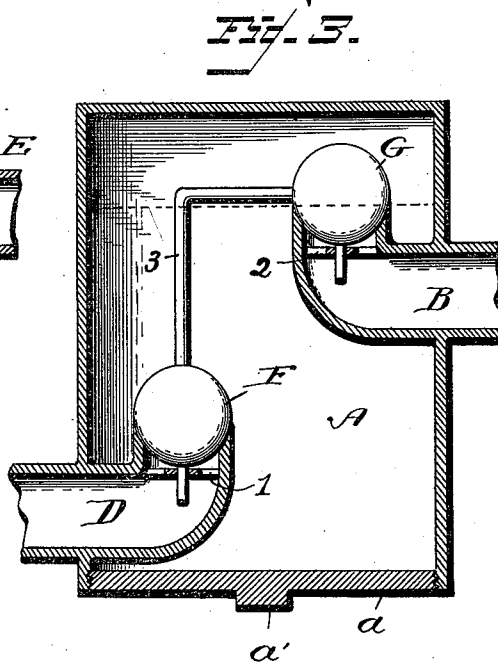
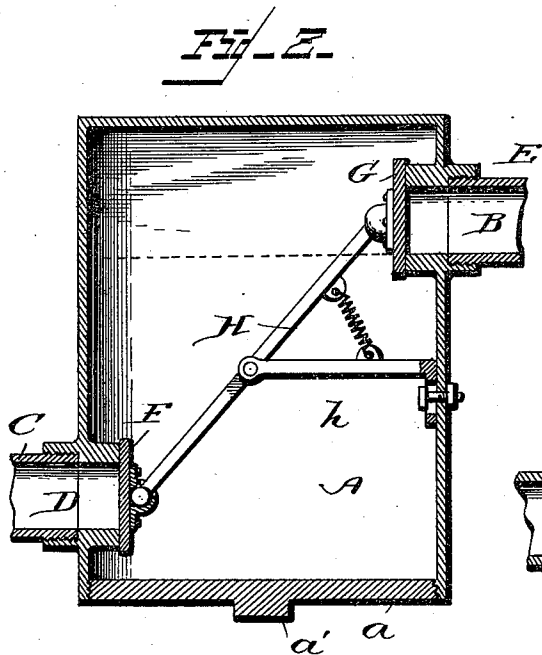
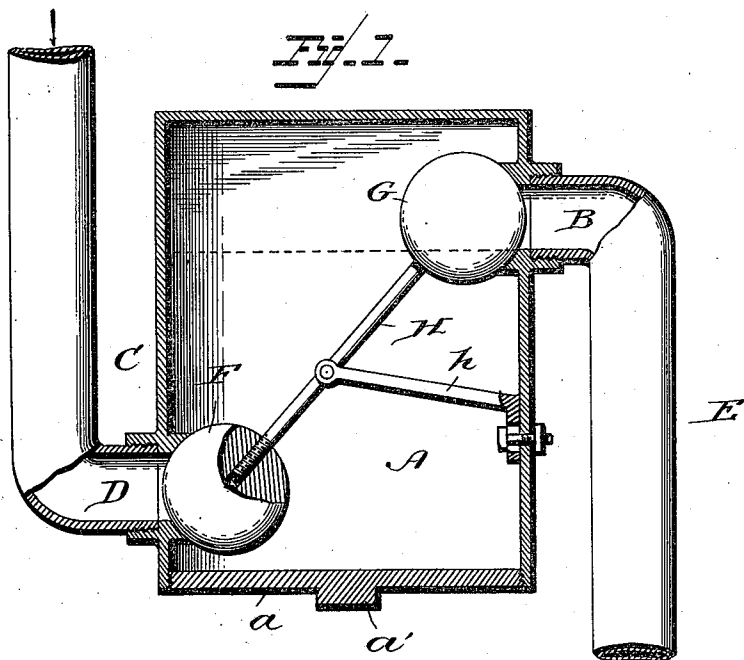


(No Model.)

P. FALKINBURG.
TRAP FOR BASINS, SINKS, &c.

No. 510,503.

Patented Dec. 12, 1893.



Witnesses
Albert Speiden
Van Buren Hillyard

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UNITED STATES PATENT OFFICE.

PERCY FALKINBURG, OF ATLANTIC HIGHLANDS, NEW JERSEY, ASSIGNOR
OF ONE-HALF TO NATHANIEL H. ROBERTS, OF SAME PLACE.

TRAP FOR BASINS, SINKS, &c.

SPECIFICATION forming part of Letters Patent No. 510,503, dated December 12, 1893.

Application filed March 8, 1893. Serial No. 465,072. (No model.)

To all whom it may concern:

Be it known that I, PERCY FALKINBURG, a citizen of the United States, residing at Atlantic Highlands, in the county of Monmouth, State of New Jersey, have invented certain new and useful Improvements in Traps for Basins, Sinks, &c.; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to traps for sinks and basins, and has for its object to provide a water seal and two valves for the purpose of excluding sewer gas.

The improvement consists, essentially, of a case having an inlet at its lower end and an outlet at its upper end, and a lever carrying valves on opposite sides of its pivotal point to close the said inlet and outlet when the trap is inactive.

The improvement also consists of the novel features and the peculiar construction and combination of the parts which will be hereinafter more fully described and claimed and which are shown in the annexed drawings, in which—

Figure 1 is a detail view, partly in section, of the invention. Fig. 2 shows a modified form of valve for closing the inlets. Fig. 3 shows a further modification in which the valves and the valve connecting rod are adapted to have a vertical movement.

The case A is closed and may have any desired form and be constructed of suitable material. In the preferred form of construction the case is cylindrical in cross section and is constructed of either brass, copper or lead tubing. For purposes of cleaning the lower end of the case is closed by a removable head a which is adapted to be screwed on the case. A projection a' extends from the head a to receive a wrench or other instrument by means of which the said head can be turned when screwing it on or off the case A. This case A is provided at its upper end with an outlet B and near its lower end with an inlet D. Both the inlet and outlet are formed in the side of the case close to the ends thereof and are provided with valve seats. These valve

seats project on opposite sides of the body portion of the case to prevent matter adhering to the inner sides of the case from interfering with the seating of the valve and also to provide means of attachment to the case of the inlet and the outlet pipes C and E, respectively. The valves F and G close, respectively, the inlet and the outlet and are attached to the opposite ends of a lever H which is pivotally supported between its ends. The valves and lever are so constructed and disposed that the valve G and the upper portion of the lever H will overbalance the valve F and the lower portion of the lever whereby the superior weight of the valve G and upper portion of lever H will cause the seating of the valves F and G under normal conditions. It will be observed that the inlet and outlet are disposed at diagonally opposite ends of the case. Hence the lever H will occupy a corresponding diagonal position in order to seat the valve.

The manner of supporting the lever H is not essential and will depend upon the skill of the workman. As shown the lever is supported on the outer end of a rod h which is projected from the side of the case. This rod may be attached to the case in any desired manner, but it is preferred to have it form part of a bracket which is adjustably connected to the case so that the relative position of the lever may be adjusted within certain limits to accurately seat the valves F and G. To further allow for differences in mechanical construction the valves F and G may be adjustably connected with the ends of the lever H. The simplest form of construction for adjustably connecting the valves with the said lever is that shown in which the ends of the lever will be threaded and the valves correspondingly threaded and adapted to screw on the threaded ends of the latter.

The precise construction of valve is not essential. They may be flat, as shown in Fig. 2, or ball valve, as shown in Fig. 1. The latter form is preferred. Where the valves are flat, as shown in Fig. 2, they will be connected with the lever by a ball and socket joint which will admit of the valves adapting themselves to their seats so as to obtain a close joint.

In practice the trap will be arranged sub-

stantially as shown in Fig. 1 and under normal conditions both the valves will be seated. As the water or other fluid enters the case through the inlet D the valve F will be unseated by the force of the incoming water. The valve G by reason of its connection through lever H with the valve F will at the same time be moved away from its seat and permit the water or fluid in the trap to escape through the outlet B. The instant the water ceases to enter the trap through the pipe C, the valves F and G will close their respective inlets and exclude noxious odors. The upper portion of the case will contain air and the lower portion water, the latter forming a water seal as is usual in devices of this nature. In some instances it may be expedient to provide a spring to operate on the lever H to insure a seating of the valve. This construction is indicated in Fig. 2.

In Fig. 3 the valves F and G are adapted to have a vertical movement and are guided in their movements by depending extensions which are adapted to work in openings formed in the cross bars 1 and 2 extending across the inlet and outlet. These valves are connected by a rod 3 so as to cause them to operate simultaneously.

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

1. A trap for basins, stands &c. comprising

a closed case having an inlet at the lower end and an outlet at the upper end, the inlet and the outlet being diagonally disposed, valves for closing the said inlet and the outlet, and a single lever pivotally supported between its ends and extending diagonally within the case and having the said valves attached to its opposite ends, the weight of the upper valve being superior to cause the seating of the valves, substantially as described.

2. A trap for basins, stands &c. comprising a closed case having an inlet at its lower end and an outlet at its upper end and a lever adjustably supported between its ends and provided with valves to close the said inlet and outlet, substantially as described.

3. The herein described trap for basins, stands &c. comprising a closed case the lower end of which is removable, and having an inlet at the lower end and an outlet at the upper end, and a lever pivoted between its ends, and having ball valves at its opposite ends to close the said inlet and outlet, the upper valve overbalancing the lower valve for the purpose of effecting a seating of the said valves, substantially in the manner set forth.

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

PERCY FALKINBURG.

Witnesses:

E. H. COOK,

D. L. CONOVER.