C. H. Burleigh,

Fire Trap.

No. 97,160. Patented Nov. 23. 1869.

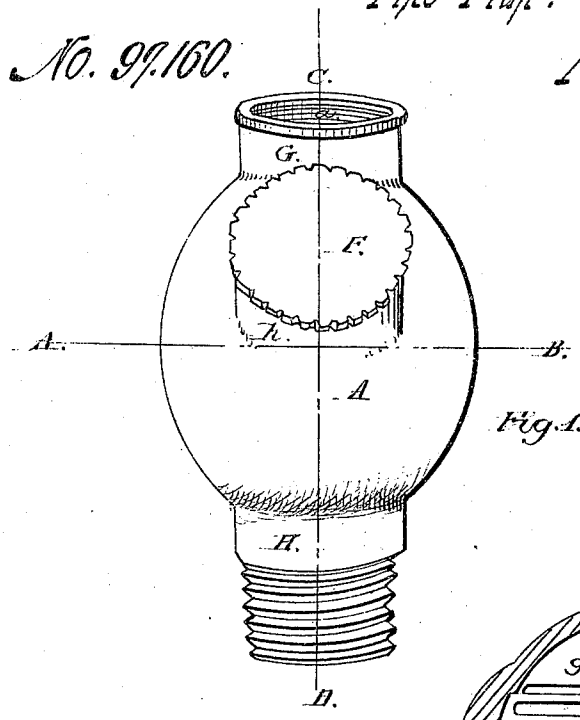


Fig. 1.

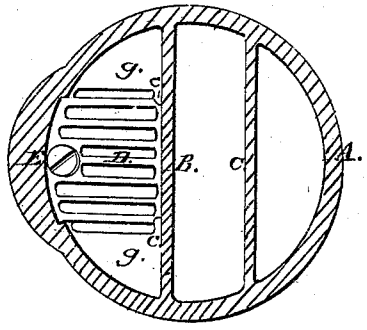


Fig. 2.

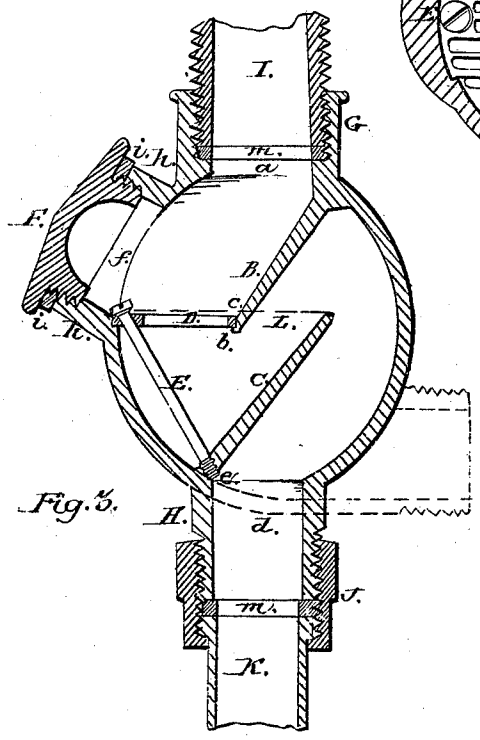


Fig. 3.

WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES H. BURLEIGH, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN PIPE-TRAPS.

Specification forming part of Letters Patent No. **97,160**, dated November 23, 1869.

To all whom it may concern:

Be it known that I, CHARLES H. BURLEIGH, of the city and county of Worcester, and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Pipe-Traps; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a perspective view of my improved pipe-trap. Fig. 2 represents a horizontal section on line A B, Fig. 1, and Fig. 3 represents a vertical section on line C D, Fig. 1.

To enable those skilled in the art to which my invention belongs to make and use the same, I will proceed to describe it more in detail.

The nature of my invention consists, first, in the arrangement in the globe or body of the trap of an aperture for cleaning the interior thereof, as hereinafter described; second, in the combination, with the lower partition, of a drain-stop screw or plug, as hereinafter explained; third, in the combination, with the body or globe of the trap, of a net or strainer, as and for the purposes set forth; fourth, in the manner of attaching the trap to the stem or pipe of a wash-bowl or sink, as shown and described.

In the drawings, the part indicated by letter A is the body or globe of the trap. It consists of a hollow metallic shell, made in this instance of an oval form with openings at the top and bottom for the passage of the water, and having in its interior two partitions, B and C, cast with the shell A and extending laterally from side to side. The upper part of the partition B is joined to the shell A at the back of the top opening, *a*, and extends obliquely downward and forward somewhat more than half-way to the bottom of the shell, terminating with a small horizontal flange, *b*, along its central part, and by flanges or webs *g* at either end. The other partition, C, joins the shell A at the front side of the lower opening, *d*, and extends obliquely upward and backward to a short distance above the level of the lower edge of the partition B, thus forming a bowl or cup, in which the water is retained at the level indicated by the dotted line L, Fig. 3, thereby completely closing the passage and preventing the escape of foul air or noxious vapors from the pipes or sewers.

A net or strainer, D, is arranged horizontally between the lower edge of partition B and the shell A, one of its edges resting on the flange *b* and the other in a groove formed in the shell A. It is made in this instance of slotted metal; but perforated metal or wire-netting may be used, if preferred. The strainer D is held in place by small projections *c*, formed at the junction of the partition B with the flanges *g*. These projections *c* extend over the corners of the strainer, as indicated in the drawings, Figs. 2 and 3.

An opening, *e*, is formed through the partition C at the bottom of the cup or bowl, in which is fitted the drain-screw or plug E, by means of which the water may be drained from the trap to prevent it from freezing, said screw answering the double purpose of holding the front edge of the strainer D and stopping the opening *e*.

An opening or port, *f*, through which to examine the interior of the trap, is formed in the front of the shell A just above the strainer D, and a cap, F, is provided for closing the same, which screws into the flange *h* around said opening. The head of the cap is milled or notched, so that it can be readily turned with the hand, and the joint between the cap and flange is made water-tight by means of a leather or rubber packing, *i*, as fully indicated in the drawings.

A socket, G, at the top of the shell A is furnished with a female screw-thread on the inside to fit the thread on the stem of the wash-bowl or sink on which the trap is used, and a stem, H, at the bottom of the shell A is provided with a male screw-thread to fit the thread of the clamping-nut on the end of the pipe. These screw-threads may all be formed of the same size and the trap fitted to the bowl or sink in the manner shown in Fig. 3, where I indicates the stem of the bowl or sink, J the clamping-nut, and K the thimble to which the pipe is soldered.

Packing *m*, of leather or any other suitable material, is placed between the parts, as indicated, to insure tight joints.

It will be seen that by this mode of construction the strap can be readily applied to wash-bowls and sinks already set up, the only labor required being to remove the nut J from

the stem I of the bowl, and in its place screw on the trap, then screw the nut J upon the stem H of the trap; or, if desirable to use the trap in the line of the pipe, it may be attached in a similar manner, or the pipe may be soldered directly to the socket G and stem H.

In lieu of making the trap with its stem H projecting directly downward, it may be made to project to the rear, as indicated by dotted lines, Fig. 3, or to either side, as most convenient. The trap may also be made without the opening *e* through the lower partition, C, thereby dispensing with the drain-screw E; but I prefer to make them in the manner shown.

The front of the strainer D may be fastened in place by setting out a small portion of metal from the shell A. It will be observed that the strainer D prevents the passage of anything that would be liable to become lodged in the pipes, while at the same time it is a sure protection against the loss of any small articles—such as finger-rings, pins, or buttons—that may by accident be dropped into the wash-bowls and pass into the pipes—an event of frequent occurrence and a source of much annoyance. With my trap all such articles can readily be recovered by simply removing the cap F and withdrawing them through the opening in the front of the shell without the inconvenience which results from removing such articles from traps where the clearing-opening is below the water-level. The strainer D may be arranged in a different position within the shell A, and still produce the same results.

Having described my improved pipe-trap, what I claim therein as new and of my invention, and desire to secure by Letters Patent, is—

1. The combination, with the body of a pipe-trap, of an aperture for cleaning the interior thereof, arranged in the side of the trap, as shown and described.

2. The combination, with the lower partition, C, of a drain-stop screw or plug, as above described.

3. The combination, with the body of the trap, of the net or strainer D, substantially as and for the purposes set forth.

4. The combination, with the body or globe of the pipe-trap, of a projecting stem, H, and socket G, having male and female screw-threads of the same size, substantially as and for the purposes set forth.

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Witnesses:
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