(No Model.)

J. S. PRIEST.

BOILER FOR STEAM HEATING.

No. 369,470. Patented Sept. 6, 1887.

Fig. 1.

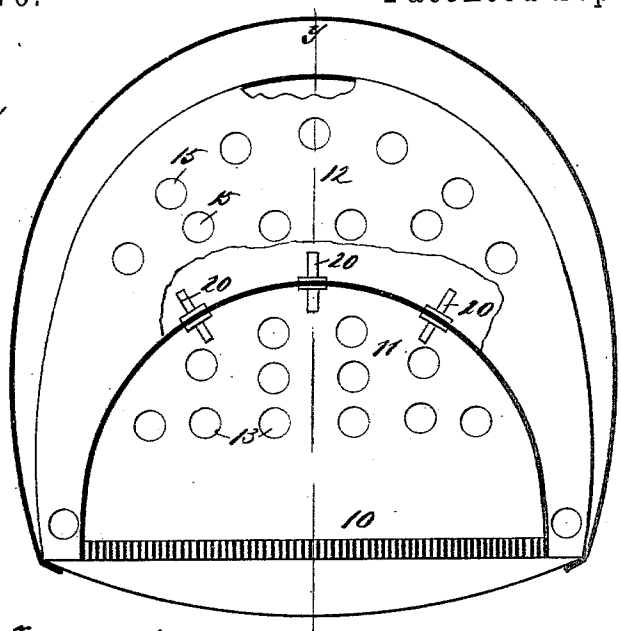
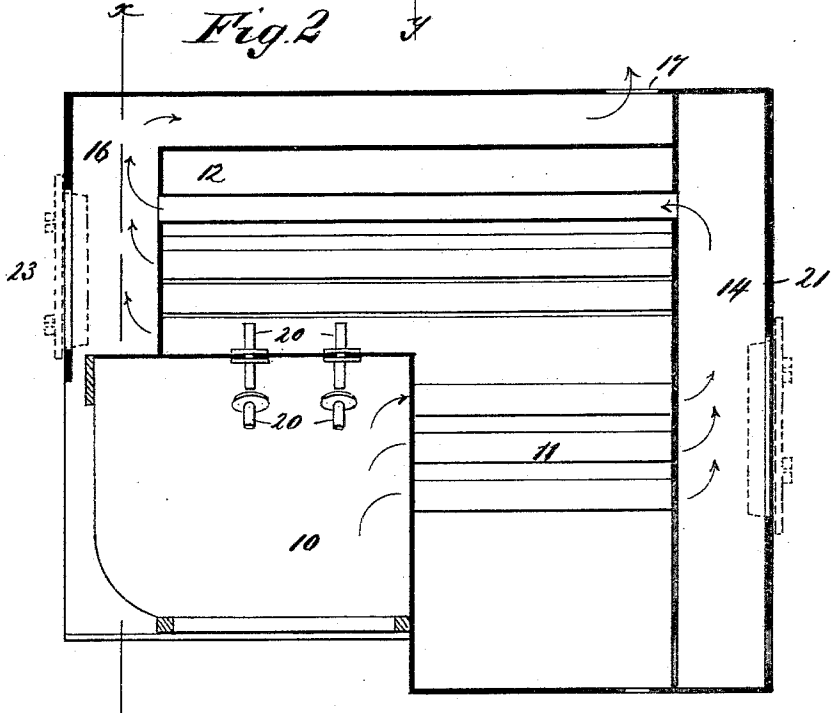


Fig. 2



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES SMITH PRIEST, OF MANAYUNK, PENNSYLVANIA.

BOILER FOR STEAM-HEATING.

SPECIFICATION forming part of Letters Patent No. 369,470, dated September 6, 1887.

Application filed June 7, 1887. Serial No. 240,521. (No model.)

To all whom it may concern:

Be it known that I, JAMES SMITH PRIEST, of Manayunk, in the county of Philadelphia and State of Pennsylvania, have invented a new and Improved Boiler for Steam-Heating, of which the following is a full, clear, and exact description.

This invention relates to the construction of boilers, the object of the invention being to provide a low-pressure boiler and one that is especially applicable for use as a boiler for steam-heating purposes.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in both the views.

Figure 1 is a sectional front elevation of my improved boiler, the view being taken on line *x x* of Fig. 2; and Fig. 2 is a central longitudinal sectional view upon the line *y y* of Fig. 1.

In constructing such a boiler as the one illustrated in the drawings above referred to, I provide a fire-chamber, 10, that is in advance of the main section, 11, of the boiler and beneath a crescent-shaped hood, 12, which extends forward in advance of the main section of the boiler. Primary flues are shown at 13, and extend through the main body of the boiler to a chamber, 14, at the rear of the boiler, the products of combustion passing through the flues 13 to the chamber 14, and thence through flues 15 to a chamber, 16, that is in advance of the crescent-shaped hood 12, passing from the chamber 16 above the boiler to the exit 17, which communicates with the stack.

In the crown-sheet of the boiler I insert a number of copper plugs, 20, so that the heat generated within the fire-box will be more quickly transmitted to the water within the boiler than would otherwise be the case.

With such a boiler as the one above described I am enabled to utilize the greater portion of the heat generated within the fire-box 10. In the back wall of the boiler-case, which is shown at 21, there is a doorway, that is normally closed by a door, the position of which is indicated by dotted lines, which doorway is arranged for the purpose of providing access to the flues 13, access to the flues 15 being obtained by means of a doorway that is normally closed by a door the position of which is indicated at 23.

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

The boiler consisting of the main inclosing-case, within which is arranged the crescent-shaped boiler proper, the crescent-shaped fire-chamber, and the rear and front chambers, said fire-chamber extending back about midway of the lower half of the boiler proper and also forward beyond the front end of the said boiler proper into the front chamber, and said boiler proper having two series of flues extending through it, one series connecting the fire-chamber with said rear chamber, and the other series connecting the rear and front chambers together, substantially as set forth.

JAS. SMITH PRIEST.

Witnesses:
JAS. H. FLOOD,
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