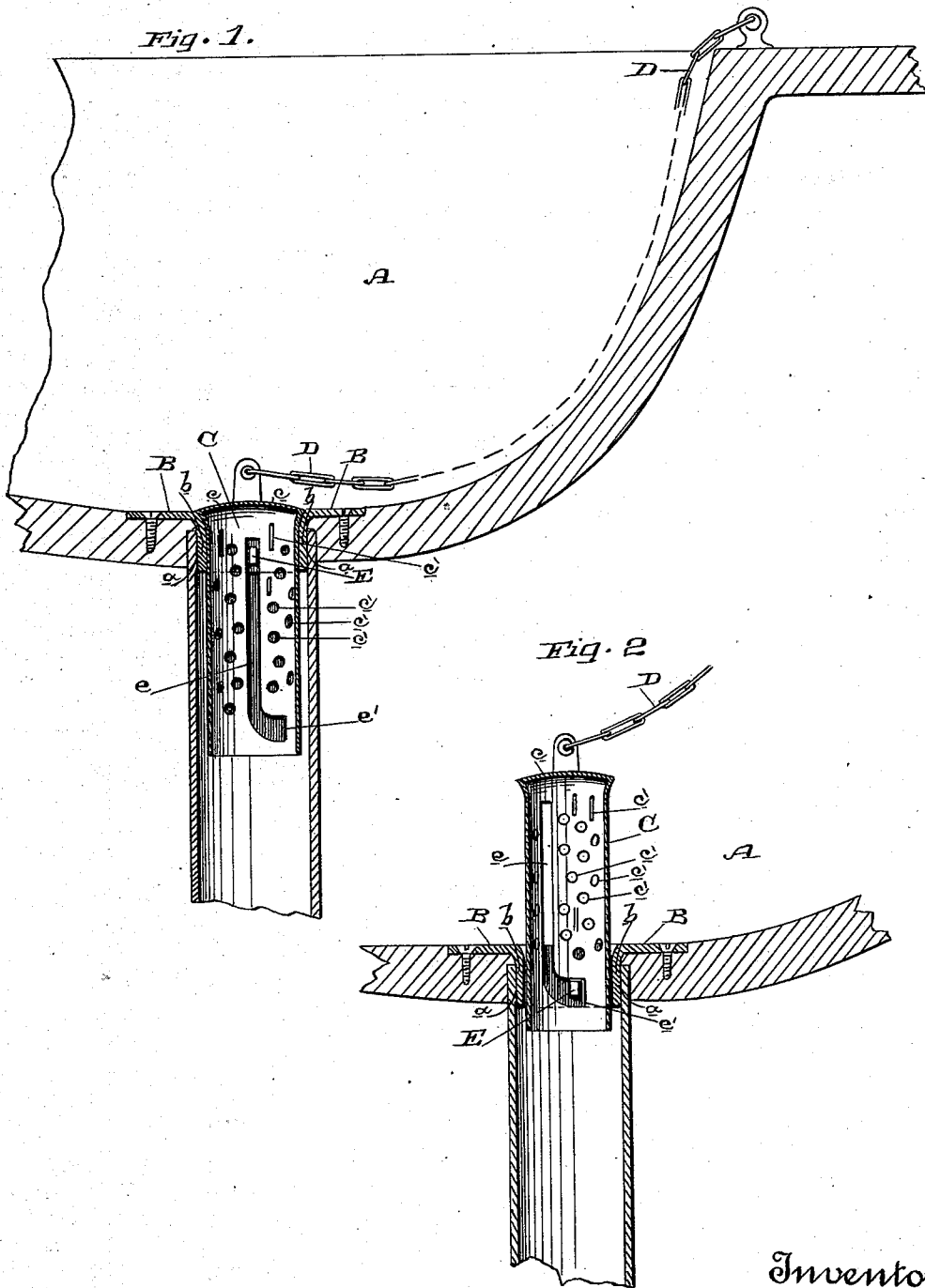


(No Model.)

W. B. SMITH.
PLUG FOR SINKS, TUBS, &c.

No. 401,976.

Patented Apr. 23, 1889.



Witnesses,
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UNITED STATES PATENT OFFICE.

WILLIAM B. SMITH, OF SAN FRANCISCO, CALIFORNIA.

PLUG FOR SINKS, TUBS, &c.

SPECIFICATION forming part of Letters Patent No. 401,976, dated April 23, 1889.

Application filed January 16, 1889. Serial No. 296,538. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. SMITH, of the city and county of San Francisco, State of California, have invented an Improvement in Plugs for Sinks, Tubs, Basins, &c.; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to the class of plugs for stopping up the discharge-holes of sinks, tubs, basins and other similar vessels or receptacles; and my invention consists in the constructions and combinations of devices which I shall hereinafter fully describe and claim.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a section of a basin, showing my plug in its lowest position acting as a stopper. Fig. 2 is a view showing the plug raised, serving as an escape and a strainer for the water.

A represents a sink, tub, basin, or other water-receptacle, having the discharge-hole *a*.

B is the usual plate surrounding the discharge-hole, and having a flange, *b*, extending down into it.

C is my plug, made of a hollow or tubular piece, the lower end being open, and the top, which is represented by *c*, being completely closed, and having the lifting-chain D connected with it.

In the sides of the plug are made openings *c'*, of various shapes, some circular, some elongated, as slots or slits, as shown. The plug is seated in the discharge-hole, and can be lifted up and lowered down therein. When fully down, the top *c* finds a seat in the plate B of the discharge-hole and serves as a stopper therefor, resembling in this position an ordinary plug. To let the water out of the vessel A, the plug C is raised, whereby its apertures come above the plate B and the water passes through them and out the open bottom of the plug; but the foreign matter is stopped by reason of the aperture straining the water, and it collects on the outer surface of the plug. Now by lowering the plug all the foreign matter is scraped off its exterior surface against the inner rim of plate B, thus thoroughly cleaning the plug and leaving the foreign matter loose in the bottom of

the vessel, whence it can be readily removed. It will thus be seen that no foreign matter can pass through the plug, which acts as a strainer, and thus prevents the trap from getting clogged up, and every time the plug is pushed down the foreign matter is scraped off and can be easily removed. When the plug is down in place, it does not interfere with the use of the vessel, because its top, serving as the stopper, does not project up into the vessel any more than does an ordinary plug. Now, in order to hold the plug in an elevated position, I form in its sides one or more slots, *e*, the lower end, *e'*, of which is curved to one side, as shown. In the inner rim or flange, *b*, of plate B, I secure or form one or more pins or studs, *E*, which extend into the slot or slots *e* of the plug. When the plug is raised, its slots slip by the pins or studs until, reaching the curved lower ends, *e'*, the pins or studs enter them, the plug turning axially, and they then support said plug. To lower the plug, it is first slightly turned to free the slot ends *e'* of the pins or studs and then dropped. When the plug is raised by the chain D, the pins or studs entering the curved lower ends of the slots cause the partial rotation of the plug of themselves, so that but a single lifting movement on the chain is necessary to raise the plug to its extreme limit and place it in position to be there held. The pins or studs *E* also serve as limiting-stops to prevent the plug from being raised out of the discharge-hole.

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

1. The plug for the discharge-holes of sinks, tubs, basins, and other vessels, consisting of the sliding hollow or tubular piece having a closed top, an open bottom, and apertures in its sides, in combination with the means for holding the plug in position to permit the escape of the water through its apertures, consisting of a fixed pin or stud in the discharge-hole, and a slot in the side of the plug, in which the fixed pin or stud fits, said slot having a curved lower end, with which the pin or stud engages, substantially as described.

2. The plug for the discharge-holes of sinks, tubs, basins, and other vessels, consisting of

the sliding hollow or tubular piece having a closed top, an open bottom, and apertures in its sides, and having also in its side an elongated slot terminating below in a portion
5 curved to one side, in combination with the protecting-plate B of the discharge-hole, having a fixed pin or stud entering the elongated slot of the plug and engaging its curved lower

portion to hold the plug up, substantially as described. 10

In witness whereof I have hereunto set my hand.

WILLIAM B. SMITH.

Witnesses:

S. H. NOURSE,

H. C. LEE.