## TIMB-Flamment,

Mater Last

Faterited Mar. 1/854.

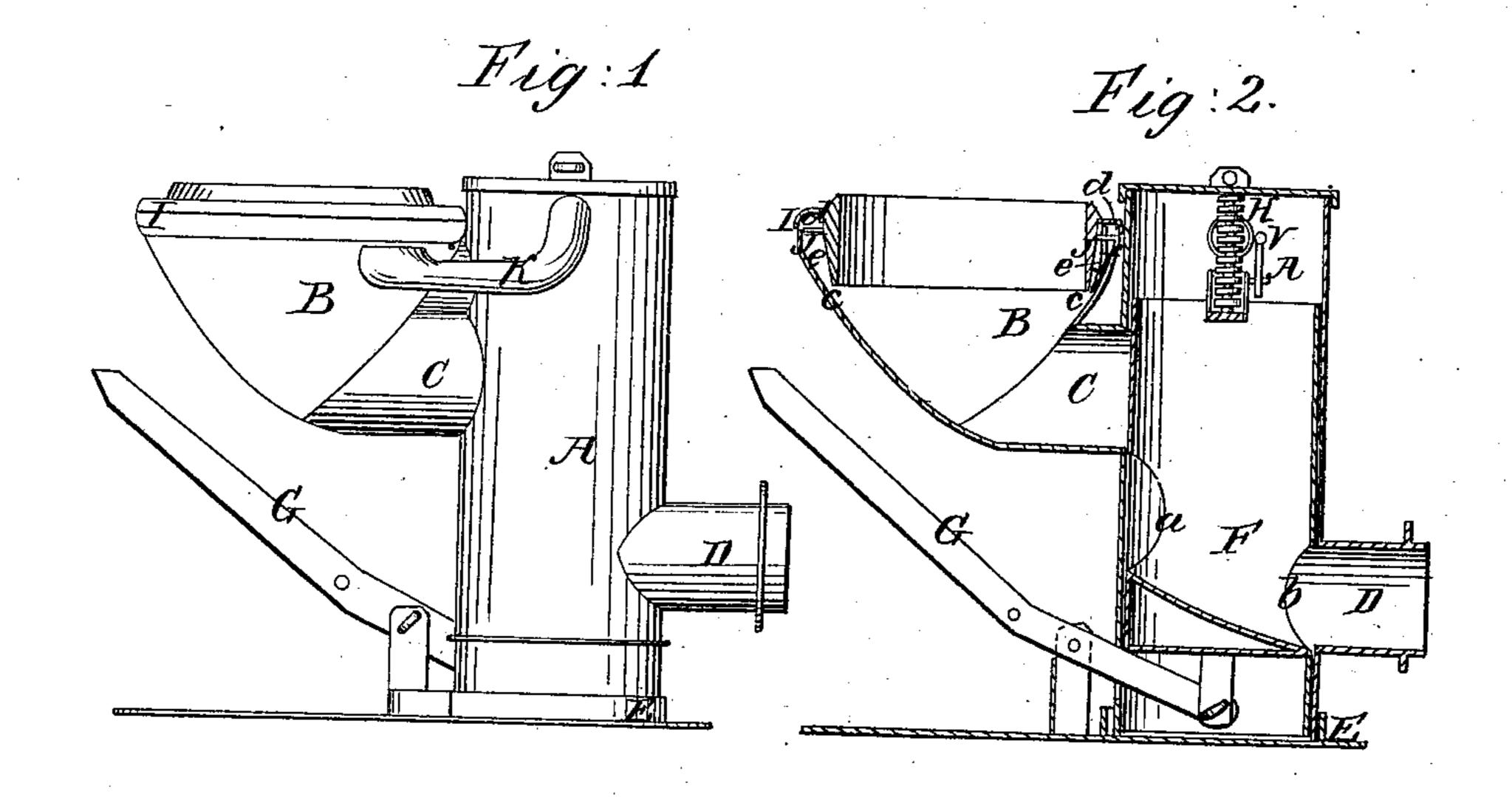


Fig: 3

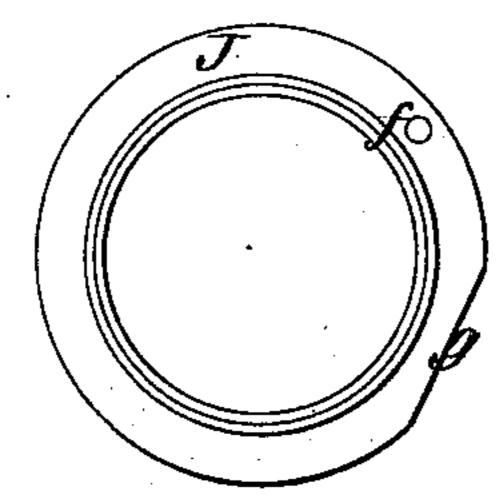


Fig:5

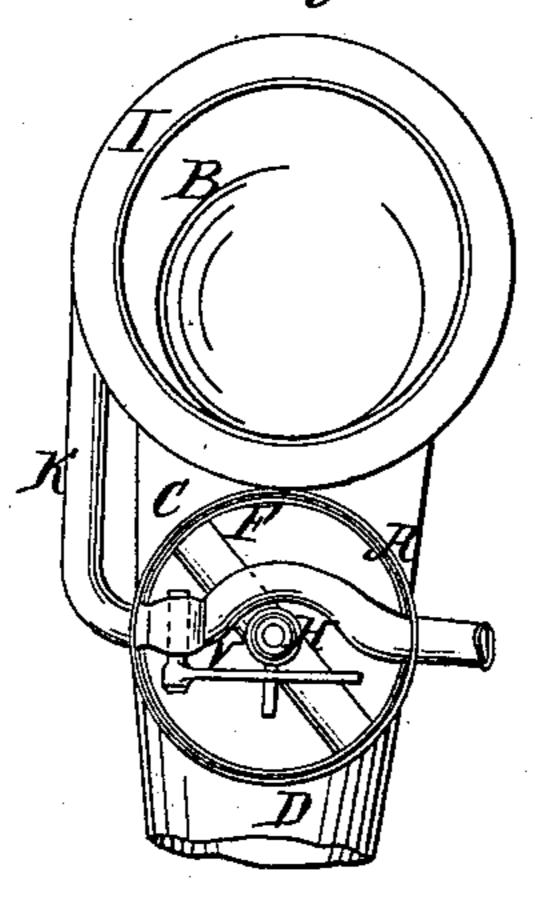
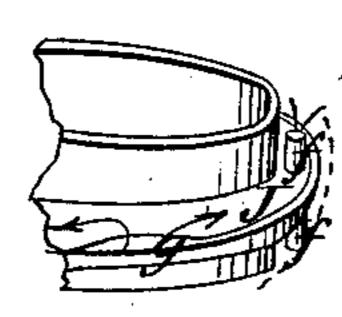


Fig.4



## UNITED STATES PATENT OFFICE.

D. RYAN AND J. FLANAGAN, OF NEW YORK, N. Y.

## WATER-CLOSET.

Specification of Letters Patent No. 10,620, dated March 7, 1854.

To all whom it may concern:

Be it known that we, Daniel Ryan and John Flanagan, of the city, county, and State of New York, have invented certain new and useful Improvements in Water-Closets; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this

10 specification, in which—

Figure 1, is an external view of our improved water closet. Fig. 2, is a vertical section of ditto, the line of section being through the center. Fig. 3, is a plan or top view of the flanch or partition which divides the circular chest or penstock into two compartments or spaces. Fig. 4, is a perspective view of a portion of the chest or penstock, the upper surface being removed for the purpose of showing the flanch or partition. Fig. 5, is a plan or top view of the water closet, the top of the trunk or cylinder being removed.

Similar letters of reference indicate corresponding parts in each of the several figures.

The nature of our invention consists,—1st, in dividing the circular chests or penstock which surrounds the upper part of the bowl seat into two compartments, or spaces, by 30 means of a flanch or its equivalent which will be hereafter fully described and by which a sufficient quantity of water is reserved or kept within the penstock through it to cover the opening or aperture in the 35 trunk when the closet is not in use and thus prevent the escape of affluvia into the room in which the closet is placed; 2nd our invention consists in having a sliding tube placed within the trunk of the closet, said tube be-40 ing constructed, arranged and operated as will be hereafter shown, by which a direct communication is at all times cut off between the bowl seat and exit pipe, and at the same time the excrement allowed to pass into the 45 exit pipe at the proper time.

To enable others skilled in the art to make or construct water closets upon our improved plan, we will proceed to describe their construction and the manner in which

50 they are operated.

A represents the trunk or cylinder of the closet, to the upper part of which is attached permanently the bowl seat, B, com-

municating with the trunk or cylinder A by means of a pipe C.

D is the exit pipe attached to the lower

part of the trunk on cylinder A.

E is a base on which the trunk or cylinder A rests, and is secured to it in any proper manner. The base is secured or attached to 60 the floor.

F is a sliding tube which is fitted and works within the trunk or cylinder A, see Fig. 2. This tube F is provided with two openings (a) (b). The opening (a) when 65 the tube is elevated is opposite the pipe C at the lower end of the bowl seat, and the opening (b) is above the exit pipe. But when the tube is lowered or depressed as seen in Fig. 2, the opening (a) is below the pipe C 70 and the opening (b) is directly opposite the exit pipe.

G is a lever by which the tube F is raised and H is a spiral spring which depresses the tube when the lever G is relieved from 75

the hand or foot.

I is the circular chest or penstock which surrounds the upper part of the bowl seat B. The penstock has a small opening or recess (c) all around its lower end, see Fig. 2.

J is a flanch or partition which divides the penstock horizontally into two compartments or spaces (d) (e). The flanch J has a small vertical tube (f) inserted in it the use of which will be presently shown. A 85 small segment is cut off the flanch as seen at (g) Figs. 3 and 4 this affords a space for the water to pass through.

K is a supply pipe which admits water into the chest or penstock I. This pipe 90 communicates with the lower portion (e)

of the chest or penstock.

The operation will be readily understood. A person when using the closet depresses the lever G and the sliding tube F rises, the 95 opening (a) coming opposite the pipe C at the bottom of the bowl seat B the opening (b) passes above the exit pipe D and the communication between the bowl seat and exit pipe is closed as it is in all cases. As 100 the sliding tube rises it operates upon a cock V in the supplying pipe K shown in Figs. 2 and 5, by which water is allowed to pass through the supplying pipe K into the chest or penstock I the water passes 105 down all around the sides of the bowl seat

through the opening (c) and washes the excrement into the sliding tube F. The water passes into the chest or penstock Ithat is, into the lower compartment (e) 5 and a portion will pass through the opening (g) into the upper compartment (d), the air as the water rushes up escaping down through the tube (f) see Fig. 4. When a person leaves the closet and the foot or hand is taken from the lever G the sliding tube F is depressed by the spiral spring H and the water in the supply pipe K cut off. The excrement in the sliding tube F then passes into the exit pipe D as the opening 15 (b) comes opposite the exit pipe and the opening (a) below the pipe C, the communication being cut off between the bowl seat and exit pipe in all cases as before stated. When the sliding tube is depressed 20 the water that passed up in the upper portion (d) of the chest or penstock gradually falls into the pipe C and covers the opening or space where the pipe C communicates with the trunk or cylinder A thus prevent-25 ing the possibility of the escape of effluvia into the apartment.

It may be proper to state that the india rubber packing is placed between the sliding tube and trunk or cylinder A and the inner surface of the sliding tube glazed or

enameled to prevent oxidation.

We do not claim the chest or penstock I, surrounding the upper part of the bowl seat as that has been previously used; but

Having thus described the nature and 35 operation of our invention what we claim as new and desire to secure by Letters Pat-

ent, is—

1. Dividing the chest or penstock I into two compartments communicating with each 40 other the division being made by means of a flanch J or its equivalent, by which a sufficiency of water is reserved within said chest or penstock after the supply has been stopped to cover the opening or mouth of 45 the pipe C at the bottom of the bowl seat B and effectually prevents the escaping of effluvia into the apartments.

2. We claim the sliding tube F within the trunk or cylinder A said tube being constructed arranged and operated as shown by which a direct communication is at all times cut off between the bowl seat and exit pipe and at the same time the excrement allowed to pass into the exit pipe at the 55

proper time.

DANIEL RYAN.
JOHN FLANAGAN.

Witnesses:

Jonas B. Phillips, W. H. Stokes.