

H. W. ATWATER.
Outlet-Pipe for Sinks, &c

No. 214,983.

Patented May 6, 1879.

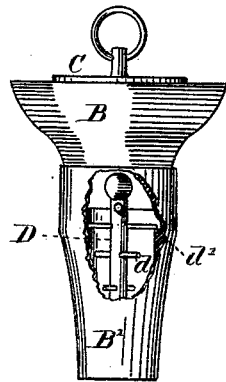


Fig. 1

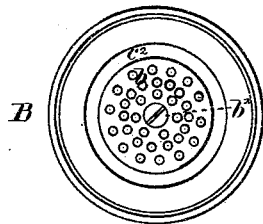


Fig. 3.

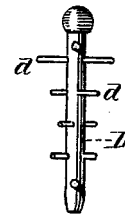


Fig. 4.

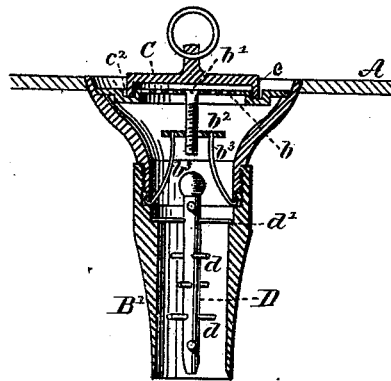


Fig. 2.

Witnesses:

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Inventor:

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UNITED STATES PATENT OFFICE.

HENRY W. ATWATER, OF NEWTON, MASSACHUSETTS.

IMPROVEMENT IN OUTLET-PIPES FOR SINKS, &c.

Specification forming part of Letters Patent No. **214,983**, dated May 6, 1879; application filed March 17, 1879.

To all whom it may concern:

Be it known that I, HENRY W. ATWATER, of Newton, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Outlet-Pipes for Sinks, &c., of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, making a part hereof.

In the drawings, Figure 1 is an elevation of an outlet-pipe in which my invention is embodied, part of the pipe being broken away to show its interior construction. Fig. 2 is a vertical section of the pipe. Fig. 3 is a plan showing the strainer, and Fig. 4 is an elevation of my device for preventing the clogging of the pipe.

A is the bottom of the sink, to which the outlet-pipe B B' is attached. B is the upper part of the outlet-pipe, which is fastened to the sink; and B' is the lower part of the pipe, which is screwed onto B and runs to a trap or sewer.

B is provided with a strainer, *b*; and the first part of my invention relates to the mode now to be described of attaching the strainer to the part B.

*b*¹ is a screw, which passes through the strainer and into the nut *b*². Its entering end is upset, to prevent it from being withdrawn from the nut.

The nut *b*² is provided with two or more wire hooks, *b*³, which are adapted to hook over the lower end of the piece B, which is made a little smaller than the rest of the piece B, as shown in Fig. 2.

When the strainer is to be removed, the screw *b*¹ is unscrewed as far as possible, and the hooks *b*³ are unhooked from the bottom of B, pressed together, and drawn up out of the pipe with the strainer, screw, and nut.

This combination of the strainer and outlet-pipe, by means of screw-nut and hooks, constitutes the first part of my invention.

To stop the outlet-pipe, I use a cover, C, the rim *c* of which fits in the groove *c*² in the piece *b*, and is ground so as to make a watertight joint with the piece *b*. The groove serves to keep the cover in place, and the pressure of water on the cover when the sink is in use is such that there can be no leakage into the outlet-pipe, the bottom of the cover forming a ground joint with the bottom of the groove *c*².

This combination of the cover C, having a

rim, *c*, with the piece *b*, having the groove *c*², forms the second part of my invention.

The third part of my invention is the device shown in place at D in Figs. 1 and 2, and in elevation in Fig. 4, by which much of the lint and other matter which passes into the pipe is caught and prevented from clogging the pipe. This device is a rod having a number of small pins, *d*, passed through it, these pins being arranged to cross each other, as shown. This device is held in place in the outlet-pipe by the shoulder *d'*, against which one of the upper pins rests, the upper pins being longer than the lower pins.

When it is found that the waste-water does not flow away as rapidly as it should, the strainer being removed, this device D is easily drawn out of the pipe by means of pinchers, or in any other convenient way, cleaned, and put back.

This device may of course be used with or without a strainer, *b*, its purpose being to prevent the waste-pipe from becoming clogged, and to afford a simple way of removing any matter which has passed through the strainer, or other device used in its stead, into the pipe.

This device differs from any other device for a like use known to me, in that the pins pass through the rod and are arranged one above the other, and each at an acute angle with the one above it. The lower ones are shorter than the upper ones, in order that they may pass by the shoulder *d'* into the outlet-pipe; and one of the upper ones is of sufficient length to catch upon the shoulder *d'* and so hold the device in place in the outlet-pipe.

What I claim as my invention is—

1. The combination of the strainer *b*, screw-bolt *b*¹, nut *b*², and wire hooks *b*³ with the pipe B, substantially as described.

2. In combination, the cover C, having the rim *c*, with the strainer *b*, having the groove *c*², all as and for the purposes set forth.

3. The device D, having a number of pins extending through it, arranged one above the other, to form a spiral about the rod, one or more of the upper pins being longer than the lower ones, and adapted to hold the device in place in the waste-pipe, all substantially as described.

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Witnesses:

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