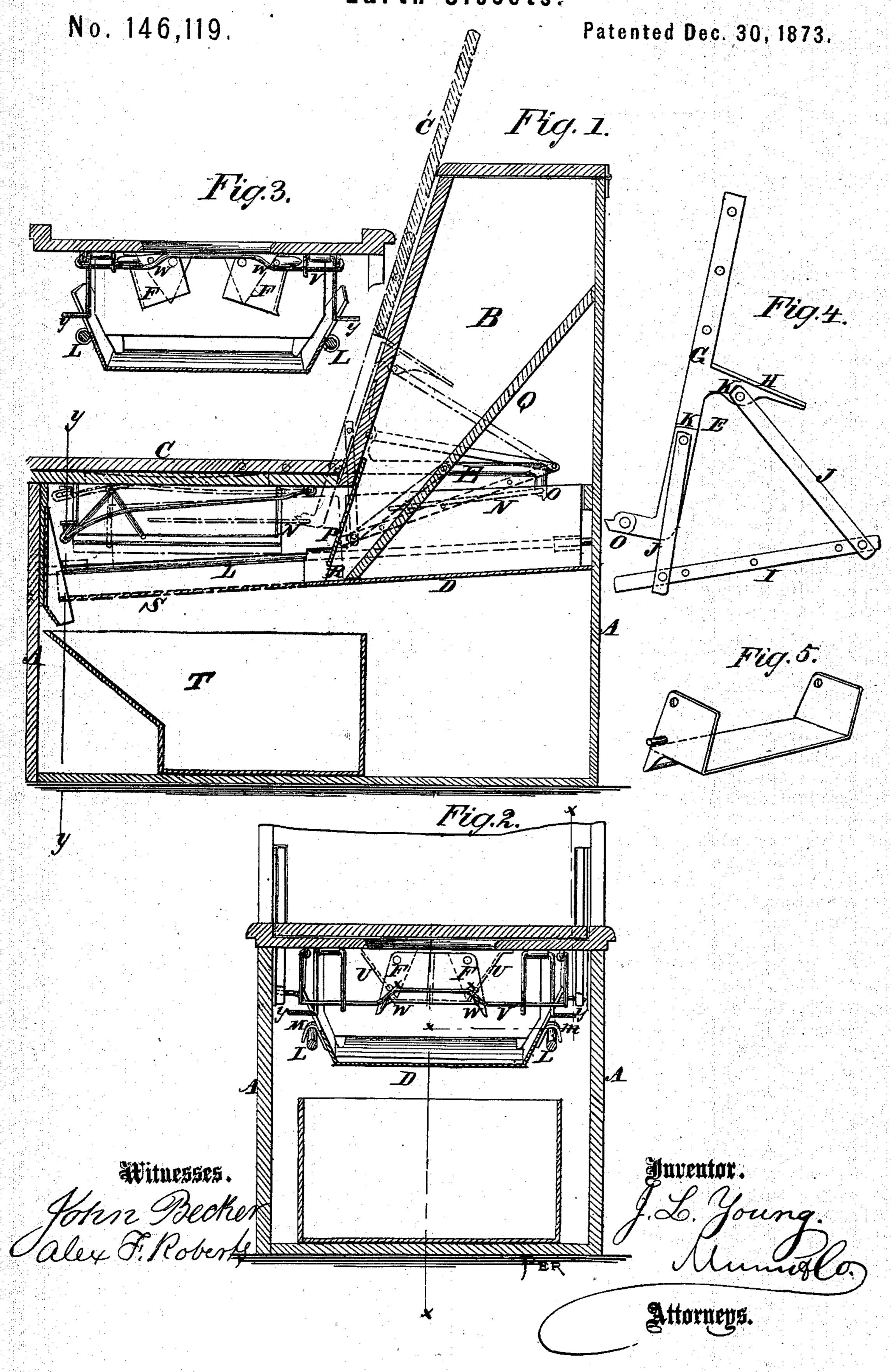
J. L. YOUNG. Earth-Closets.



UNITED STATES PATENT OFFICE.

JOHN L. YOUNG, OF NEW YORK, N. Y.

IMPROVEMENT IN EARTH-CLOSETS.

Specification forming part of Letters Patent No. 146,119, dated December 30, 1873; application filed October 12, 1872.

To all whom it may concern:

Be it known that I, John L. Young, of the city, county, and State of New York, have invented a new and useful Improvement in Earth-Closets, of which the following is a specification:

The invention consists in the improvement of earth-closets, as hereinafter described, and

pointed out in the claims.

In the accompanying drawing, Figure 1 represents a vertical section of the closet, taken on the line x x of Fig. 2. Fig. 2 is a vertical section of Fig. 1, taken on the line y y, showing the shutters closed. Fig. 3 is a view of the same in another position, showing the shutters open. Fig. 4 is a detail, showing the cover-hinge. Fig. 5 is a detail of one of the shutters.

Similar letters of reference indicate corresponding parts.

A represents the outer walls or casing of | the closet. B is the hopper. C is the seat. C' is the seat cover or lid. D is the service plate or pan. E is the hinge attached to the cover and to the casing, by means of which the service-pan and shutters are operated. In Fig. 1 these parts—that is, the cover, the hinge, the service-pan, and the shutters—are shown in two positions, one position being in dotted lines, and shown as when the cover is raised and the closet in use. F represents the shutters. The hinge E consists of the bar G, which is attached to the edge of the cover, having a branch, H, thereon. I is a bar, which is attached to the side of the closet-casing, and is connected with the bar G by the straps JJ at the points KK. These straps are connected by pivots at each end, and the pivots are the points upon which the hinge turns, and by which it is allowed to change its position so as to operate the shutters and servicepan, as well as the cover. L L are inclined rods running from front to rear of the closet. The service-pan is connected with these rods by means of clips or slides M. N represents a wire attached to each side of the pan at one end. The other end is connected with the

hinge bar G at the hole O. This bar extends down below the edge of the cover, and its end swings back, as seen in Fig. 1, so as to carry the service-pan back beneath the hopper, as represented. P is a plate in front of the mouth of the hopper. Q is the inclined back of the hopper. R is the mouth, through which the dry earth is discharged. When the cover is raised, the service-pan D is carried forward beneath the seat, as seen in the broken line S, and carries with it a layer of earth equal in thickness to the width of the space R. The excrement falls upon this layer of earth. When the cover of the seat C is closed, the pan is drawn back and the contents of the pan are deposited in the tub T beneath. The space R (and consequently the thickness of the layer of earth on the pan) may be of any width, and the plate P may be made adjustable, if desired. U U represent jambs or inclined pieces of metal attached to the under side of the seat. (See Fig. 2.) The shutters F F are two pieces of metal, with their ends turned at right angles and pivoted to the jambs U U, so that they will fall and close together by their own gravity. They are opened, when the cover C is raised, by means of the turnedup edges of the service-pans, which strike the cranks Y Y, which raises the bail V as the pan is carried forward. This bail has two inclined planes, W, which strike the pins X X on the shutters, which separates and opens them. The hinge is of such peculiar construction and so applied that the shutters are neither opened nor closed until the cover C is thrown almost back against the front of the hopper. The arrangement of the hinges and the manner in which it operates upon the shutters are essential features of my invention. A person after using the closet can close the shutters by leaning a little forward and then starting the cover forward, which closes them while the seat is occupied, so that the odor is confined.

The service-pan is believed to be a decided improvement in earth-closets and its effect much superior to the old or common plan. The

excrement is more perfectly deodorized, as a portion of earth always falls on top and covers it, no distributing apparatus being required. The movements are all produced by positive motion, and no springs are required.

Having thus described my invention, I claim as new and desire to secure by Letters Pat-

ent—

1. The combination of the shutters F F

and service-pan D, as and for the purposes described.

2. The arrangement of the bail V and cranks Y Y, in combination with the service-pan and shutters, substantially as shown and described.

JOHN L. YOUNG.

Witnesses:

T. B. MOSHER,
ALEX. F. ROBERTS.