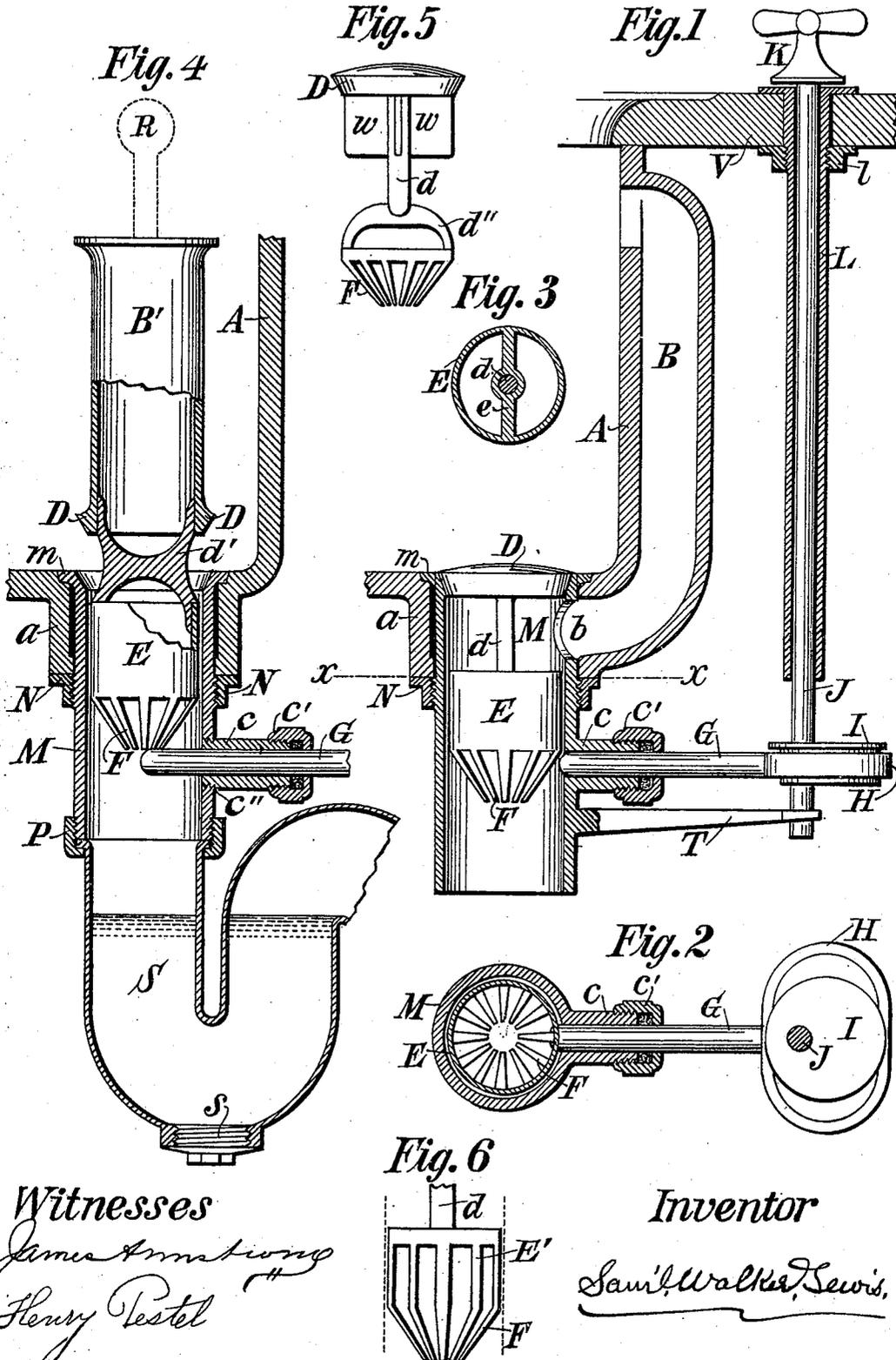


(No Model.)

S. W. LEWIS.
WASHBASIN, BATH, SINK, &c.

No. 568,261.

Patented Sept. 22, 1896.



Witnesses
James Armstrong
Henry Pestel

Inventor
Sam'l. Walker Lewis,

UNITED STATES PATENT OFFICE.

SAMUEL WALKER LEWIS, OF BROOKLYN, NEW YORK.

WASHBASIN, BATH, SINK, &c.

SPECIFICATION forming part of Letters Patent No. 568,261, dated September 22, 1896.

Application filed January 25, 1896. Serial No. 576,789. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL WALKER LEWIS, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements for Washbasins, Baths, Sinks, &c., of which the following is a specification.

My invention relates to waste-valves for washbasins, baths, and similar receptacles or devices, and has for its objects to prevent the loss of finger-rings, jewels, and similar valuables through the waste pipe or passage, and to provide a valve or stopper and strainer operated by a simple mechanism which may be easily adjusted and that will permit the withdrawal of said valve and strainer, whereby all of the waste-passage can be cleansed down to the water seal of the trap. I attain these objects by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal section showing the application of my device to a washbasin or bath. Fig. 2 is a plan of same. Fig. 3 is another detail plan of Fig. 1 on the line $x x$. Fig. 4 is a section similar to Fig. 1 to illustrate the operation of the valve, also a modified construction. Figs. 5 and 6 illustrate other modifications.

The same letters of reference indicate identical parts in all the views.

The basin or bath A, Fig. 1, is fitted to the usual rim or slab V and is provided with an overflow-passage B, which terminates at b in a neck or outlet-section a . The waste passage or pipe M is secured within said neck or section a by its flange m and jam-nut N. A valve or stopper D serves to close the outlet waste-passage M, and from the bottom of said valve depends a connecting rod or stem d .

E is a cylinder adapted to free vertical movement within the passage M and provided at its lower end with a strainer F, which is preferably formed with a concave or sloping bottom which will retain any article that may be too large to pass through said strainer.

Fig. 3 illustrates a cross-bar or bridge e on the line $x x$, Fig. 1, which supports the stem d and valve D. An arm or branch pipe c extends laterally from the waste-passage m to support and guide a closely-fitting push-

pin or rod G, and a stuffing-box or nut c' prevents any leak therethrough. The inner end of said pin is adapted to engage with or bear against the sloping surface of the bottom of said strainer F, and the outer end of said pin is preferably attached to or terminates in a yoke H, which latter is adapted to reciprocate the motion of an eccentric I, which is operated by the rock-shaft or axle J and its handle K, said rock-shaft being preferably arranged within the guide-tube L. In some cases I employ the brace T to give rigidity to said rock-shaft and eccentric. Furthermore, the pin G and yoke H can be made separately and jointed or connected together in any convenient way.

In Fig. 4 the waste-pipe M is open and the arm c is screwed into it at c'' . A modification is shown by the standing or tubular overflow-pipe B', which communicates with the cylinder E and strainer by a thin bracket or spanner d' . An ordinary trap S is shown secured to the waste-pipe M at P to illustrate the facility with which the entire passage can be cleansed down to the trap water seal when the valve D and strainer F are lifted out and the pin G drawn back clear of the passage. This is of great advantage, as it entirely obviates or prevents the inaccessible space between the usual rigidly-attached strainer and the trap, which space becomes the source of foul odors from accumulated filth because of inaccessibility.

I preferably make the strainer with an open space in the center and with downturned prongs or bars converging from its periphery, whereby hairs, lint, or similar substances can slide off the points of said bars and be washed out through the trap; but the sloping or concave strainer can be made with the bars connected in the center. The concave shape of the strainer increases its area and gives ample space for the free flow of liquids, while preventing the escape of finger-rings and similar valuables, which being retained within the cup or basket shaped strainer could be easily recovered by lifting out the valve and strainer. Furthermore, the location of the concave strainer F or cylinder E applies to both the direct waste-passage M and the overflow-passage B or B', whereby articles which

fall into or are carried over into said overflow will be caught and retained by or within the strainer F.

Fig. 5 illustrates a modified form of the strainer and valve without the cylindrical guide E, the valve D and stem *d* being connected to the strainer by the yoke *d'* and the valve being guided by wings or fins *w*, or any other convenient means may be employed to properly guide the valve. In this construction the concave strainer F is relied upon for the recovery of articles passing into it. In Fig. 6 the prongs E' F of the strainer are formed vertical above the sloping bottom, thus forming a guide at E' and a deeper basket or cup shape.

In operation, rotation of the eccentric I and consequent inward thrust of the pin or rod G against the sloping bottom of the strainer acts to elevate the strainer and open the valve, as shown in Fig. 4, whereby the basin is emptied, and withdrawal of the pin G permits the strainer to drop and the valve to close the waste-passage as in Fig. 1. I preferably employ this mechanism to open and close the valve, but other means may be employed for that purpose. For instance, the cylinder E might be provided with a flat strainer, and a simple handle, as outlined by dotted lines at R in Fig. 4, might be employed to open and close the valve, or other means might be employed to operate the rod G. Hence I have merely indicated in Figs. 1 and 2 the mechanism which occurs to me as simple and effective for the object sought.

Having described my invention, I claim—

1. The combination for a washbasin or bath or the like, of a waste-outlet pipe or passage, a valve or stopper for said passage, a movable and substantially hollow or cup-shaped strainer connected to the valve and located within said passage far enough below said valve to permit the flow of liquid between it and the valve, whereby the liquid will pass the valve into the passage and through the strainer, and any article that passes the valve into the passage but is too large to pass said strainer will be retained thereby, substantially as set forth.

2. In a washbasin or bath or the like, provided with a direct waste-passage therefrom and an overflow-passage leading from the upper part of said receptacle down to said waste-passage, a valve for said passage, a hollow or concave-shaped strainer for said passage located below said overflow and in communication with said valve, whereby articles retained by and within said strainer may be recovered by removal of the valve and strainer, substantially as described.

3. The combination for a washbasin or bath or sink or the like, of a trapped outlet-pipe or waste-passage, a valve or stopper for said passage, a hollow or cup-shaped strainer which is movable and connected with said valve and located within said passage far enough below said valve to permit the flow

of liquid between it and the valve, and a means for operating or lifting said valve and strainer, whereby the liquid can pass the valve into the passage and into and through the strainer and when both valve and strainer are removed all of said passage will be free and open for cleaning down to the liquid seal of the trap, substantially as described.

4. In a waste-controlling device for a washbasin or bath or similar receptacle, the combination of a waste-pipe or outlet-passage, a valve for opening and closing said passage, a strainer formed with a concave or sloping bottom and having free vertical movement within said passage, a push pin or rod having horizontal motion across said passage and adapted to engage or bear against the sloping or concave surface of the bottom of said strainer and suitable communication between said valve and strainer, whereby on the inward thrust of said pin against the bottom of said strainer said strainer will be raised and the valve opened and withdrawal of the pin will permit the strainer to lower and close the valve, substantially as described.

5. In a washbasin or bath or similar receptacle, provided with a waste-outlet passage, a valve for said passage a guide for said valve a vertically-moving strainer formed with a sloping bottom and connected with said valve a push-pin acting horizontally against the sloping bottom of said strainer to raise and lower said strainer and valve, substantially as described.

6. In an operative mechanism for opening and closing a waste-pipe, the combination with said waste-outlet pipe or passage and a valve for opening and closing said passage, of a strainer formed with a sloping bottom and adapted to freely move within said passage, a push-pin acting horizontally against the sloping bottom of said strainer, a means for operating said pin and suitable connection between said strainer and the valve, substantially as and for the purpose described.

7. In a washbasin or bath or the like, provided with a waste-outlet passage, a valve or stopper for opening and closing said passage, a strainer adapted to freely move within said passage, said strainer formed of downward-sloping prongs or bars converging from its periphery toward the center and having the ends or points of said prongs separate to permit fibrous or similar substances to slide or wash off the prongs, a horizontally-moving rod adapted to engage the sloping bottom of said strainer, and suitable communication between said valve and the strainer, whereby upon one stroke or motion of said rod said strainer will be raised and the valve opened and upon the opposite stroke or motion of said rod said strainer will lower and the valve close, substantially as described.

8. The combination for a washbasin or bath or the like, of the outlet pipe or passage M, the valve D, concave or sloping strainer F attached to said valve, push-pin G adapted

to operate horizontally against the sloping bottom of said strainer, whereby the motion of said pin will operate to open and close the valve, substantially as described.

5 . The combination for a washbasin or bath or similar receptacle, of the waste-pipe or outlet-passage M, the valve or stopper D for said passage, the hollow or cylindrical part E movable within said passage and connected to said
10 valve, a strainer attached to said part E, and a suitable opening or space between said valve and the part E, whereby the liquid will pass the valve into said part E and through the strainer, substantially as described.

15 10. In a washbasin or bath or sink or the like, provided with a waste-outlet passage and a valve for opening and closing said passage, a strainer in communication with said valve

and adapted to freely move within said passage, said strainer being formed of downward 20 or outward sloping prongs or bars converging from its periphery toward the center and having the ends or points of said prongs separate to permit fibrous and similar substances to slide or wash off the prongs, and a suitable 25 distance or space between said valve and the strainer, whereby when the valve is open liquid can pass said valve into the passage and thence through the strainer, and both the valve and strainer can be removed from said 30 passage, substantially as and for the purpose described.

SAML. WALKER LEWIS.

Witnesses:

JOSEPH P. CASEY,
M. H. DUMONT.

It is hereby certified that in Letters Patent No. 568,261, granted September 22, 1896, upon the application of Samuel Walker Lewis, of Brooklyn, New York, for an improvement in "Washbasins, Baths, Sinks," &c., an error appears in the printed specifications requiring the following correction, viz: On page 1, line 50, the reference letter "m" should be *M*; and that the said Letters Patent should be read with this correction that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 29th day of September, A. D., 1896.

[SEAL.]

WM. H. SIMS,

First Assistant Secretary of the Interior.

Countersigned:

S. T. FISHER,

Acting Commissioner of Patents.