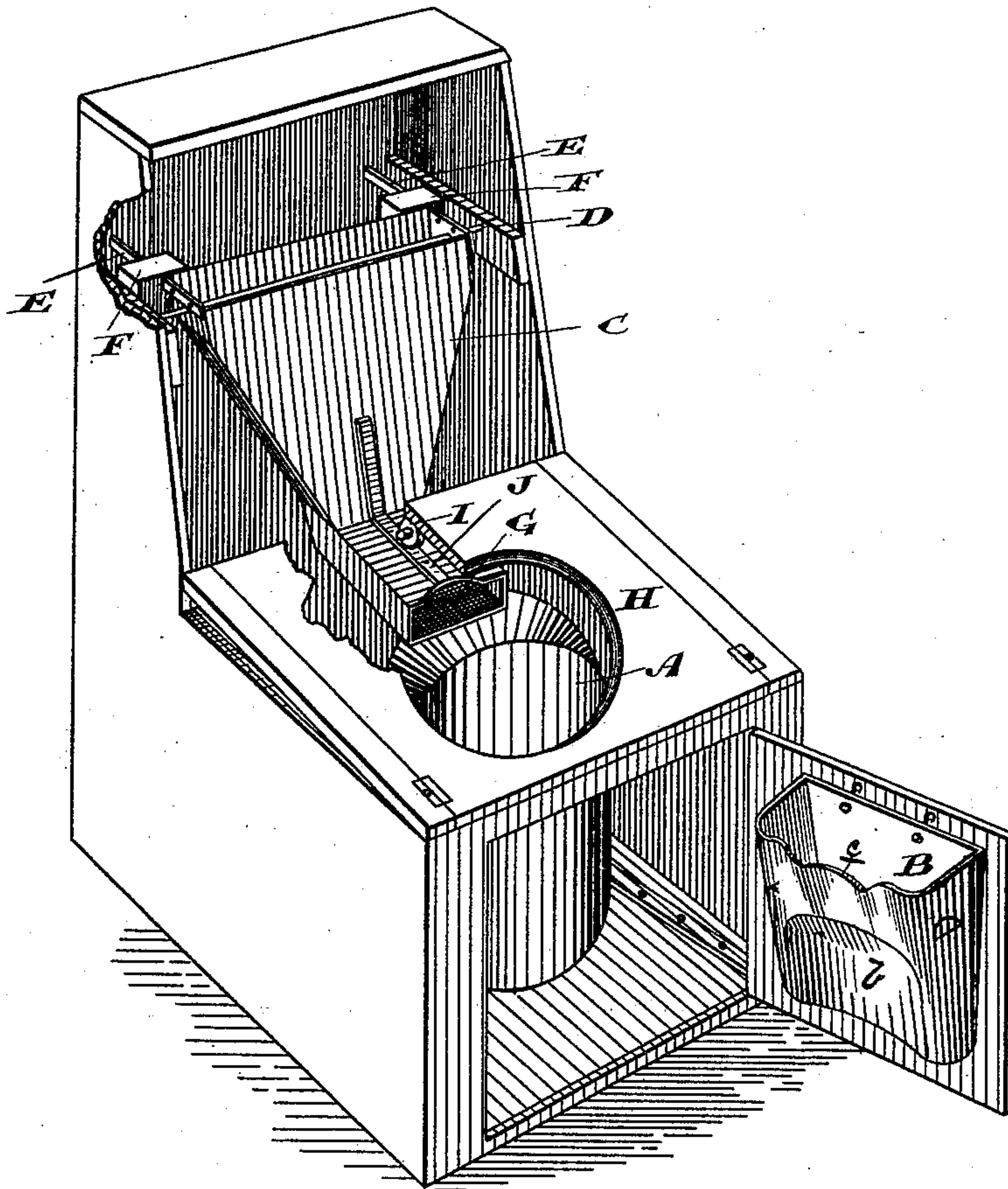


(No Model.)

W. HEAP.
EARTH CLOSET.

No. 347,037.

Patented Aug. 10, 1886.



Witnesses.

Inventor.

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UNITED STATES PATENT OFFICE.

WILLIAM HEAP, OF OWEN SOUND, ONTARIO, CANADA.

EARTH-CLOSET.

SPECIFICATION forming part of Letters Patent No. 347,037, dated August 10, 1886.

Application filed December 17, 1885. Serial No. 185,932. (No model.) Patented in Canada October 2, 1885, No. 22,579.

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, (for which Letters Patent were granted to me on the 2d day of October, 1885, No. 22,579,) of which the following is a specification.

The objects of the invention are, first, to design a device by which the urine shall be effectually separated from the solid deposit, and which device shall not be an impediment for the free removal of the excrement-pail, which may be almost the full depth allowed below the seat; and, secondly, to so pivot and weight the hopper containing the deodorizing material that the mechanism required to operate the same shall not be an impediment for the free removal of the excrement-pail; and it consists, essentially, first, of a urine-separating receptacle, shaped substantially as indicated, and preferably attached to the door of the closet or commode; and, secondly, in placing a weight or weights at or near the top of the pivoted hopper, so that its discharge-spout shall be thrown forward with a jerk on the removal of the weight from the seat, provided with means for holding the said spout back.

The drawing represents a perspective view of my improved earth-closet, partially in section, so as to expose the urine-separating receptacle, excrement-pail, and pivoted weighted hopper.

In earth-closets it is always desirable to have as deep an excrement-pail as possible to obviate too frequent removals. A urine-separator is also desirable, and it is necessary that mechanism shall be provided for throwing the deodorizing material over the solid deposit within the excrement-pail.

By the adoption of my present invention I am enabled to have an earth-closet or commode with a seat the ordinary height from the floor, and an excrement-pail almost as deep as the full distance of the said space will permit, and, further, the said excrement-pail may be considerably increased in diameter, and may be moved either from the front, back, or sides of the commode, as there are no levers and weights

or other mechanism below the seat to interfere with the said pail.

A represents the excrement-pail; B, the urine-separating receptacle, which is shaped substantially as indicated, and is preferably hooked or otherwise attached to the door of the commode or closet. One side of the urine-separating receptacle B extends backwardly to a point below the hole in the seat sufficiently far to effectually catch all the urine without interfering with the free passage of the solid excrement into the pail A. By thus providing a urine-receptacle formed substantially as shown the combined offices of a separator and receptacle are contained in one vessel, which is readily removed and leaves all necessary space for as large an excrement-pail as may be required. It will be noticed that the hopper C is pivoted on a rod, D, and that two arms or bars, E, are attached to and extend behind the said hopper. Each of these bars E is provided with an adjustable weight, F, so that the strength of the action of the hopper may be easily altered by the simple adjustment of the said weight. I prefer to use two weights; but it will of course be understood that one weight would answer the purpose, and although it is a great advantage to have the said weight or weights adjustable, the major portion of the object of my invention would be secured were the said weight or weights made stationary. It will be noticed that the discharge-spout G of the hopper C extends at an angle from the said hopper below the seat H, which seat is hinged at its front side, and has a roller, I, attached to its bottom, which roller rests upon the top of the spout G, which is preferably provided with a bearing-plate, J, as shown. When the seat H is pressed down, the roller I, acting on the spout G, forces the said spout back, the weights F being sufficiently light to permit the said movement. When pressure is removed from the seat H, the tendency of the weights F, located as indicated, will of course throw the spout G forward with a jerk, thereby distributing the deodorizing material over the solid deposit contained within the excrement-pail.

I am aware of the Patent No. 83,215, and make no claim to anything shown therein as forming part of my invention.

It will be noticed that my receptacle B is

curved, as shown at *b*, to correspond inversely with the curvature of the pail *A*, and is cut away, as shown at *c*. This is important, for where there is but little room between the
5 excrement-pail and the door of the commode it is difficult to obtain a sufficiently large receptacle to catch a large flow of water without having one of the sides of the receptacle extend back over the excrement-pail. My im-
10 proved receptacle avoids this difficulty.

What I claim as my invention is—

1. The hopper *C*, pivoted on the rod *D*, and provided with a bar or bars, *E*, on which the weight or weights *F* are adjustably connected,
15 in combination with a roller, *I*, connected to the

bottom of the seat *H*, and arranged to act against the discharge-spout *G*, substantially as and for the purpose specified.

2. The rod *D*, the hopper *C*, pivotally supported at its upper end by said rod, and horizontal bars *E*, attached to and extending behind said hopper at its top, combined with the weights *F*, adjustably secured on said bars, substantially as and for the purpose specified.

Toronto, December 11, 1885.

WILLIAM HEAP.

In presence of—

JOHN CAMERON,

J. B. TAYLOR.