

(No Model.)

2 Sheets—Sheet 1.

G. CLARK.
STEAM RADIATOR.

No. 286,780.

Patented Oct. 16, 1883.

Fig. 1

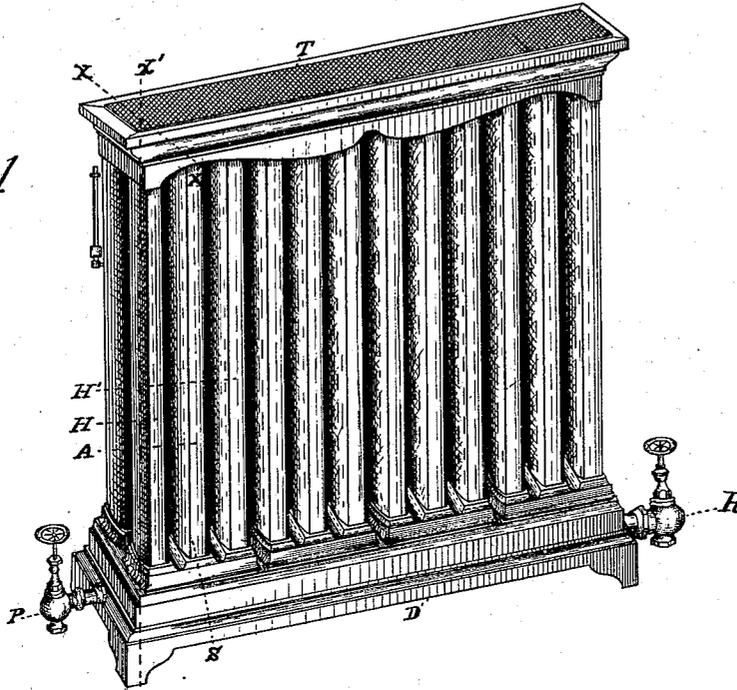
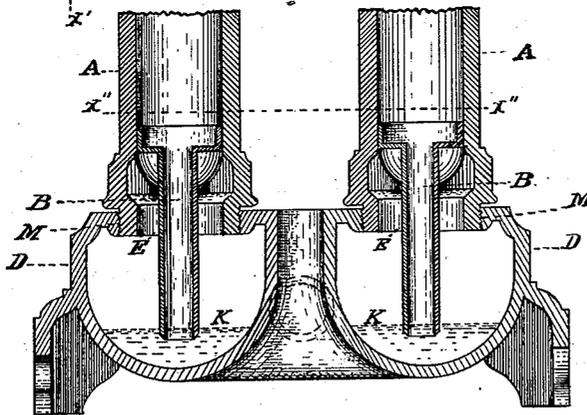


Fig. 2



Witnesses

Walter S. Stearns
Louis H. Baker

Inventor

George Clark
By Horace Lyman Hicks
his Attorney

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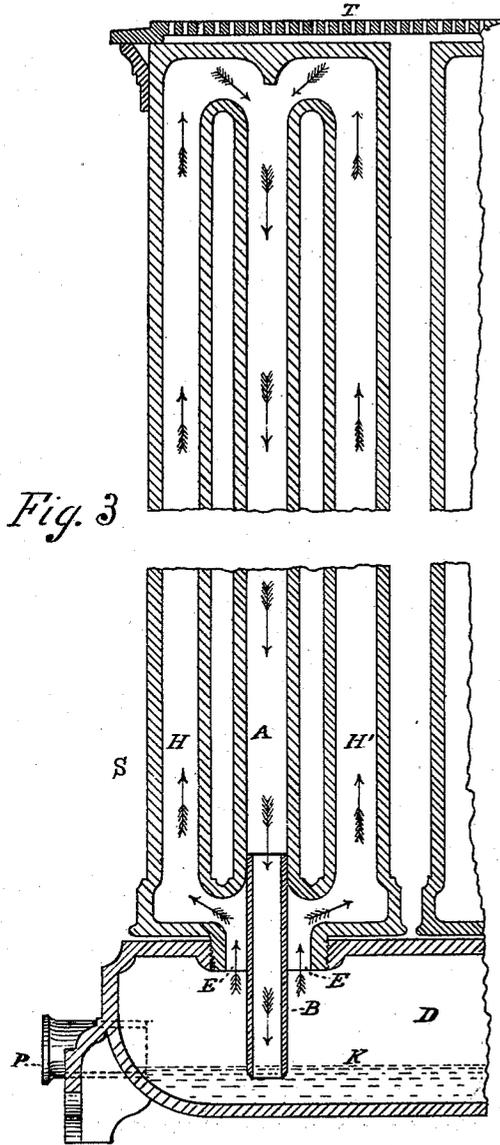


Fig. 3

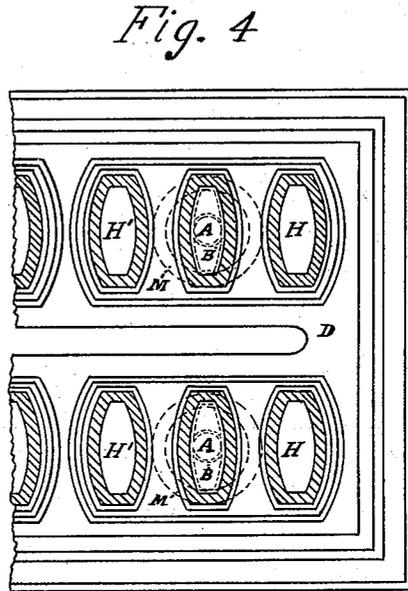


Fig. 4

Witnesses

Walter H. Steiman

Louis N. Baker

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George Clark,
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UNITED STATES PATENT OFFICE.

GEORGE CLARK, OF WEST TROY, NEW YORK, ASSIGNOR OF ONE-EIGHTH
TO CHARLES TEUSCHER, OF SAME PLACE.

STEAM-RADIATOR.

SPECIFICATION forming part of Letters Patent No. 286,730, dated October 16, 1883.

Application filed February 10, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE CLARK, of the village of West Troy, county of Albany, and State of New York, have invented a new and useful Improvement in Steam-Radiators, of which the following is a specification.

My invention applies to steam-radiators composed of separate metallic pipes set into and opening into a common base, which base is inclosed and furnished with stop-cocks for the inlet of steam and the outlet of water formed by the condensation of the steam, the pipes furnishing a means for the more extended circulation of the steam, and diffusing warmth by reason of the heat imparted to their surfaces by the steam so circulating within them; and my invention consists in the organization of a steam-radiator, as will be hereinafter more fully set forth.

Accompanying and forming a part of this specification are two plates containing four figures illustrating my invention, of which—

Figure 1 is a view of my invention in perspective. Fig. 2 is a cross vertical section taken on the line $x x$ of Fig. 1. Fig. 3 is a vertical section taken longitudinally on the line $x' x'$ of Fig. 1. Fig. 4 is a horizontal section taken on the line $x'' x''$ of Fig. 2.

The several parts of the device of which my invention is composed are designated by letter reference and their operations explained as follows:

D is the base, and T the top, of the radiator.

H, A, and H' are three chambers, constituting one of a series, of one or more of which the radiator is composed, in combination with a base and top, H and H' being the outer chambers, and A the middle one or discharge-pipe.

B is the separable tube, placed in the middle chamber, A, and extending down to the bottom of the base D.

S is a section of the radiator of one of the series composed of the chambers H, A, and H'.

E is the opening from the base D to the base of the steam-section S.

M is the joint formed by screwing the steam-section S to the base D.

K is the water formed by the condensation

of the steam that has been passed through the outer chambers, H and H', and discharged through the middle chamber, A, and the tube B to the bottom of the base D.

P is the inlet for steam, and R is the outlet for the water formed by the condensation of the steam. The arrows indicate the course taken by the steam after passing from the inlet P through the opening E into the steam-pipe S. The steam, entering the base D through the inlet-pipe P, takes the course indicated by the arrows, and passes through the opening E up into the outside chambers, H and H', to the top of the pipe S, where it again unites and follows the course indicated by the arrows down through the middle chamber, A, and the tube B to the lower part of the base D, the new steam being thereby kept separate and distinct from the old steam, and suffering no check nor losing any of its heating-power through the presence or resistance of any air-cushion in any one of the three chambers.

From the foregoing description and reference to the drawings it will be observed that each radiator-section S for the reception and passage of the steam is so constructed as to comprise three chambers, each chamber opening into the other, as shown in Fig. 3 of the drawings; also, by making the tube B separable, which simplifies the casting of the section S and reduces the cost of construction, it can readily and easily be adjusted to the base of the radiator to secure a proper steam-trap, as shown.

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

In a steam-radiator, the combination of three chambers, constituting a series, and a separable dependent or suspended tube attached to the intermediate chamber of the series, and extending down into the radiator to form a steam-trap, substantially as and for the purpose stated.

Dated Troy, New York, February 8, 1883.

GEORGE CLARK.

In presence of—

CHAS. H. TYLER,
GEO. M. PAYFER.