

(No Model.)

J. A. THOMAS.
DRAIN TRAP.

No. 535,872.

Patented Mar. 19, 1895.

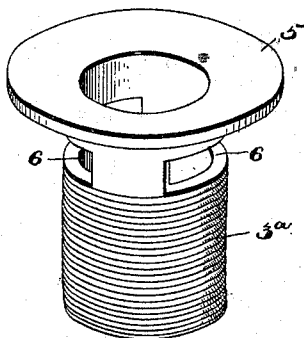
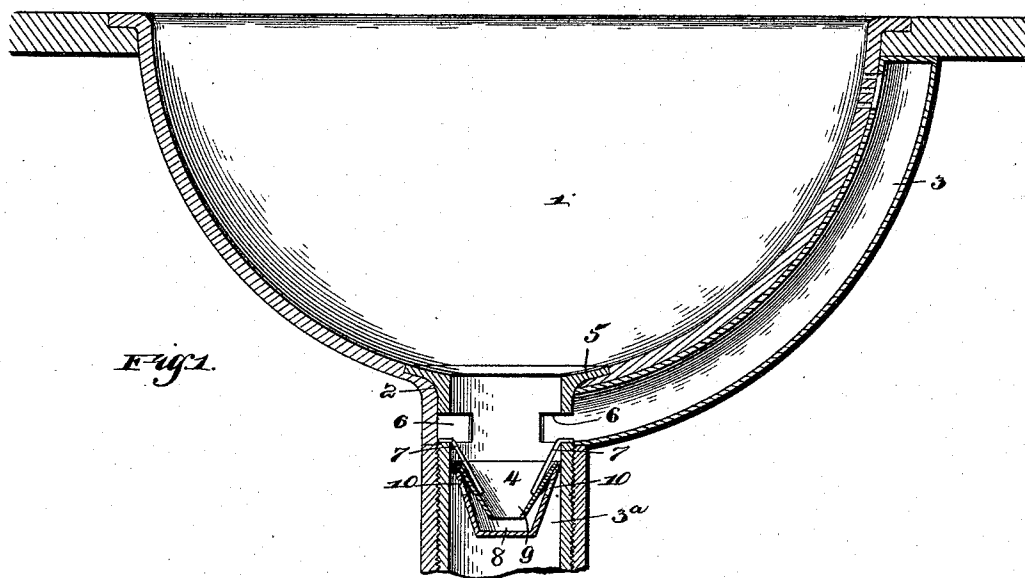
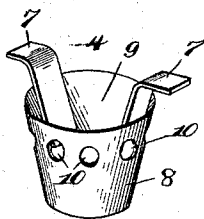


Fig. 3.



Witnesses

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Inventor

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By *his* Attorneys.

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UNITED STATES PATENT OFFICE.

JACOB A. THOMAS, OF READING, PENNSYLVANIA.

DRAIN-TRAP.

SPECIFICATION forming part of Letters Patent No. 535,872, dated March 19, 1895.

Application filed September 15, 1894. Serial No. 523,129. (No model.)

To all whom it may concern:

Be it known that I, JACOB A. THOMAS, a citizen of the United States, residing at Reading, in the county of Berks and State of Pennsylvania, have invented a new and useful Drain-Trap, of which the following is a specification.

The invention relates to improvements in drain traps.

The object of the present invention is to improve the construction of drain traps adapted for use in connection with wash-bowls, bathtubs, sinks, and the like, to provide means for collecting and holding dirt and other heavy substances to prevent the same from being carried into the waste pipe and clogging the latter, and also to provide a water seal for preventing foul smelling gases from arising into the bowl, tub or the like, from the waste pipe.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompany drawings and pointed out in the claims hereto appended.

In the drawings:—Figure 1 is an enlarged vertical sectional view of a wash-bowl provided with a drain trap constructed in accordance with this invention. Fig. 2 is a detail perspective view of a drain tube. Fig. 3 is a similar view of the drain trap.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a wash-bowl of the ordinary construction, provided with the usual bottom drain opening 2 and having a side over-flow passage 3; and depending from the wash-bowl, is a drain tube 3^a, of ordinary configuration, designed to be coupled with an ordinary waste pipe.

Ordinary wash-bowls are provided with a strainer plate or screen, fitted in the drain opening thereof to prevent large foreign substances from passing into the waste pipe; but the present invention dispenses with such strainer plate or screen, and in place thereof, a trap 4 is provided, and is located within the drain tube 3^a.

The drain tube is provided at its upper end with a supporting flange 5, and it is secured to the bowl in the ordinary manner, and it is

provided at opposite sides with horizontal openings 6, which receive resilient, supporting arms 7 of the trap 4. One of the horizontal openings 6 of the drain tube registers with the lower end of the said over-flow passage; and the resilient arms 7 are substantially inverted L-shaped and have their arms extending outward and resting upon the drain tube at the lower edges of the openings 6. These arms permit the trap to be readily removed from the drain tube when it is desired to clean the same, or for any other purpose; and they also greatly facilitate its attachment to the drain tube.

The trap consists of a water-cup 8, having a circular bottom, and truncated, conical sides, which taper from their upper edges to the bottom. Located within the water-cup, is a depending, conical, or downwardly tapering neck 9, which is secured to the upper edges of the sides of the water-cup, and which terminates a short distance above the bottom thereof. The sides of the water-cup are provided near their upper edges with an annular series of drain openings 10, which allow the water from the bowl to pass freely into the waste pipe.

By reason of locating the drain openings 10 above the plane of the lower end of the neck 9, the said lower end of the neck is always submerged, whereby an effective water seal is provided to prevent any gases from passing upward from the waste pipe into the bowl; and at the same time this construction of trap causes all dirt and sediment to settle at the closed bottom of the water-cup, from which the accumulation can be readily removed.

The lower ends of the shanks of the L-shaped arms 7, are secured to the inverted conical neck, and it will be readily apparent that the double conical drain trap may be quickly applied to a drain tube of ordinary construction, and that such drain tubes are not materially altered. It will also be seen that the drain trap is equally applicable to bath-tubs, sinks, and the like, and that it excludes foreign substances, and provides an effective water seal, to prevent the backward and upward passage of gases.

Changes in the form, proportion, and minor details of construction, may be resorted to

without departing from the principle or sacrificing any of the advantages of the invention.

What I claim is—

1. The combination of a drain tube, and the
; double conical drain trap arranged within the
drain tube and provided with a supporting
device, and consisting of the conical cup 8 pro-
vided near its upper edge with openings, and
the inner conical neck 9 having its upper
10 edges contiguous to and connected with the
upper edges of the cup and depending within
the same, said supporting device serving to
suspend both the cup and the neck within the
drain tube, substantially as described.
- 15 2. The combination of a drain tube pro-
vided at opposite sides with openings, and a
drain trap located within the tube and form-
ing a water seal, and the opposite resilient
arms engaging the drain tube at the openings
20 thereof, and secured to and supporting the

trap within the drain tube, substantially as described.

3. The combination of a drain tube pro-
vided with opposite openings, a trap compris-
ing a tapering water cup provided at its sides 25
with drain openings, and an inverted conical
neck extending downward from the sides of
the water cup to a point below the drain open-
ings, and the opposite resilient arms engag-
ing the drain tube at the openings thereof 30
and supporting the trap in the tube, substan-
tially as described.

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

JACOB A. THOMAS.

Witnesses:

ELLWOOD H. DENPHER,
L. J. DOUGHERTY.