T. GUERIN.

SEWER-TRAPS.

No. 183,259. Patented Oct. 17, 1876.

Fig:1.

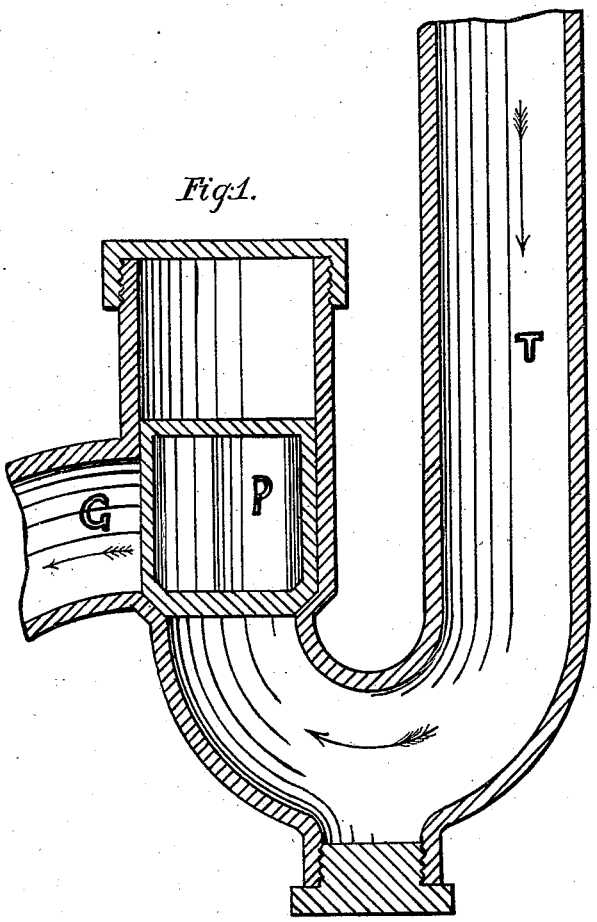


Fig:2.

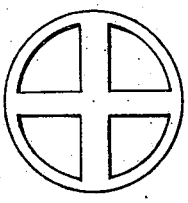


Fig:3.

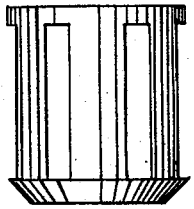
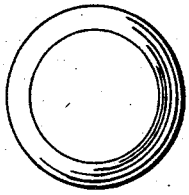


Fig:4.



Witness

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UNITED STATES PATENT OFFICE.

THOMAS GUERIN, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN SEWER-TRAPS.

Specification forming part of Letters Patent No. **183,259**, dated October 17, 1876; application filed June 30, 1876.

To all whom it may concern:

Be it known that I, THOMAS GUERIN, of San Francisco city and county, State of California, have invented a trap for the prevention of sewer-gas or other foul air from entering a dwelling through the pipes which are intended to convey away the house-sewage; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it appertains to make and use my said invention without further invention or discovery.

In order to illustrate and explain my invention I have the honor to refer to the accompanying drawings, in which—

Figure 1 is a vertical section of my invention.

T is a pipe leading from the wash-basin or sink. The arrows show the direction of the flow. This pipe, after descending to a point a few inches above the floor, is bent upward, and at a short distance above the bend it widens into a small barrel, which contains a plunger, P. This plunger rests on a beveled seat, composed of polished brass, the plunger and barrel being also composed of this metal. The pipe G denotes that which leads to the sewer. The height of the plunger is greater than the diameter of the entrance to the pipe G, in order that the barrel above the entrance may serve as a guide for the movement of the plunger.

From this description it will be perceived that the waste-water enters the pipe T, and advances to the base of the plunger, which it lifts, and then passes off through the pipe G.

Fig. 2 is a plan of the top of the plunger. Fig. 3 is an elevation of the plunger. Fig. 4 is a plan of the bottom.

The plunger has openings on the top and sides, as represented in Figs. 2 and 3, so as to facilitate its movement in the barrel. As the plunger rises the air in that portion of the barrel above it has a tendency to become compressed, and thus resist the upward motion of the plunger; but the openings in the top of the plunger allow it to enter the plunger and escape through the openings in the sides, and pass into the pipe G. It is necessary to have a sufficient number of openings in the plunger, so as to have one or more of them facing the pipe G, whatever may be the position of the plunger.

The barrel has a cap or covering, which can be screwed off at pleasure for inspection. At the lowest point or bend there is also a cap or plug to facilitate the removal of sediment which may collect there. No sediment can collect on the seat of the plunger, for the weight of the plunger on the stream passing under it will always cause a scour sufficient to remove such impediment. No air can pass from the sewer to the dwelling, for however forcibly the air may blow up through the pipe G, it will only fill the barrel and plunger, and press the latter more forcibly on its seat. Furthermore, when the waste-water ceases to flow through the pipe T there will a column of it remain in this pipe, which will be in equilibrium with the weight of the plunger, thus affording a water-trap in combination.

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

1. The plunger of polished brass or other incorrodible metal, with its openings on the top and sides.

2. In a trap, the combination of the polished brass valve, as shown, and the beveled valve-seat of incorrodible metal.

THOMAS GUERIN.

Witnesses:
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