(No Model.)

W. HAYTHORN.

STRAINING DEVICE FOR STEAM TRAPS.

No. 379,160. Patented Mar. 6, 1888.

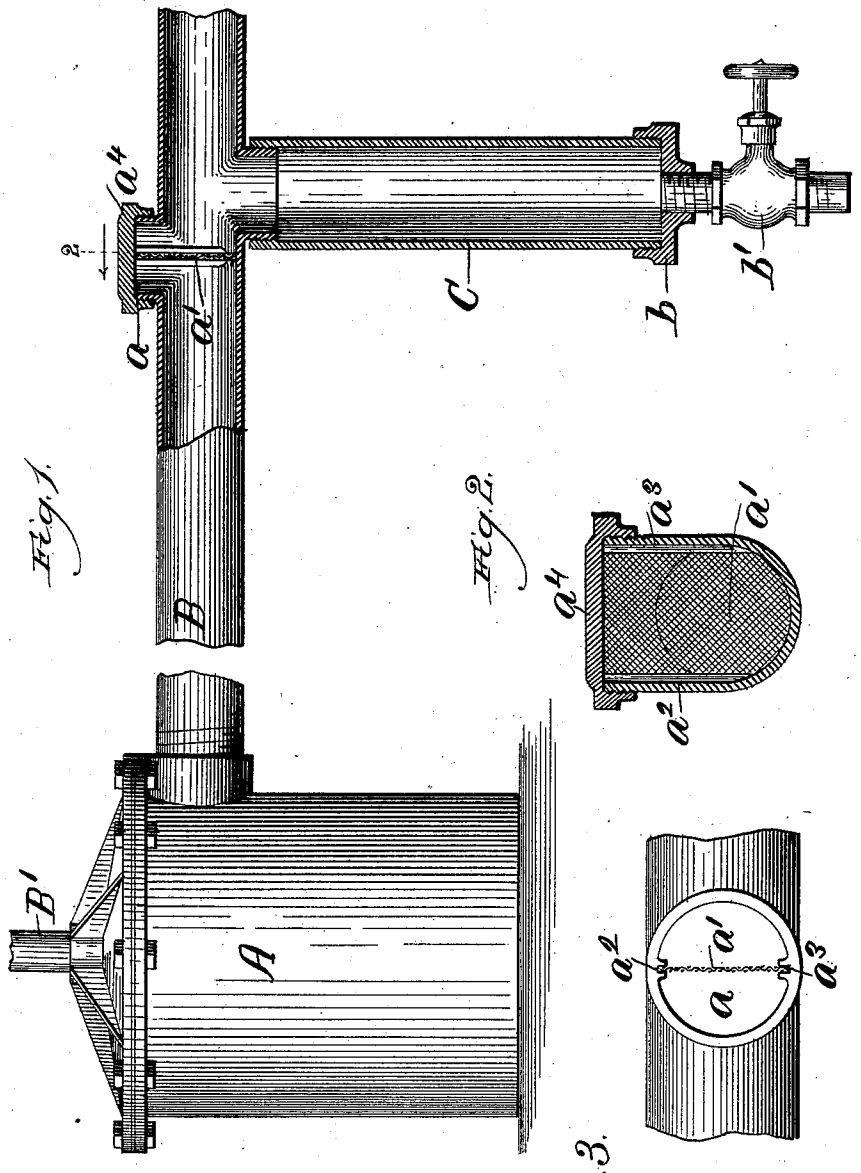


Fig. 1.

Fig. 2.

Fig. 3.

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UNITED STATES PATENT OFFICE.

WILLIAM HAYTHORN, OF CHICAGO, ILLINOIS.

STRAINING DEVICE FOR STEAM-TRAPS.

SPECIFICATION forming part of Letters Patent No. 379,160, dated March 6, 1888.

Application filed July 26, 1887. Serial No. 245,317. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HAYTHORN, of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in a Straining Device for Steam-Traps, of which the following is a full, clear, and exact description, that will enable others to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

The object of this invention is to provide means for preventing sediment, scale, and other matter from entering and obstructing the automatic operation of steam-traps; also means whereby such refuse matter may be conveniently removed without having to disconnect the steam pipes or open the trap.

Figure 1 is a side elevation and partial section of a trap and connection embodying my improved features. Fig. 2 is a transverse section in the plane 2, Fig. 1; and Fig. 3 a plan view with the cap removed.

Referring to the drawings, A represents an ordinary steam-trap usually located at the terminal of a steam circulating appliance; B, the terminal pipe discharging into the trap, and B′ the relief or steam-escape pipe.

The terminal pipe B is provided near the steam-trap with the opening *a*, in which is inserted the removable strainer *a′*, made of wire-cloth or other suitable material.

The section of pipe B is provided or formed on the two interior sides with the vertical rabbeted grooves a^2 a^3, (see Fig. 3,) into which the diaphragm-strainer loosely slides. The opening *a* is closed by the screw-cap a^4, by which means convenient access may be had for the removal of the strainer should the perforated surface of the same become clogged.

To the underside of the pipe B, and just below the strainer, is connected the drop tube C, which forms a catch-basin to receive the deposit of sediment and scale coming through the circulating appliances. The lower end of this drop-tube is provided with the screw-cap *b*, which may be taken off whenever it may become necessary to remove the deposit. The valve *b′*, inserted in the cap *b*, permits of the liquid contents being quickly discharged without removing the cap. By this arrangement the sediment received through the circulation is prevented from entering or interfering with the operation of the steam-trap.

Under the ordinary arrangement, when the trap became clogged and inoperative, it was necessary to remove the whole top or cover, breaking a large joint and involving a considerable loss of time as well as incurring quite an expense, all of which is obviated by the use of my improvement.

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

The combination, with a steam-trap, of a terminal pipe, B, having the capped opening *a* and provided with the rabbeted grooves a^2 a^3, a strainer inserted in said pipe and removably retained therein by said grooves, the drop-tube or catch-basin C, connected to the under side of the pipe B, and the removable cap *b*, provided with the valve *b′*, whereby all sediment and foreign matter are deposited in the drop-tube and prevented from entering and obstructing the working of the trap, substantially as set forth.

WILLIAM HAYTHORN.

Witnesses:
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