

No. 794,015.

PATENTED JULY 4, 1905.

F. J. HOSTETLER.
BOILER CLEANER.

APPLICATION FILED MAY 4, 1905.

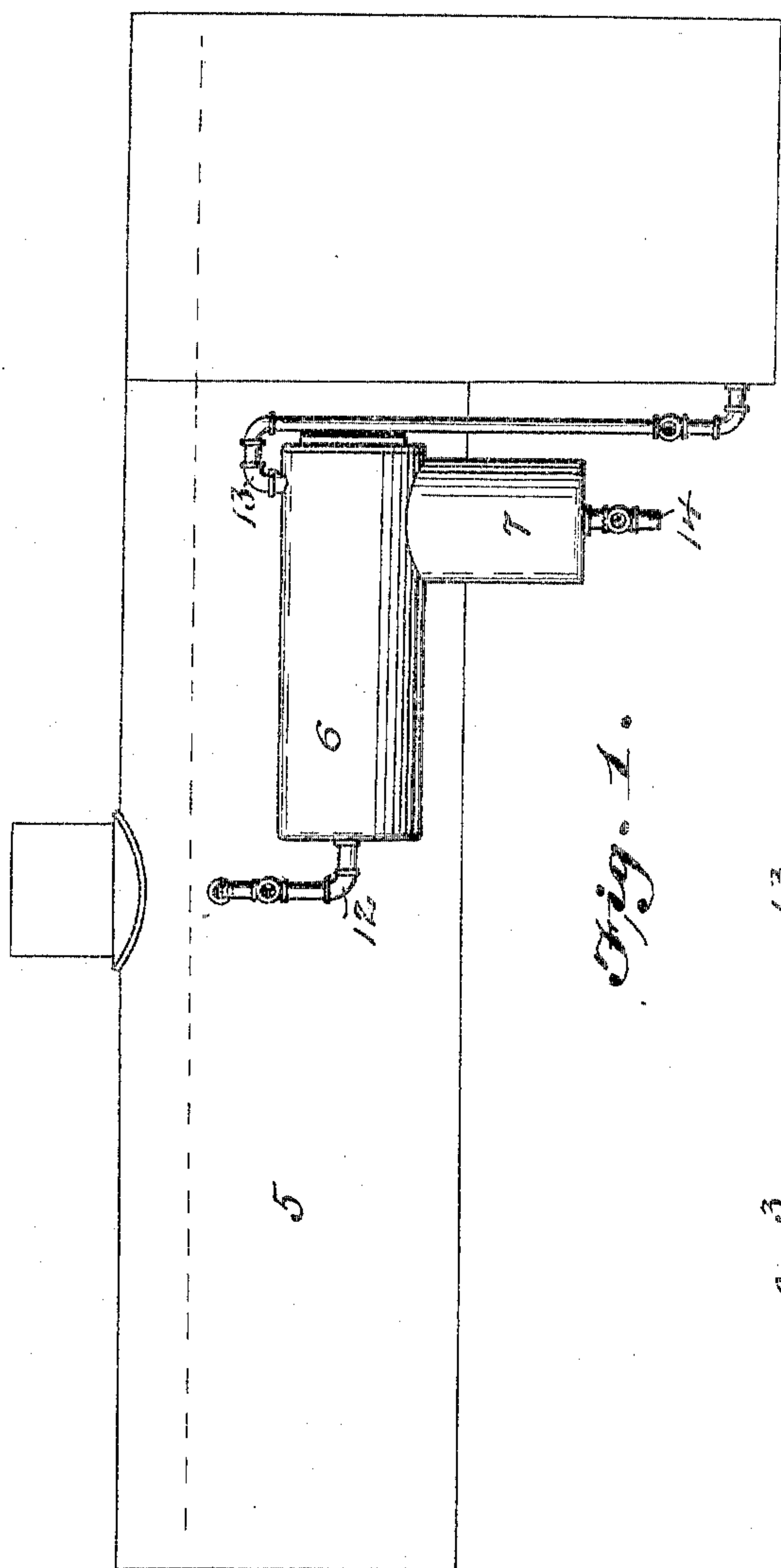


Fig. 1.

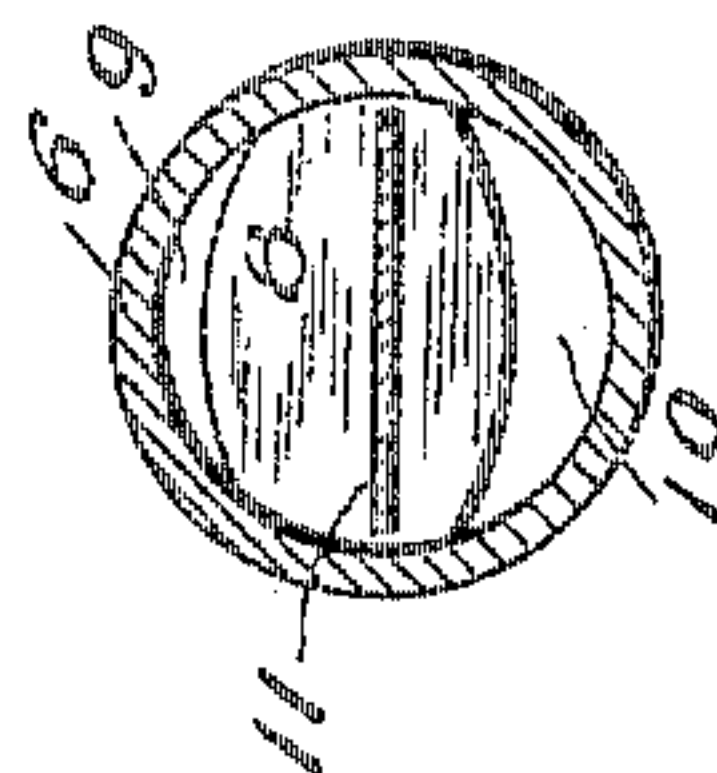


Fig. 3.

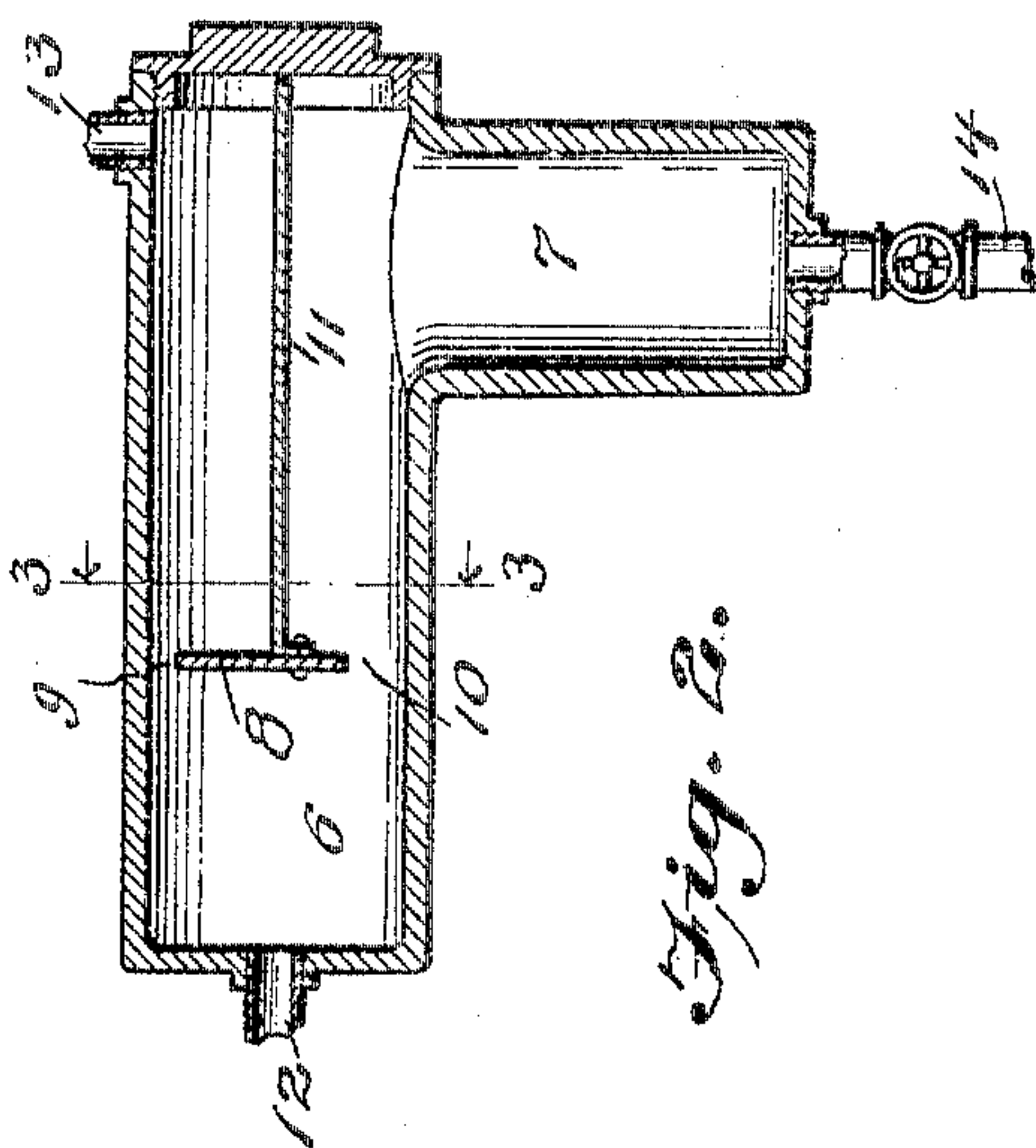


Fig. 2.

Witnesses
F. A. Barron.
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by
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UNITED STATES PATENT OFFICE.

FREDRIC JESSE HOSTETLER, OF MULVANE, KANSAS.

BOILER-CLEANER.

SPECIFICATION forming part of Letters Patent No. 794,015, dated July 4, 1905.

Application filed May 4, 1905. Serial No. 258,877.

To all whom it may concern:

Be it known that I, FREDRIC JESSE HOSTETLER, a citizen of the United States, residing at Mulvane, in the county of Sumner and State of Kansas, have invented new and useful Improvements in Boiler-Cleaners, of which the following is a specification.

My invention is a boiler-cleaner of that type comprising a chamber arranged outside the boiler through which the water circulates and in which the scale and other impurities are precipitated.

The object of the invention is to provide an apparatus of this kind embodying simplicity of construction and thorough efficiency of operation.

In the accompanying drawings, Figure 1 is an elevation of a boiler with my apparatus in position. Fig. 2 is a longitudinal sectional view of the apparatus. Fig. 3 is a transverse section on the line 3 3 of Fig. 2.

Referring specifically to the drawings, 5 denotes a boiler which may be of any construction or type, nothing being claimed with respect thereto. The precipitation-chamber is indicated at 6 and is provided with a depending branch 7. Inside the chamber 6 is a vertically-arranged baffle-plate 8, which extends to the side walls of the chamber, but is spaced from the top and bottom thereof, the top space 9 being narrow and the bottom space 10 wide.

At or about the middle of the chamber 6 is a horizontal partition 11, which extends from one end of the chamber to the baffle-plate, being secured to the latter. The partition is spaced slightly from the walls of the chamber for a purpose to be hereinafter described.

An inlet-pipe 12 enters the front end of the chamber 6. The outlet-pipe 13 extends from top of the chamber, near the rear end thereof, above the partition 11. The inlet-pipe extends into the boiler just below the water-line, and the outlet-pipe enters the lowest part of the boiler, so that there is a continuous circulation of water through the chamber. The lower end of the branch 7 is fitted with a blow-off pipe 14.

The operation of the apparatus is as follows: The water entering the chamber 6 strikes the baffle-plate 8, which retards its flow somewhat, causing the scale, dirt, &c., to be precipitated and to pass under the baffle-plate through the space 10 into the branch 7, where it collects and from which it can be blown when necessary through the blow-off pipe 14. As the partition 11 is slightly spaced from the walls of the chamber, there will be sufficient circulation under the partition to carry the impurities to the branch 7. There is, however, no circulation in the latter, and the impurities collecting therein will not again be taken up by the water to be passed into the boiler. The clear water passes over the baffle-plate through the space 9 and out of the chamber and back to the boiler through the outlet-pipe 13.

Having thus described my invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. The combination with a boiler; of a precipitation-chamber, having a depending branch, and an inlet from the boiler; a baffle-plate in the chamber between the inlet and the branch, and spaced from the top and bottom of the chamber; an outlet to the boiler behind the baffle-plate; and a partition in the chamber between the branch and the outlet.

2. The combination with a boiler; of a precipitation-chamber having a sediment-collection receptacle; an inlet from the boiler; a baffle-plate in the chamber between the inlet and the receptacle, and spaced from the top and bottom of the chamber; an outlet to the boiler behind the baffle-plate; and a partition in the chamber between the receptacle and the outlet.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FREDRIC JESSE HOSTETLER.

Witnesses:

MARION L. HOWARD,
GEORGE HOWARD.