(No Model.)

E. J. WHITLOCK.

WATER SEAL OVERFLOW TRAP.

No. 404,759. Patented June 4, 1889.

Fig. 1.

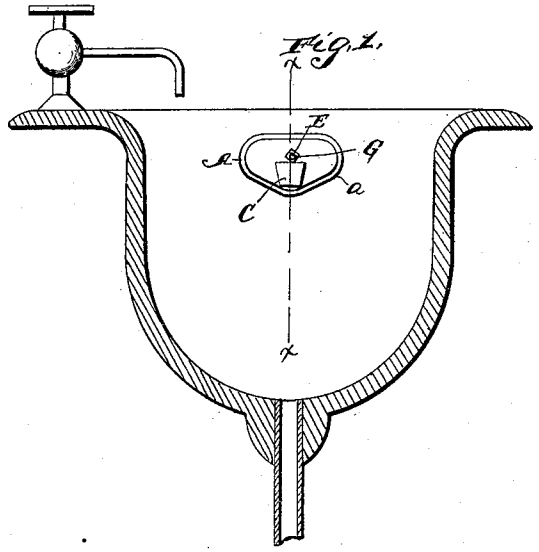


Fig. 2.

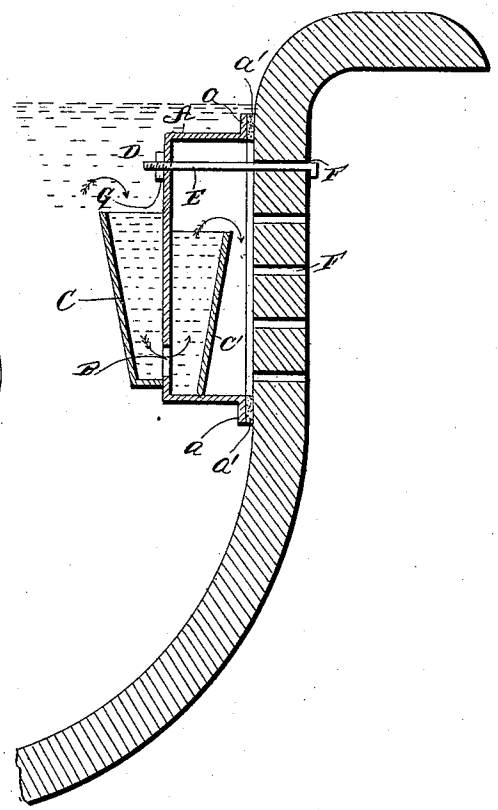
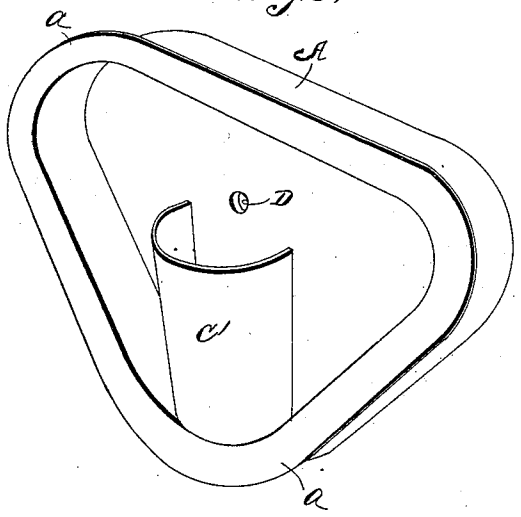


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

EPHRAIM JAMES WHITLOCK, OF BROOKLYN, NEW YORK, ASSIGNOR OF TWO-THIRDS TO ILES E. BYRNES AND JOHN THAKE, BOTH OF SAME PLACE.

WATER-SEAL OVERFLOW-TRAP.

SPECIFICATION forming part of Letters Patent No. 404,759, dated June 4, 1889.

Application filed March 28, 1887. Renewed March 30, 1889. Serial No. 305,501. (No model.)

To all whom it may concern:

Be it known that I, EPHRAIM JAMES WHITLOCK, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Water-Seal Overflow-Traps, of which the following is a specification.

My invention relates to an overflow-trap adapted to be applied to the overflow-perforations of a wash-basin, bath-tub, or to any overflow which is at times covered with water, and which when not covered is liable to allow the escape of effluvia.

My invention consists in a certain novel construction and arrangement of parts for service, clearly described hereinafter, specifically pointed out in the claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a front view of the trap applied to a wash-basin, the said basin being shown in section. Fig. 2 is a vertical section of the same on the line *x x* of Fig. 1. Fig. 3 is a detached perspective view of the trap, showing the rear side thereof.

Referring by letter to the drawings, A designates the body of the trap comprising a flat box having an open rear side and an outwardly-bent flange *a* around the rear edge, provided with a rubber ring *a'*, for a purpose to be described. The front side or face of the box is provided in the center with an opening B, and C C' are receptacles or reservoirs secured on opposite sides of the said face-plate, having open upper and closed lower ends and so disposed that the said opening B forms a means of communication between the said reservoirs at the lower ends.

D is a small perforation in the face-plate above the said reservoirs, through which is passed the threaded end of the bolt E, the rear end of which being bent and passed through one of the perforations F of the basin, it being evident that the said bent end of the bolt may be passed through the perforations by properly manipulating the same, but it cannot be drawn straight out.

G is a nut secured on the outer threaded end of the bolt E on the outer side of the face-plate, thus drawing the flange on the rear edge of the body A tightly against the side of the said basin around the perforation therein, and as the said flange is provided with a rubber ring, as described, it will be seen that the joint formed between the said flange and the side of the basin will be air-tight. It will also be seen that the trap is thus made detachable and may be taken off to clean when the passage therethrough is obstructed by an accumulation of matter.

The operation of the said trap is as follows: The water being in the receptacles or reservoirs C C', on the outer and inner sides of the face-plate and covering the only opening between the same, it will be seen that all communication between the interior of the body A and the outer air must be through the said water in the reservoirs. Therefore, in order that gas might escape from the said interior space, it must pass down through the liquid in the reservoir C', through the opening B, and up through the receptacle or reservoir C, and as it is obviously impossible for the said gas to pass through water thus, it will be seen that a perfect trap is formed.

It will be understood that the manner of filling the said reservoirs with water is as usual—namely, when the water reaches the necessary level in the basin it will flow through the reservoirs and out at the perforations in the said basin; but when the water ceases flowing thus through the trap the reservoirs will be left full. Therefore, as all of the perforations in the side of the bowl or wash-basin are inclosed or covered by the box A, and as the only means of communication between the said box and the outside air is through the water in the trap, as described, there will obviously be no escape of effluvia.

It will be readily seen that the device may be easily attached to and detached from the basin in the manner described, and therefore I have provided in the herein-described trap a neat, simple, effective, and cheap means of preventing the escape of sewer-gas from overflow-perforations, thus obviating or guarding against an annoyance which proves in many cases a source of sickness in dwelling-houses.

I claim—

1. The trap for overflow-openings, consist-

ing of the closed box A, secured directly to the side of the basin over the said openings, and the wells or receptacles C and C′, arranged on reverse sides of the face-plate of the box A and connected by an opening B in said face-plate, the well C′ being situated within and covered by the said box and the well C opening into the basin direct, substantially as described.

2. In a trap for overflow-openings, the combination of the closed box A, having the flanges *a*, the bolt E, secured in one of the overflow-openings at one end and to the box A at its other end, the receptacle or well C, arranged on the outer face of the box A and opening directly into the basin, the receptacle or well C′, entirely inclosed by the box A and connected to the receptacle C by means of an opening B, formed in the lower portion of the face-plate of the box A, and the rubber gasket *a*′, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

EPHRAIM JAMES WHITLOCK.

Witnesses:

EMERSON W. KEYES,

JOS. C. SEALY.