

Clifford & Bell,

Earth Closet,

N<sup>o</sup> 64,841.

Patented May 21, 1867.

Fig. 1.

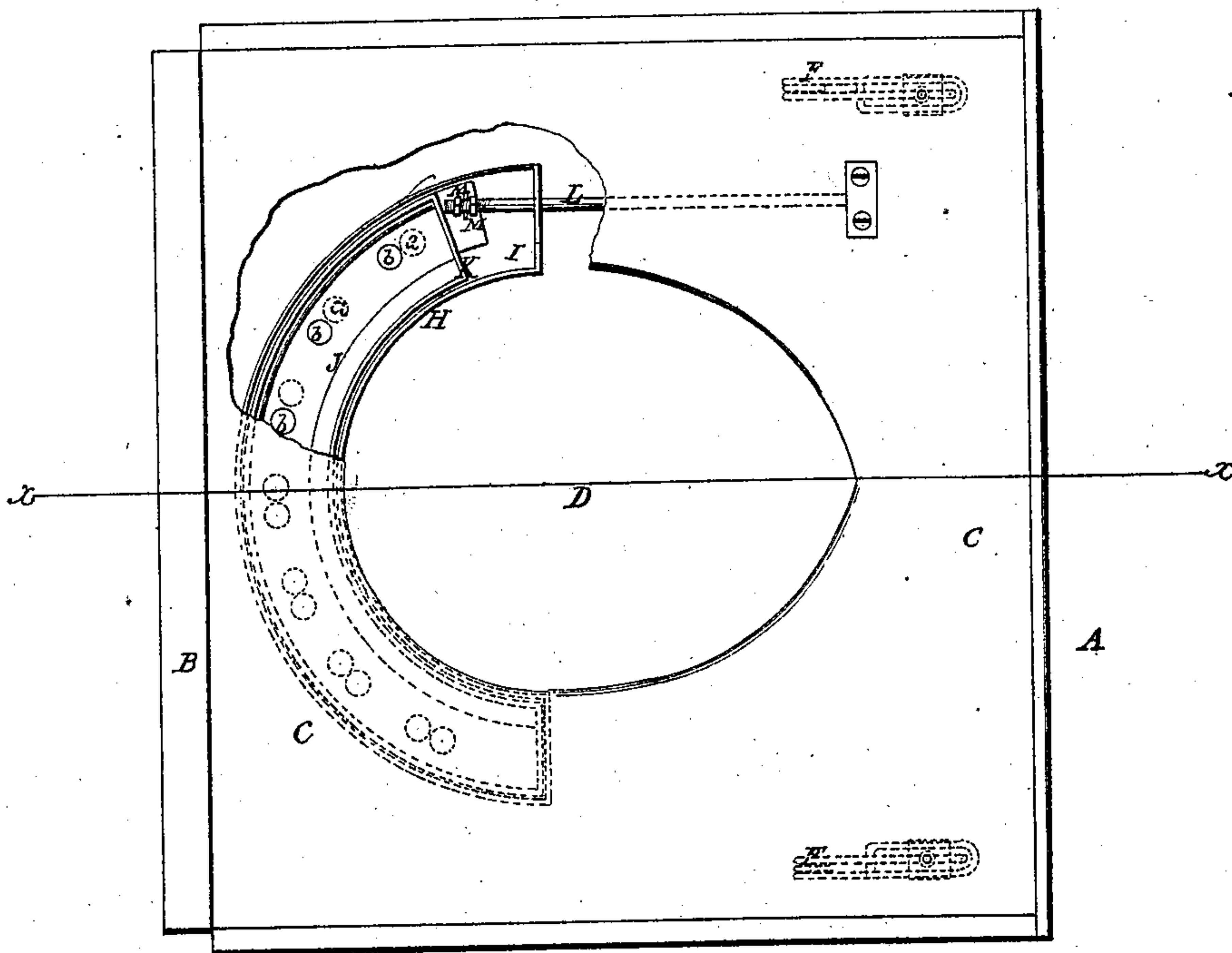
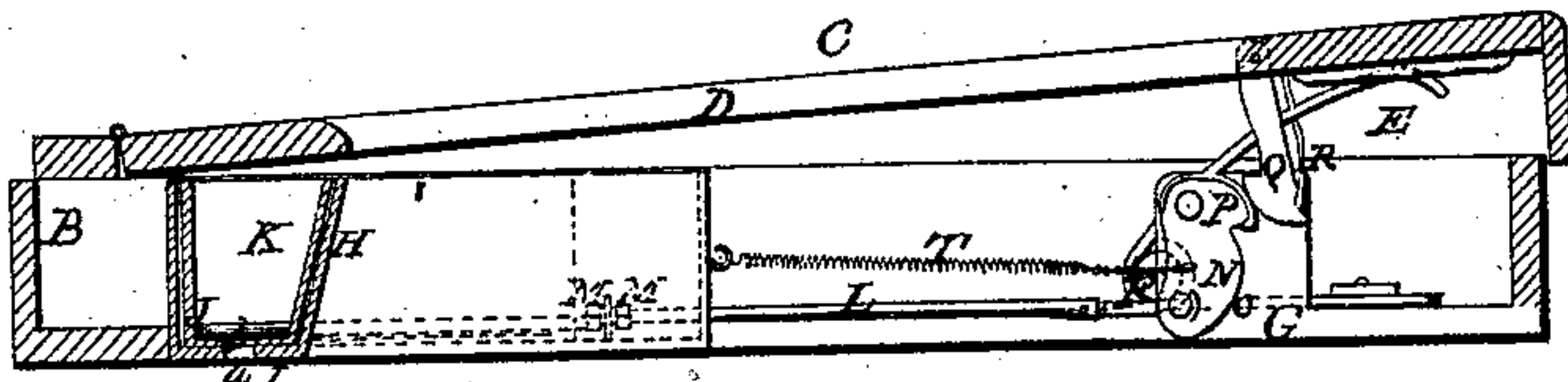


Fig. 2.



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*Letters Patent No. 64,841, dated May 21, 1867.*

## IMPROVEMENT IN DEODORIZERS FOR PRIVY-SEATS.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that we, NEIL CLIFFORD and A. N. BELL, of Brooklyn, in the county of Kings, and State of New York, have invented a new and improved "Disinfecting Seat for Privies," &c., and that the following description, taken in connection with the accompanying drawings, hereinafter referred to, forms a full and exact specification of the same, wherein we have set forth the nature and principles of our said improvements, by which our invention may be distinguished from all others of a similar class, together with such parts as we claim and desire to have secured to us by Letters Patent.

The present invention consists in combining with the seat of a privy, water-closet, cloaca, or other similar place, by whatever name called, a receptacle for a deodorizing or disinfecting material, whether in the form of a liquid or powder, in such a manner and in so connecting it with the said seat that, when such seat is used, or pressure is in any other suitable manner brought to bear upon the same, or released therefrom, the deodorizing or disinfecting material contained in the vessel combined with the seat, will be thereby sprinkled or otherwise discharged into the vault below the seat, provided for the reception of the excrement and urine, and mixing with it, thus prevent the atmosphere from becoming polluted, vitiated, or poisoned by the disgusting effluvia arising from such places, as at present and heretofore constructed; or, in other words, deodorize or disinfect the said excrement and urine, the arrangement of parts between the privy or other seat and the receptacle for the deodorizing material being such as to admit of being adjusted to discharge a greater or lesser amount or quantity of the deodorizing or disinfecting agent. In the accompanying plate of drawings our improvements in privy and other similar seats are represented—

Figure 1 being a plan or top view of the same, broken out to more fully illustrate our invention; and Figure 2, a transverse vertical section, taken in the plane of the line *x x*, fig. 1.

A, in the drawings, represents the framework or box-portion of a seat suitable for a privy or water-closet. To the rear side B of this box-portion A the seat-board C is hinged so as to be swung up, and thus to open the box A, or to be swung down and over the same, in position for being used as with ordinary privy and water-closet seats. This seat-board is provided with the usual opening D in its centre, or nearly so, and when down it rests upon the arms E of coiled springs F attached to the upper side of the bottom board or plate G of the seat-box A. Below the seat-board C, in its box A, and just back of the rear edge of the seat-opening D, around which it partially extends, is secured a vessel or receptacle, H, made of a semicircular, annular, or ring shape. The bottom plate of this vessel is provided with a series of openings or perforations, *a*, corresponding to which are openings, *b*, made in the bottom plate J of the vessel or receptacle K, arranged to move or slide within the vessel H, it being a little shorter than the same, but of a corresponding shape in transverse section. Within the inner vessel K of the two vessels H and K, the deodorizing or disinfecting material or agent, whether in the form of a powder or liquid, is placed, from which, through the perforations of its bottom plate J, and thence through the corresponding openings in the bottom plate of the outer vessel, it is discharged into the vault below the privy-seat by sliding or moving the inner vessel K forward and backward within the outer vessel H; this movement being imparted to the said inner vessel by and through the upward movement of the seat, as the pressure upon it is released by the person rising therefrom, the arrangement of devices for such purpose being as follows, viz: L, a rod connected to one end of the inner sliding vessel K by screw-nuts M, and at its other end hung to a bell-crank shaped plate, N, which, in its turn, is hung to an upright standard or plate, O, secured to the bottom board of the seat-box A. This bell-crank plate N, at one portion, is made with a hook-shaped flange, P, below which the edge *c* of the plate is of a cam shape. To the under side of the seat-board is hung a pawl, Q, in proper position for engaging with the hook-shaped portion of the bell-crank plate N, as the seat is depressed by the weight of the person who is sitting upon it, in connection with which it is held, by the action of the bent spring R, until the person rising from the seat, (leaving the seat then free to rise by the action of the springs upon which it rests,) its hook or pawl turns the bell-crank plate N, and through it slides the inner box of the two boxes H and K, when, the said pawl being thrown out of connection with the said bell-crank, by the action of its cam-shaped edge against the same, the inner vessel is then drawn or moved back to its original position, by the coiled spring T hung at one end to the bell-crank, and at its other to the stationary vessel H, as is obvious without any further explanation.



From the above description it is plain to be understood that if the inner vessel K be filled, or partially so, with any substance, or material, or agent, whether in the form of a liquid or powder, which is suitable for use as a deodorizer or as a disinfectant, by the use of the seat, such substance, or material, or agent employed must be discharged or scattered into the vault or receptacle below the seat provided to receive the excrementitious deposits, and thus mixing therewith, serve to counteract and destroy all the obnoxious and unhealthy odors and effluvia which arise from such deposits, whereby the vitiating and poisoning of the air is prevented. By hanging the connecting-rod to the disinfectant receptacle or vessel by the two nuts M, as explained, the length of movement of the said vessel can be increased or decreased at pleasure, as is obvious, whereby the quantity or amount of disinfecting material or agent discharged into the privy-vault or other place upon which the seat is used, can be regulated according as may be desired. The disinfectant receptacle may be provided with a cover, for the purpose of closing the same, but I do not deem it necessary; and, furthermore, in lieu of only extending partially around the hole in the seat-board, it may extend entirely around the same, or nearly so, and also the said receptacle may be made of various shapes other than that herein particularly described, and also the manner of connecting it to the seat, to be operated thereby, may be varied in many respects without departing from the principles of the present invention as hereinbefore stated, and therefore we do not intend to limit ourselves to any one particular form or size of the disinfectant receptacle, nor to the particular means described for operating the same to discharge the disinfectant by and through the movement of the seat-board.

Having thus described our invention, we claim as new, and desire to secure by Letters Patent—

The combination, with the seat of a privy, water-closet, or other similar place, of whatever name called, of a receptacle or vessel for the reception and holding of any suitable deodorizer or disinfectant, whether in the form of a liquid or powder, when such vessel or receptacle is so constructed and connected with the seat-board that by the depression or upward movement of the seat, or both, the said disinfectant or deodorizer will be discharged into the vault of the privy, &c., substantially as and for the purpose described.

The above specification of our invention signed by us this 11th day of August, 1866.

A. N. BELL,  
NEIL CLIFFORD.

Witnesses:

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