Bookhout & Hewlett

Water Closet

No. 14,902. Patented May 20, 1856.

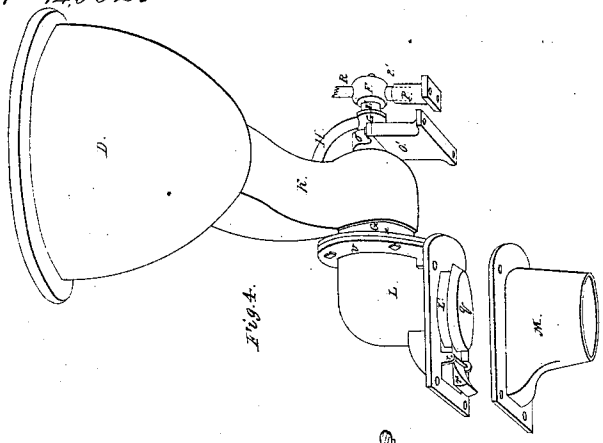

Fig. 1.

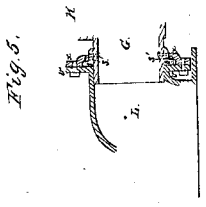

Fig. 5.

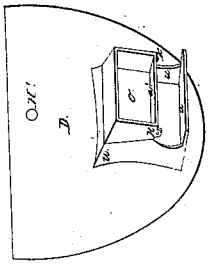

Fig. 6.

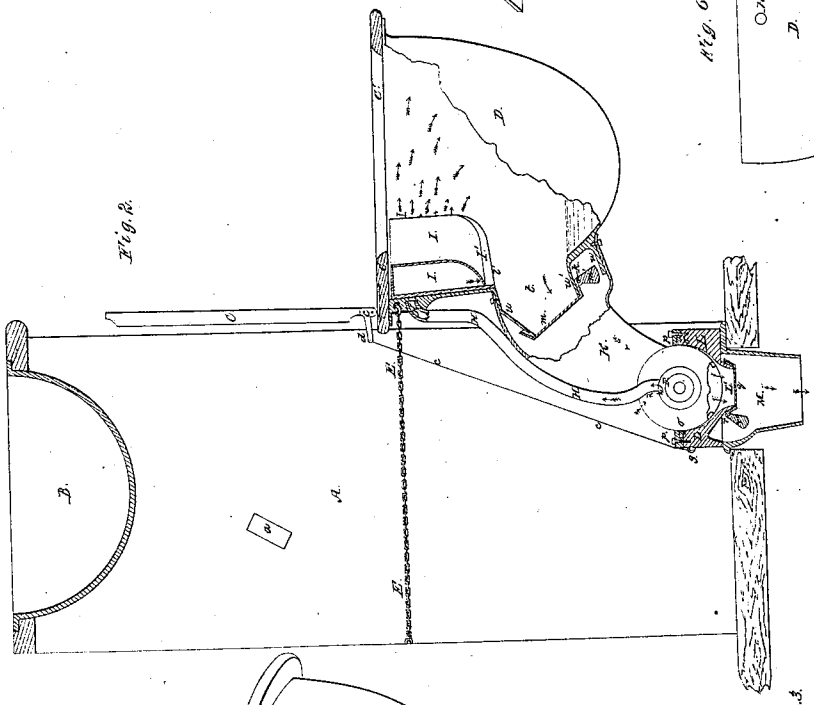

Fig. 2.

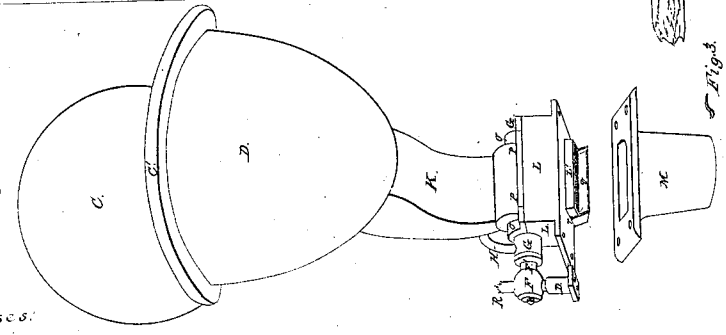

Fig. 1.

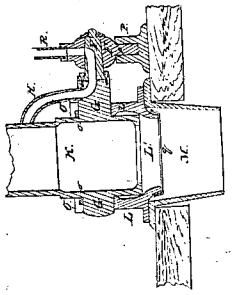

Fig. 3.

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WATER-CLOSET.

Specification of Letters Patent No. 14,902, dated May 20, 1856.

To all whom it may concern:

Be it known that we, EDWARD BOOKHOUT and CHARLES H. HEWLETT, both of the city, county, and State of New York, have invented a new and Improved Water-Closet; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of our invention consists in so constructing a water closet, that it can be kept inclosed in the case, on which the wash basin is usually placed, or in fact any other inclosure that may be convenient; thus, the room occupied by the said case may contain all the conveniences of the wash basin and completed water closet combined: first, by constructing the bowl, &c., (D) in such a manner that it can be drawn out when required, and shoved back out of sight when not in use; second, by so arranging it, that the act of shoving back will empty it of its contents; third, by so trapping it that no stench can arise.

To enable others skilled in the art, to make and use our invention we will proceed to describe its construction and operation.

Figure 1, perspective view of all the apparatus complete; Fig. 2, side elevation of apparatus, with sections cut out, to show the fan, (I′) pans (*q* and *m*) &c.; this view also shows the case and wash basin (B) at top, in section; Fig. 3, view in section of the lower part of the neck (K) or waste, faucet (F) &c. Fig. 6, back view of bowl showing (without the neck K) the discharge passageway (*t*).

A, Fig. 2, case about 30 ins. high, with wash basin at top; the whole apparatus is inclosed in this case; D, bowl of water closet, with self opening cover (C) working on a hinge (*c*) made fast to the wooden top or seat, (*c′*). This cover (C) opens when the bowl is being drawn out, by means of the cord (*e e*) which connects the arm (*d*) projecting from the hinge, with the eye (*g*) at the bottom of the apparatus; when the bowl is not in use it lies back into the case, and rests against a wooden bar (*a*) which runs from one side of the case to the other thereby keeping the cover tightly closed. The back part of the bowl has an opening, (*t*, Figs. 2 and 6), leading into the neck or waste, (K, Figs. 1 and 2), on which the bowl is secured. The bowl and waste are secured together by means of small screws; the waste fits nicely upon the flange (*u*, *u*, Figs. 2 and 6) which projects from the back part of the bowl and forms the passage way out of the bowl. The said bowl can be made out of cast metal or sheet metal, but we prefer the latter on account of its lightness. We make the flanges (*u*, *u*, *u′*, Figs. 2 and 6) of cast iron and solder to the bowl; the lower flange (*u*, Figs. 2 and 6) is used to form the space in which weight (*m′*, Fig. 2), attached to pan (*m*) works, and also to make a fastening for lower side of neck or waste (K).

m, Fig. 2, a sheet metal pan with sides raised about $\frac{3}{4}$ of an inch; said pan works on a hinge at *k*, Figs. 2 and 6, and is kept up against the passage way formed by the flanges *u* and *u′* which it surrounds, by the weight (*m′*) at its front side; this weight is heavy enough to keep the pan up against the flange (*u*, *u* and *u′*) when it (the pan) is full of water, as it always is when the bowl is thrown back and the pan has a horizontal position; the foot or cylindrical part of waste (K, Figs 1, 2 and 3) has an arm (G) projecting from each side; said arms rest in recesses formed in the shoe (L, L, Figs. 1, 2 and 3) and are held in their places by means of binders (O, O, Figs. 1 and 2) which enable the bowl and waste to oscillate backward and forward. It will be seen that at the end of one of the above-mentioned arms (G) there is a water faucet, (F, Figs. 1, 2 and 3), the plug (F′) being screwed firmly to the end of said arm.

P, Figs. 1 and 2, a bracket screwed to the floor, said bracket has a hole cast in its top about $\frac{6}{8}$ of an inch in diameter and $1\frac{6}{8}$ inches deep, in which, an arm (P′) of about the same dimensions (or enough smaller to give it a little play) projecting from the bottom of the faucet (F) sits; this is all the fastening the faucet has. The object in securing it in this manner is to prevent unequal wear on the faucet plug (F′) in case the arms do not work exactly true in the shoe, (L, L, Figs. 1 and 3) the body of the faucet (F) will accommodate itself to the unequal motion of the arm on which the plug is screwed. The shoe (L) mentioned

above is a cast iron box of sufficient dimensions at top to receive the foot or cylindrical bottom of the waste or neck (K, Figs. 1, 2 and 3) which should fit in it neatly, when it is packed to prevent the escape of effluvia by strips of india rubber laid in the recesses (*o o*, Fig. 3) on the under side of the binders, (O, O, Fig. 3) and similar recesses on the underside of the plates (*p*, *p*, Figs. 1 and 2) screwed on the top of shoe (L) close against the foot of the waste. This shoe has a flange projecting from each side sufficiently wide to be screwed to the floor and made perfectly strong as on this the whole apparatus hinges and works back and forth; this shoe terminates at its bottom side in an oblong (or it may be in any other shape) pipe or opening (L′) about four ins. across and four and a half inches wide, and one inch in length from top to bottom; said pipe or opening (L, Figs. 2 and 3) forms the lower passage way for the excrement, &c., from the bowl to pass through, and is trapped in the same manner as described on page 4.

q, Figs. 2 and 3, pan sitting up against and surmounting the pipe (L′) at the bottom of shoe, (L). This pan works on a hinge at *r*, Figs. 1 and 2, and is always kept up by means of the weight (*r′*, Fig. 2) at its back; it is kept filled with water continually; this lower pan is inclosed in a cast iron box open at both ends, (M, Figs. 1, 2 and 3) made a suitable shape at top to give room for the weight (*r′*) on the pan, to work, and as near round as possible at bottom, to accommodate itself to the leaden soil pipe in which it is cemented, it also has a flange at top, which rests between the flange at the bottom of the shoe (L, Figs. 2 and 3) and the floor, where it is well cemented and screwed down; there is a recess in the back part of the under side of shoe (L, Fig. 2) to admit the weight (*r′*) when the pan falls in discharging; *q* Fig. 1 represents the pan partly open.

The fan (I′ Fig. 2) is the same as those in common use, simply a semicircular piece of sheet metal riveted to the back (inside) part of the bowl and made water tight at its top and bottom edges leaving a sufficient opening at each side for the escape of the water, as it enters the bowl behind; upon the pan we construct a reservoir or service box (I, I) which is filled by the water rushing into the small orifice (*i*) in the fan near the top; this reservoir may be made to extend part or all the way around the bowl according to the quantity of water the pans (*m* and *q*) will contain; the water is conducted to the fan (I′) through the pipe H.

The bowl being drawn out for use, the arms G, G and faucet plug F′ make part of a revolution, the faucet opens, the water enters, by pipe R and passes into a hole in the end of the arm (on which the plug is fastened) and out of the top side of said arm into pipe H (which is soldered fast to arm G), thence into the bowl, when it is caused by the fan to shoot around and wash the whole inner surface of the bowl; the water can attain no greater height in the bowl than the flange *u′*, when it begins to run off. The bowl, &c., is supported by the chain E F, Fig. 2. When the bowl is shoved back the clean water is cut off by the faucet, (F). The excrement and water in the bowl is thrown against the pan *m* which causes it to open; the water, &c., passes out the opening at the bottom of the waste, (K), opens the lower pan, and enters the soil pipe; the pans are trapped again by the water in the reservoir (I, I) running slowly out of the small hole *i′*, at under side. As the clean water from the faucet, is not entirely cut off, till the bowl has reached its resting place in the case, and as the lower pan (*q*) finds its horizontal position independent of the position of the bowl, immediately after the excrement, &c., has passed, there is always an abundance of water to fill and trap it, as the pan (*m*) at the exit pipe of the bowl can not attain its horizontal position till the bowl has reached its resting place, it does not get so thoroughly filled with water, but it always retains some, and with what it receives after the bowl is in its place it becomes, if neatly made, pretty well trapped.

Fig. 4 shows a perspective view of our bowl and apparatus constructed in a little different manner, but the principle is substantially the same; the bowl, pans and faucet are precisely the same, but instead of having an opening at the bottom of the waste, (K), the arm (G) is made hollow and about 4 inches in diameter on the inside, instead of 2 inches in diameter as shown in Figs. 1 and 3, which is made solid; the hollow arm G works in a swivel on the elbow L as is shown in section in Fig. 5; *s*, *s*, an angled ring riveted to the hollow arm G after the flange *x x* has been placed on; the flange *x* being bolted to the flange on the elbow L, the said elbow and the waste K are held firmly together, and at the same time the arm G can revolve; this joint is packed by winding candle wick well greased around the angle ring *s*, *s* before the flanges *x x v* are bolted together, and when they are brought together the packing will be forced in the cavity *s′ s′* in flange *x*. The contents of the bowl passes through the elbow, and its weight forces open the lower pan (*q*) as before described.

We do not claim as our invention a movable bowl, for a movable bowl is used in what is termed the swing urinal; neither do we claim the pan, for the pan has long been in use in what is known as the pan closet,

(the bowl is stationary); the fan also is an old device; but,

What we do claim as our invention and desire to secure by Letters Patent is—

1. A bowl having the forward and backward motions, by means of the said bowl and waste working on a shaft, or arms or their equivalent, substantially as described.

2. We claim the use of the pan in combination with a movable bowl as set forth.

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