(No Model.)

# W. T. JEBB.

## OVERFLOW TRAP FOR WASH BASINS, BATH TUBS, &c.

No. 299,476. Patented May 27, 1884.

Fig. 1.

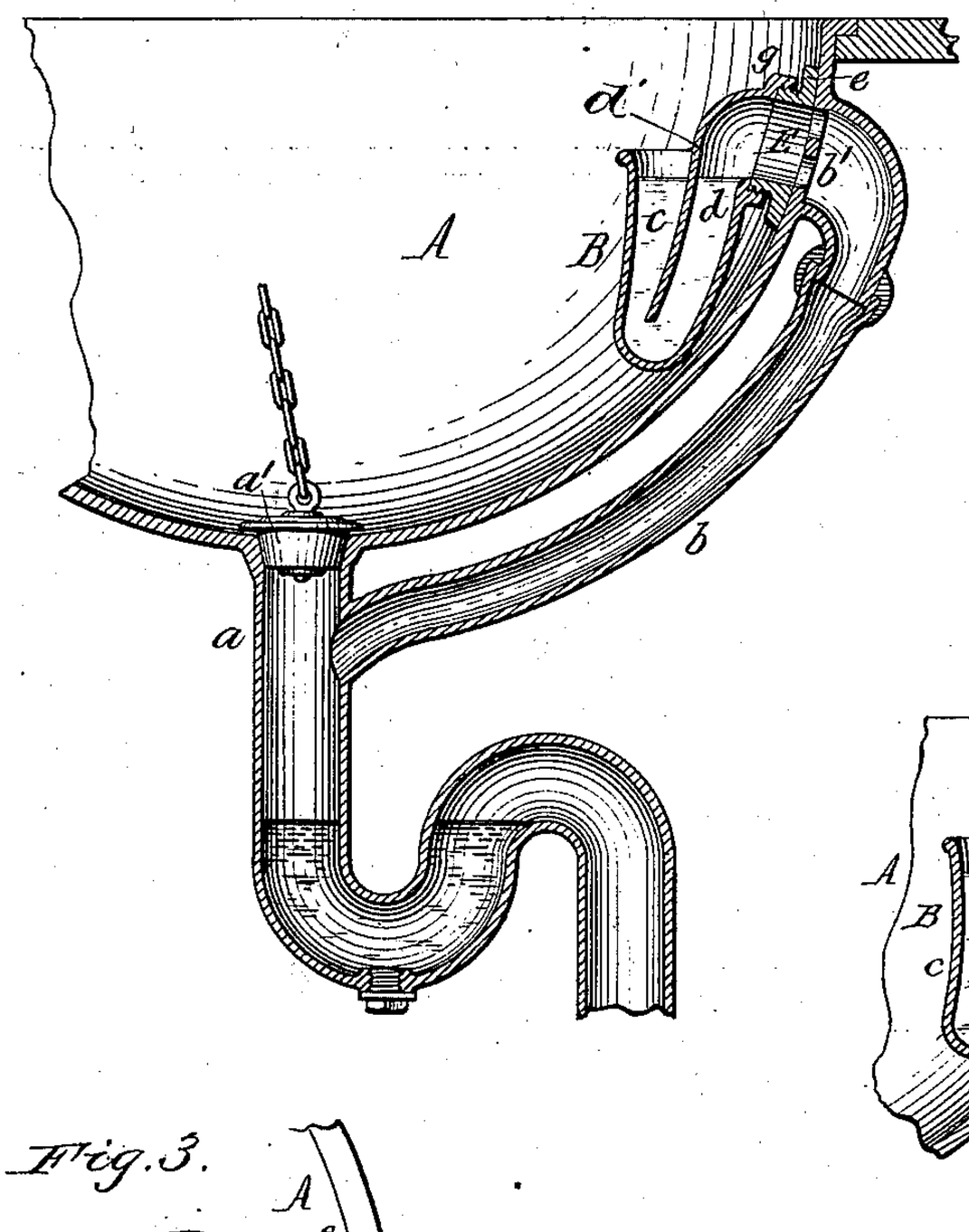



Fig. 2.

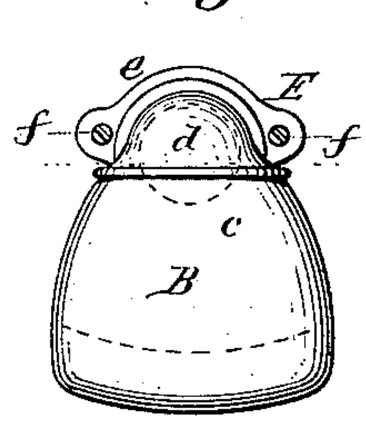



Fig. 4.

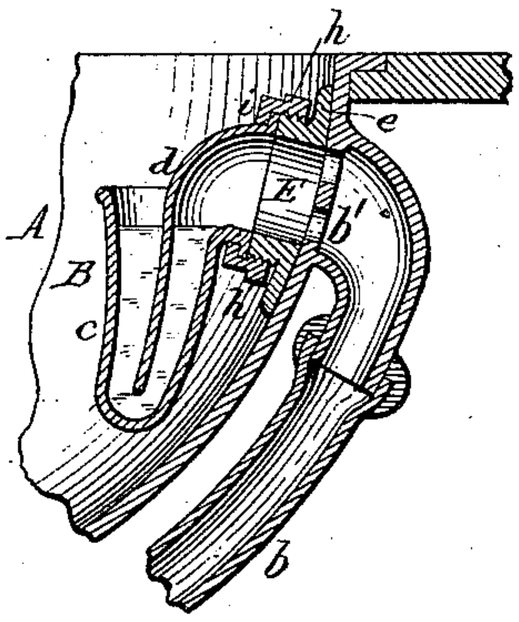



Fig. 3.

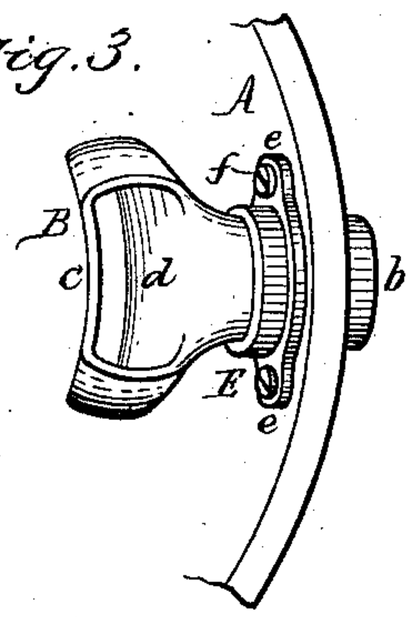
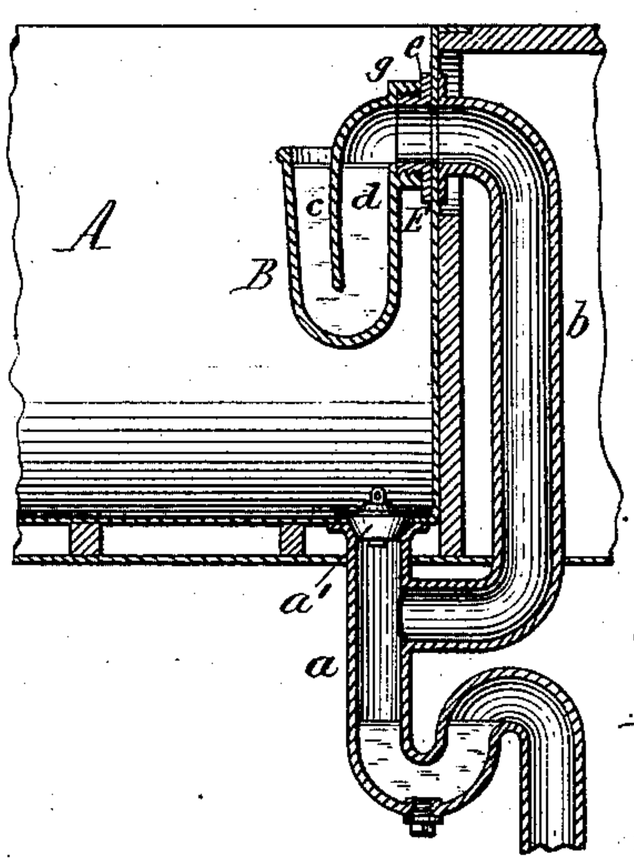



Fig. 5.




Witnesses:

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# UNITED STATES PATENT OFFICE.

WILLIAM T. JEBB, OF BUFFALO, NEW YORK.

## OVERFLOW-TRAP FOR WASH-BASINS, BATH-TUBS, &c.

SPECIFICATION forming part of Letters Patent No. 299,476, dated May 27, 1884.

Application filed March 24, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM T. JEBB, of the city of Buffalo, in the couny of Erie and State of New York, have invented new and useful Improvements in Overflow-Traps for Wash-Basins, Bath-Tubs, &c., of which the following is a specification.

This invention relates to an improvement in the construction of overflow-traps for wash-basins, bath-tubs, &c., and has for its object to prevent the escape of air or gas from the overflow-pipes into the rooms or apartments in which the basin or bath-tub is located. Overflow-pipes as ordinarily constructed connect with the discharge-pipe of the basin or tub between the latter and the trap, which is placed in the waste-pipe to prevent air or gas from entering the discharge and overflow pipes from the waste or soil pipe and the sewer with which it is connected. The interior surface of the waste and overflow pipes are coated with fermenting matter, which is deposited on the same from the liquids which pass through these conduits. This fermenting matter causes the generation of noxious gases and of low organisms or fungus-growths, which escape through the overflow-pipe into the apartment either by reason of the increase of pressure generated in these conduits by the formation of the gas or by the liquid which enters the escape-pipe when the plug is drawn and forces the air or gas contained in these conduits through the overflow-apertures into the apartment. The generation of noxious gas and low organisms in these conduits is very considerable, especially when the same are exposed to a high temperature, which is generally the case where hot-water pipes are located near these conduits, and which is a fruitful source of disease.

My invention is designed to remedy these difficulties; and it consists in the improvements in the construction of the overflow-trap, which will be hereinafter fully set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a sectional elevation of a wash-basin provided with my improvement. Fig. 2 is a front elevation of the overflow-trap. Fig. 3 is a top plan view thereof. Fig. 4 is a sectional elevation of a modified construction of the overflow-trap. Fig. 5 is a sectional elevation showing my improvement applied to a bath-tub.

Like letters of reference refer to like parts in the several figures.

A represents a wash-basin or bath-tub; *a*, the discharge-pipe, provided with the usual plug, *a'*; *b*, the overflow-pipe, and *b'* the overflow-apertures formed in the basin or tub A.

B represents the overflow-trap, arranged in the basin or tub A, and secured with its discharge end to the basin or tub A, opposite the overflow-apertures *b'*, so as to cover the latter. The trap B consists of a flattened receiving bowl or pipe, *c*, having its upper or receiving end arranged about on a level with the overflow-apertures *b'* and a discharge-pipe, *d*, which communicates at its upper end with the overflow-apertures *b'*, and depends into the bowl or pipe *c*, so that its lower end is sealed by the liquid contained in the latter. The division-plate *d'*, which constitutes the front wall of the pipe *d*, extends nearly to the bottom of the trap, and projects upwardly beyond its rim in a curve, to connect at the outlet of the trap with the fastening device. The rear or discharge end, E, of the trap B is provided with a flange, *e*, which is secured against the inner side of the basin or tub by screw-bolts *f*. A suitable packing of rubber or other material is interposed between this flange and the basin or tub. The body of the trap B is made separate from the flanged discharge end E, and both parts are connected by a screw-joint, *g*, so that the body of the trap can be readily detached for cleaning the discharge-pipe *d* without disturbing the connection between the flange *e* and the basin or tub. This joint may be a simple screw-joint, as represented in Figs. 1, 2, 3, and 5; or it may be a union-joint, as represented in Fig. 4. This latter construction is preferably used when the body of the trap cannot conveniently be turned in the basin or tub when being applied or removed.

By the construction referred to in Fig. 4, the collar *i* is secured to the upper end of the tube *d*, preferably by brazing or riveting, after the screw-nut *h* has been properly placed.

The trap may be constructed of cast-iron or other suitable metal.

In filling the basin or tub to the level of the overflow-orifices, the water enters the trap B and seals the overflow, and upon withdrawing the plug *a'* and discharging the water from the basin or tub the water contained in the trap B remains in the same, and maintains the trap in an operative condition. The water contained in the trap B prevents the air or gas contained in the discharge and overflow pipes from escaping into the compartments through the overflow-apertures. As the receiving end of the trap is exposed to view, a simple inspection of the trap will disclose the fact whether or not the trap is properly filled; and if the contents of the trap should become reduced by evaporation this fact is readily discovered and the trap easily refilled. The bottom of the trap is easily accessible through the open receiving end, and the trap is readily cleaned and freed from any deposits, if required. This trap is easily applied to wash-basins and bath-tubs of ordinary construction, and effectually removes a grave objection to the use of the ordinary overflow-pipes on such appliances.

In using a basin provided with my improved overflow-trap it is desirable to keep the basin filled with water when the plug is closed, thereby effectually trapping both the waste-pipe and the overflow-pipe at their inlet ends, and preventing the escape of gases from either of these pipes into the room, while a free escape for any excess of water resulting from a leakage of the supply-faucet, or neglect to shut the same, is provided through the overflow, and the danger of flooding avoided.

I claim as my invention—

1. As a new article of manufacture, a trap for application to the inlet end of overflow-pipes of wash-basins, sinks, and the like, provided with descending and ascending passages constructed to maintain a body of water at a permanent level within the trap, and with a fastening device at its discharge end, whereby it can be secured in position, substantially as set forth.

2. The bowl of a wash-basin or similar structure, provided with the usual overflow-pipe, combined with a trap attached to the overflow-opening within the bowl, said trap constructed so as to maintain a permanent water-level within its limbs, substantially as set forth.

3. A trap consisting of a bowl of the requisite depth, whose descending and ascending limbs, as well as its inlet and outlet openings, are formed by a division-plate which extends nearly to the bottom of the bowl and projects beyond its rim in a curve, substantially as set forth.

4. A trap consisting of a bowl of the requisite depth, whose descending and ascending limbs, as well as its inlet and outlet openings, are formed by a division-plate which extends nearly to the bottom of the bowl and projects beyond its rim in a curve, the outlet of the trap being provided with suitable means for securing it in position for use, substantially as set forth.

5. An overflow-trap composed of a receiving-bowl, *c*, open at the top, and a discharge-pipe, *d*, having its lower end arranged in the bowl *c* and its upper end adapted to cover the overflow-aperture, substantially as set forth.

6. The combination, with an overflow-trap, of a flanged discharge end adapted to be permanently secured to the basin or tub, to cover the overflow-aperture, and provided with a screw-joint, whereby the body of the trap is detachably connected with the flanged discharge end, substantially as set forth.

7. The combination, with the overflow-trap B, composed of a receiving bowl or pipe, *c*, and an ascending discharge-pipe, *d*, of a flanged discharge end, E, connected with the trap by a screw-joint, *g*, substantially as set forth.

Witness my hand this 22d day of March, 1884.

WILLIAM T. JEBB.

Witnesses:

JOHN TULLY,

JAMES E. KEESE.