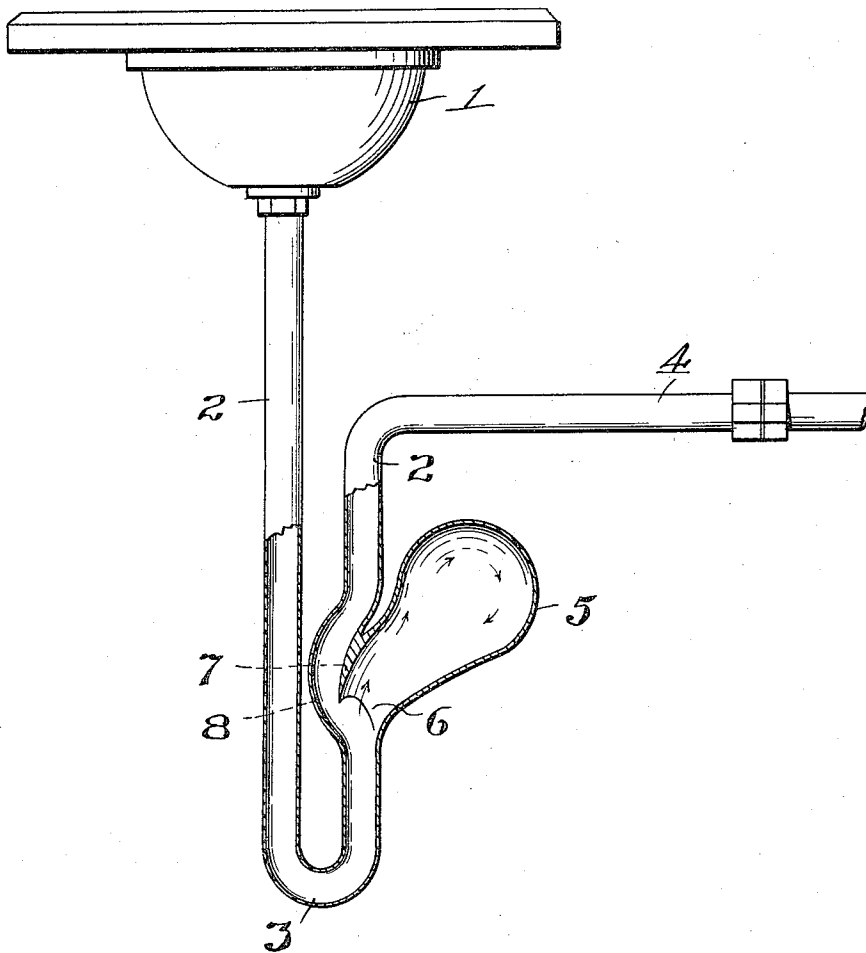


E. D. VAN DENBERG.
ANTISIPHON TRAP.
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1,069,655.

Patented Aug. 5, 1913.



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ANTISIPHON-TRAP.

1,069,655.

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To all whom it may concern:

Be it known that I, EDWARD D. VAN DENBERG, a citizen of the United States, residing at Reading, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Antisiphon-Traps, of which the following is a specification.

This invention relates to improvements in anti-siphon traps and more particularly to traps such as are used in connection with wash basins, bath tubs, sinks and other like instances.

The object of the invention is to provide a trap that will withstand severe suction without permitting the waste pipe to be emptied, but which will always retain sufficient water to insure a perfect seal. In devices of this character, it frequently happens that the water is entirely siphoned from the waste pipe and trap, permitting the foul gases to pass upward through the pipe into the basin and the compartment in which it is placed. Traps have been heretofore devised to prevent this escape of gas, but in many cases such traps become useless by reason of accumulated sediment.

It is my object in the present instance to provide a trap in which the water while being drawn from the waste pipe, will be caught in sufficient quantity in a reservoir, to always insure a sufficient and safe seal when the suction is released and the water returns to the trap, and I have so constructed the device that the action of the water in its movement into and through the reservoir will tend to prevent the accumulation therein of any sediment in appreciable quantity.

The invention consists of a reservoir communicating with the waste pipe at a point above the lowermost bend, and arranged at such an angle that the entire contents of said reservoir will drain easily into the trap. The reservoir is also arranged to facilitate its cleansing by the action of the water passing into it.

The invention is more fully described in the following specification and clearly illustrated in the accompanying drawing, in which I have shown my improved trap applied to a wash basin, the parts being shown in section.

The numeral 1 designates a wash basin and 2 the waste pipe connection leading therefrom. This pipe is bent upon itself, as shown at 3, to form the usual water trap, and 4 designates the outlet end of the waste pipe. At a suitable point above the bend 3 in the pipe, between said bend and the outlet, I form a reservoir 5, communicating directly with the pipe, and arranged at an angle other than right angles to the general vertical line of the pipe, with its mouth or open end 6 as the lowermost point. At the upper side of the mouth 6, I form an inwardly projecting lip 7, which partly reaches across the general direction or passage of the water as it passes up through the pipe 2. The general direction of this lip is downwardly and its one wall is a continuation of the inner wall of the reservoir 5.

It will be evident that when the suction or siphoning action takes place, which tends to draw the water from the trap, the water will, in its upward passage, be directed by the lip 7 into the reservoir, where it will be held until the suction is released by the admission of air through the basin opening, when the water in the reservoir will fall back into the trap 3. This reservoir will be of sufficient size to hold enough water to insure the proper sealing of the pipe when it descends into the trap.

The location and formation of the reservoir, in connection with the lip 7, will cause the water, as it is drawn up, to enter the reservoir with a swirling action, as indicated by the arrows, thus insuring the constant and effectual cleansing of the inner wall of the reservoir and preventing the accumulation therein of sediment.

The waste pipe 2, in its upturned section leading to the outlet, may be curved slightly away from the reservoir as shown at 8, so as to bring the end of the lip 7 more directly in vertical alinement with the body of water as it passes upward through the pipe.

Having thus described my invention, I claim:—

An anti-siphon trap comprising a waste water pipe bent to form a U-shaped seal section; an inclined, globular, self cleansing reservoir communicating with the pipe at a point above the seal, said pipe being curved

out of vertical alinement at the point of communication with the reservoir and extending above said point of communication; and a lip at the mouth of the reservoir, extending
5 partly across the outlet passage of the pipe at said curved point to divert the water from the seal into said reservoir and hold it there during successive siphoning actions.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD D. VAN DENBERG.

Witnesses:

ED. A. KELLY,
CLARA E. YOUNG.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
