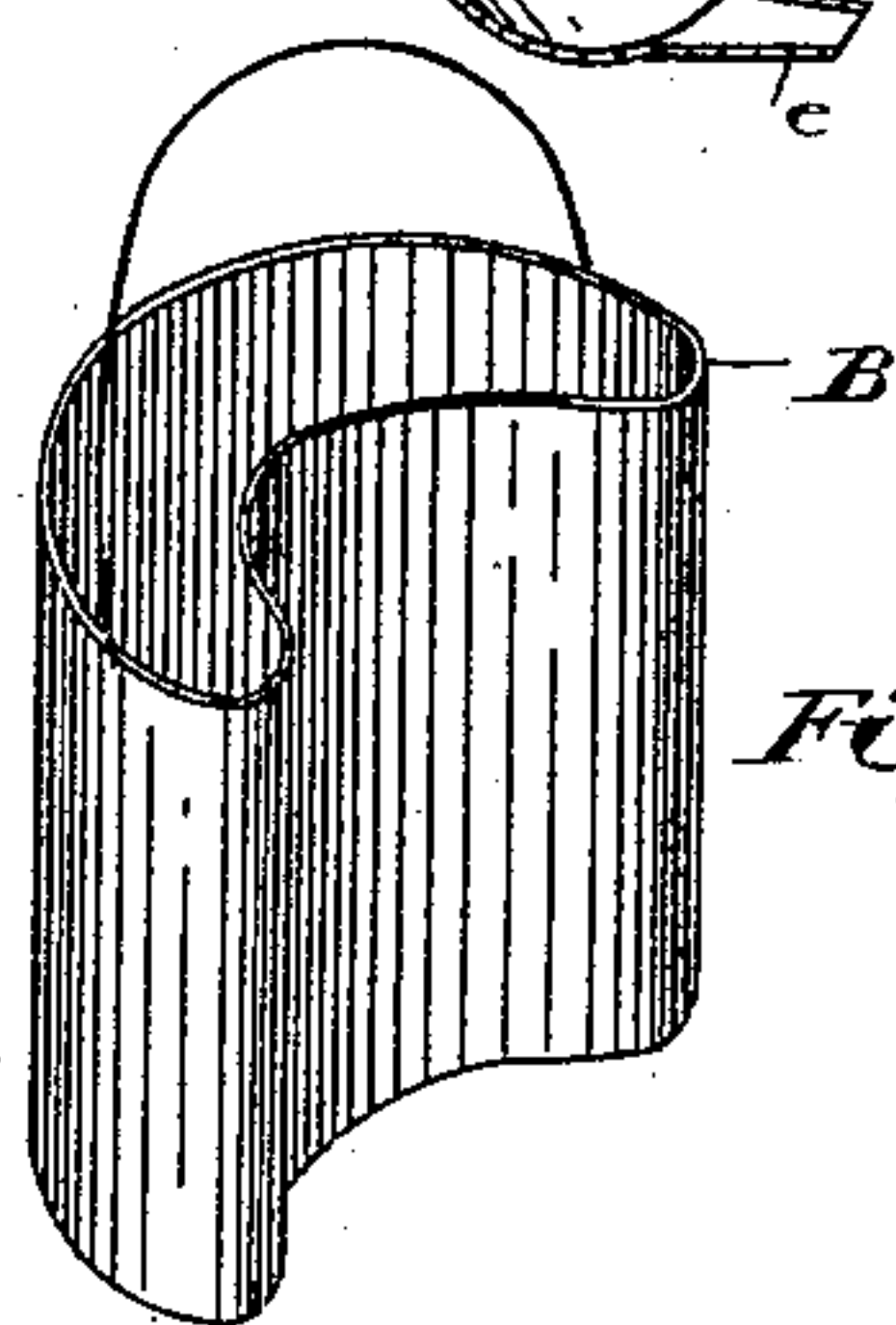


Fig. 4.

Witnesses.

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EARTH-CLOSET.

SPECIFICATION forming part of Letters Patent No. 345,053, dated July 6, 1886.

Application filed December 17, 1885. Serial No. 185,931. (No model.) Patented in Canada May 13, 1885, No. 21,660.

To all whom it may concern:

Be it known that I, WILLIAM HEAP, a subject of the Queen of Great Britain, residing at the town of Owen Sound, in the county of Grey, in the Province of Ontario, Canada, manufacturer, have invented a certain new and useful Improvement in Earth-Closets, (patented by me in the Dominion of Canada May 13, 1885, No. 21,660,) of which the following is a specification.

The objects of the invention are, first, to provide a commode or earth-closet with a urine-separator so formed that while it will carry the urine sufficiently far from the receptacle placed to receive the solid deposit it will not project downwardly so far as to interfere with the free passage of the said receptacle through the front of the commode or closet; secondly, to so construct the discharge-spout of the hopper containing the deodorizing material that the said material shall be evenly and perfectly discharged over the entire solid deposit; and it consists, essentially, in forming the urine-separator in the form of a shallow vessel, the frame of which extends around the hole of the commode, to the bottom of which it is fastened. From the bottom of the shallow vessel a spout extends in almost a horizontal direction, so as to convey the urine away from the hole under which the excrement-pail for the solid deposit is placed without extending so low as to prevent the free passage of the excrement-pail when it is necessary to insert it through the front of the commode.

Figure 1 is a perspective view, partially in section, of a commode having my improved urine-separator and hopper. Fig. 2 is a perspective detail of the discharge-spout portion of the hopper. Fig. 3 is a perspective detail of my improved urine-separator. Fig. 4 is a perspective view of the urine-receptacle.

In the drawings, A represents the excrement-pail designed to receive the solid deposit, and B the receptacle to receive the urine. This latter receptacle is preferably made in the form shown in Fig. 4—that is to say, it is curved so as to fit the circumference of the pail A, for when made in this shape it will occupy less space in the commode in proportion to its

capacity than it would if it were simply square or round.

D is the urine-separator, which, as will be noticed, is a shallow vessel, the rim of which extends round the hole of the commode, to the bottom of which it is fastened. A U-shaped wall, *d*, forms one side of the vessel designed to receive the urine, leaving the balance of the space immediately below the hole clear for the free passage of the solid deposit into the excrement-pail A. The spout *e*, with which the separator D is provided, extends in almost a horizontal direction from the bottom of the said separator, so that it will carry off the urine away from the pail A without projecting to any extent below the bottom of the said separator.

The hopper for containing the deodorizing material is made in the usual form, except that it is provided with a double discharge-spout, C, which is formed by two shelves extending at about right angles to the open mouth of the said discharge-spout, the bottom shelf, *a*, forming an actual bottom of the discharge-spout, while the upper shelf, *b*, commences a slight distance away from the outer wall of the discharge-spout C and extends beyond the bottom shelf, *a*. When the earth or other deodorizer falls from the hopper into the discharge-spout C, it will naturally fill the entire space from the bottom shelf, *a*, and will of course overflow onto the upper shelf, *b*. When the spout C receives its vibrating movement, the earth or other deodorizer on the shelves is thrown in two streams upon the deposit within the pail A. The earth on the bottom shelf, *a*, being farther from the deposit, will not extend so far on the said deposit as the earth which is thrown from the upper shelf, *b*. The two streams, however, being thus discharged, will entirely and evenly cover the deposit.

What I claim as my invention is—

1. A hopper for holding the deodorizing material, provided with a discharge-spout, C, having stationary shelves *a* and *b*, projecting one in advance of the other, substantially as and for the purpose specified.

2. The combination, with the pail A, of the

receptacle B, curved, as shown, to correspond with the curvature of the said pail, substantially as and for the purpose specified.

5 3. A hopper for holding the deodorizing material, provided with a discharge-spout, C, having formed integral therewith the shelf *a*, extending at about right angles to the mouth thereof, and the shelf *b*, also formed integral

with said spout and extending beyond said shelf *a*, substantially parallel therewith, substantially as and for the purposes specified. 10

Toronto, December 11, 1885.

WILLIAM HEAP.

In presence of—

JOHN CAMERON,
J. B. TAYLOR.