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L. KOSIOL.

OVERFLOW AND WASTE FIXTURE FOR SINKS, &c.

(Application filed Jan. 10, 1899.)

(No Model.)

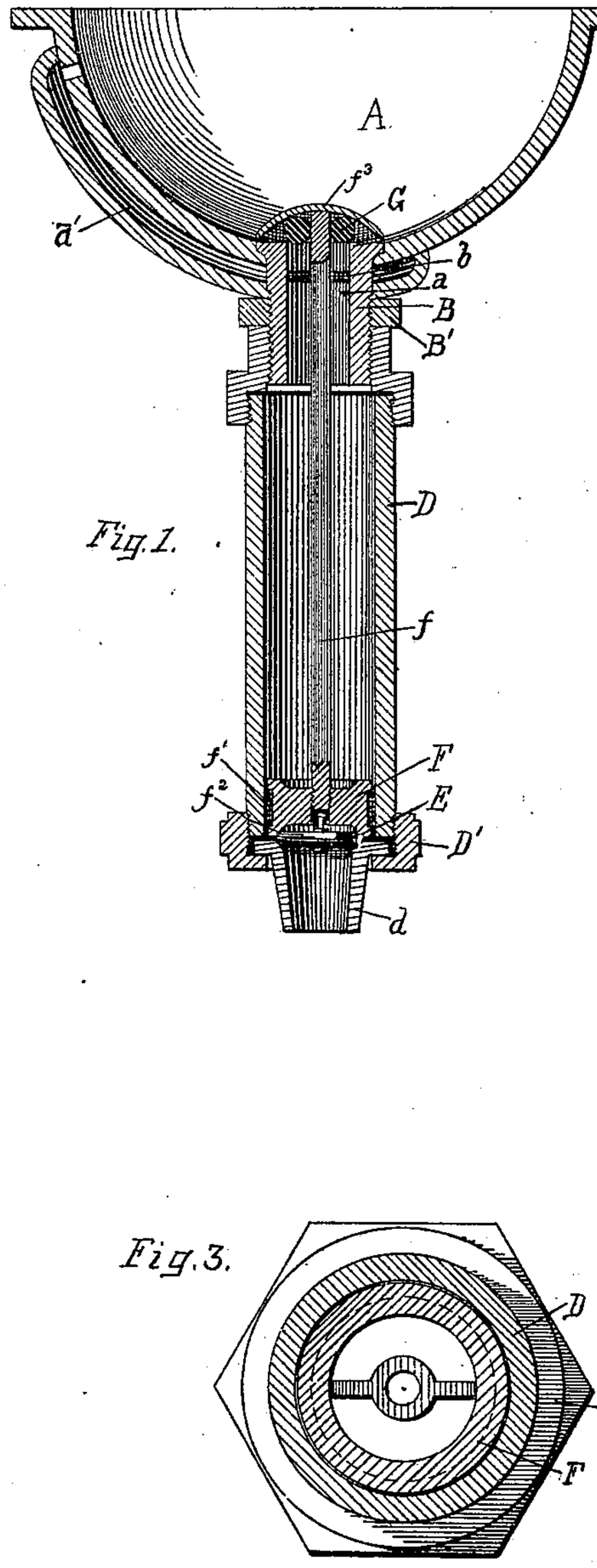

Fig. 1.

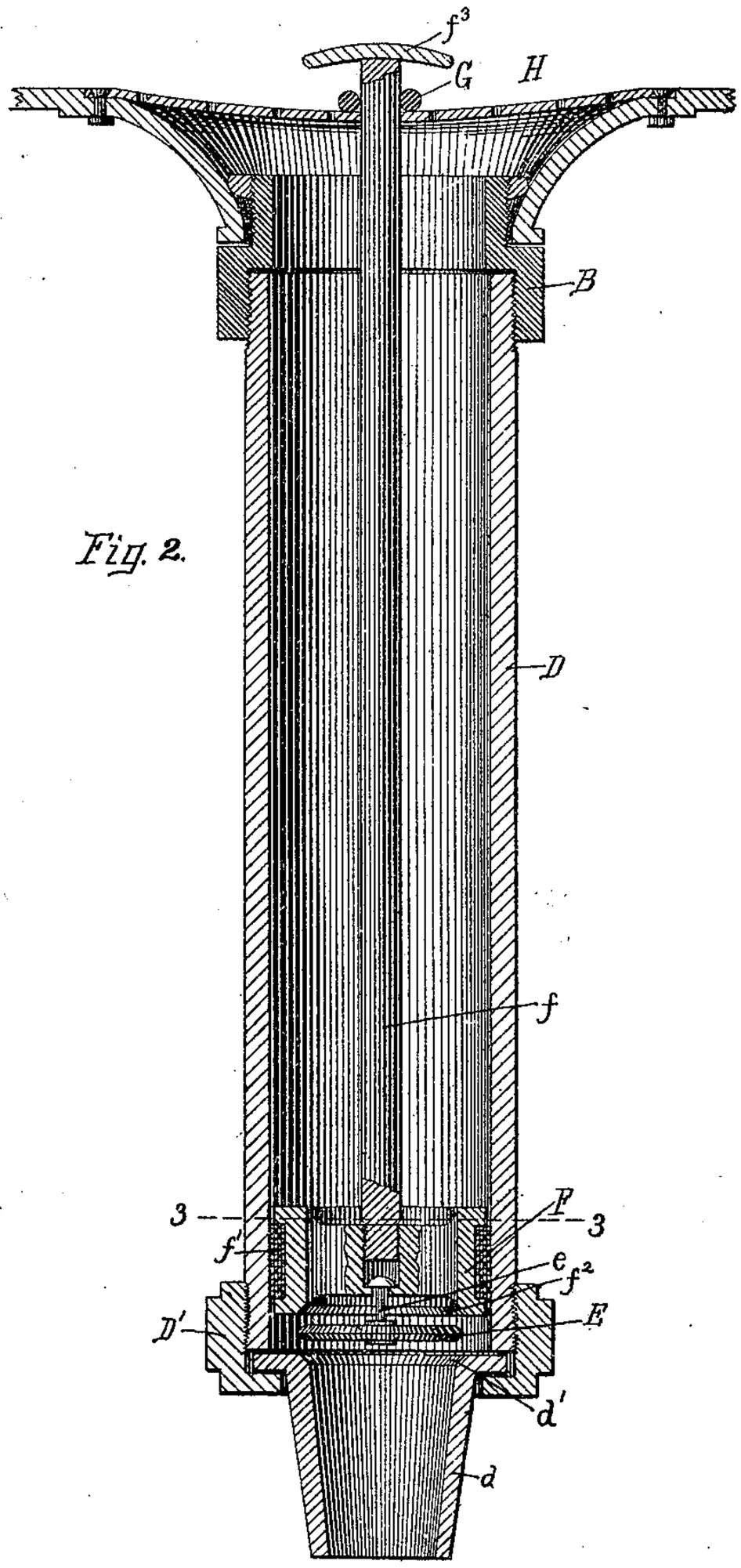

Fig. 2.

Fig. 3.

Witnesses:
A. S. Austin.
Jamm R. Mansfield

Inventor
Louis Kosiol,
By
Alexander & Dowell
Attys

UNITED STATES PATENT OFFICE.

LOUIS KOSIOL, OF LOUISVILLE, KENTUCKY.

OVERFLOW AND WASTE FIXTURE FOR SINKS, &c.

SPECIFICATION forming part of Letters Patent No. 630,718, dated August 8, 1899.

Application filed January 10, 1899. Serial No. 701,710. (No model.)

To all whom it may concern:

Be it known that I, LOUIS KOSIOL, of Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Overflow and Waste Fixtures for Sinks, &c.; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form part of this specification.

This invention is an improvement in overflow and waste fixtures for sinks, bath-tubs, basins, &c. Its objects are to enable the waste-pipe to be kept clean and clear; also, to enable the trap to be cleaned and to prevent freezing thereof by providing means whereby the water can be forced out of the trap at will; also, to control the escape of waste water from the fixture and to prevent inflow of sewer-gases, and, finally, to provide a device which will act as a plug to prevent the escape of the water from the fixture to which the device is attached.

The invention consists in the novel construction and combination of parts hereinafter claimed, and the accompanying drawings illustrate the preferred form of the device as practically used, which is described as follows:

Figure 1 is a sectional elevation of a portion of a basin with my improved waste devices applied, showing the parts adjusted to form a double valve-closure. Fig. 2 is a view of the invention as applied to a sink and showing the parts adjusted to permit escape of the water. Fig. 3 is a transverse section on line 3 3, Fig. 2.

Referring to the accompanying drawings, A designates a basin or other fixture provided with an outlet a at its bottom and with an overflow-passage a'. The walls of the outlet a are formed by a tubular brass plug B, tightly secured in the fixture and communicating with the overflow by slots b in its side, as shown. This plug is exteriorly threaded on its lower end and is provided with a locking-nut B', on which below the locking-nut is secured a union, into which is screwed the upper end of a depending tube D. The lower end of this tube is connected to the waste-outlet pipe d by a threaded union D', as shown. The upper end of this outlet d is beveled to form a valve-seat d', upon which a disk-valve E is adapted to seat. This valve is provided with a short stem e, which is loosely connected to an annular plunger F, secured on the lower end of a rod f. This plunger is provided with exterior padding f', so as to fit tightly within the tube D, and also with a beveled valve-seat f^2 on its lower edge, against which the upper side of valve E will seat when the plunger is quickly or fully depressed. The rod f extends up through the plug B into the fixture and is provided with a cap or handle f^3 on its upper end, by which it can be easily manipulated. Closely fitted on the rod f, above the plug B, is a rubber ring G, which serves two purposes—first, when adjusted upon the rod f it will uphold the plunger G at any desired point in the tube D. It is only necessary in ordinary practice that this plunger be upheld sufficiently to allow valve E to hang clear of both seats f^2 and d', in which position any water entering the tube D can easily escape past the valve E to the waste-outlet d. Second, the ring G also performs the office of a stopper to close the plug B and prevent escape of water from the basin through the plug until the ring and rod are lifted.

In Fig. 2 the invention is shown as applied to the waste-outlet of a sink which is provided with a strainer H, and the sole function of the ring G in this instance is to uphold the rod f and plunger F at any desired point in the tube D.

When the plunger and valve are seated, as shown in Fig. 1, no water can escape from the fixture, nor can any gas enter therethrough, as a double closure is formed between the seat d' and valve E and between the valve E and seat f^2. If the plunger be slightly raised, as indicated in Fig. 2, water can escape through the fixture, as is obvious, passing through plunger F and around the valve E.

If it is desired to clean the trap, which is not shown, but will be attached below the waste-outlet d, the plunger and valve are raised to the highest position and then suddenly depressed. By this action, particularly if there be any water in the tube D, the valve E will be forcibly seated against the plunger F, and with it will form a tightly-fitting piston in the tube D, and the air, water, or other

matter below this piston will be forced downward in and through the pipe and trap, and thus water or other obstacles below the piston and plunger can be forced out of the pipe, and the trap can be thus readily emptied of water in cold weather.

The most important feature of my present invention I consider to be the plunger and the valve suspended therefrom, adapted to be adjusted to permit the escape of water freely or to form a double seal to prevent the escape of water or the inlet of gases, and also adapted to form a piston whereby the cleansing or emptying of the traps and pipes can be effected.

The ring G for regulating the position of the plungers and serving as a stopper is a secondary, although valuable, feature of the invention.

I do not wish to confine myself to the specific construction of the devices herein shown and described, as they can be varied within the scope of the invention to suit the fixtures to which they are applied.

Having thus described my invention, what I therefore claim as new, and desire to secure by Letters Patent thereon, is—

1. The combination of a tube attached to the outlet of the fixture, the valve-seat at the lower end of the tube, the movable plunger in the tube, and the valve suspended from said plunger and adjustable therewith within the tube and adapted to close the outlet when the plunger is sufficiently lowered, and also to form with the plunger a piston for the removal of obstructions in the pipe, substantially as described.

2. The combination of the waste-tube, the valve-seat at the lower end of said tube, the adjustable plunger within said tube provided with a valve-seat on its lower side, and the plunger-rod: with the valve loosely suspended from said plunger, and means for holding the plunger in any position to which it is adjusted, for the purpose and substantially as described.

3. The combination of the water-fixture, the waste-tube connected therewith, the valve-seat at the lower end of said tube, the annular plunger within said tube tightly fitted therein provided with a valve-seat on its lower edge; and the plunger-rod projecting into the fixture; with the valve loosely suspended from said plunger and adapted to make a double-seat valve-closure when the plunger is fully lowered and also adapted to form with the plunger a piston for forcibly cleansing the pipes, for the purpose and substantially as described.

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

LOUIS KOSIOL.

In presence of—
OLIVER S. OPPENHEIMER,
M. LIEBER.