

S. R. WILMOT.
Steam-Radiators.

No. 153,139.

Patented July 14, 1874.

Fig:1

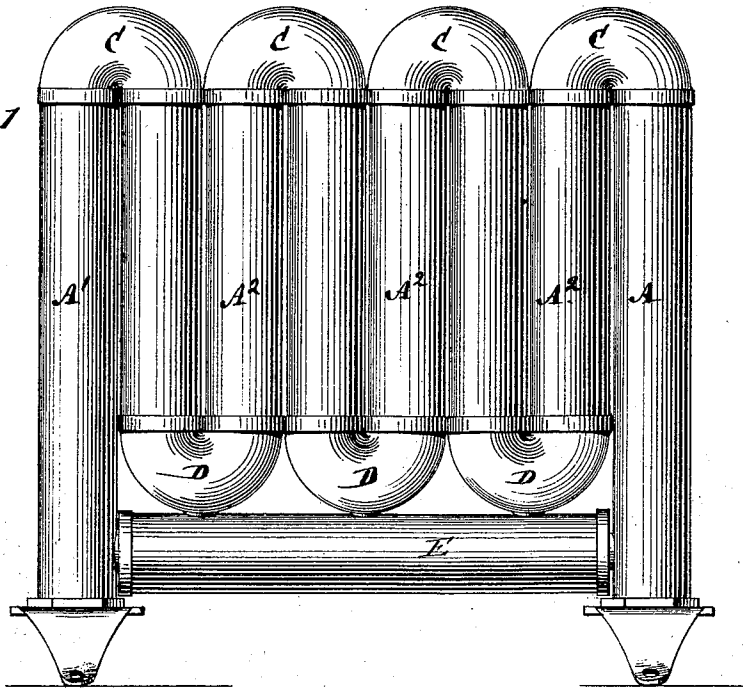
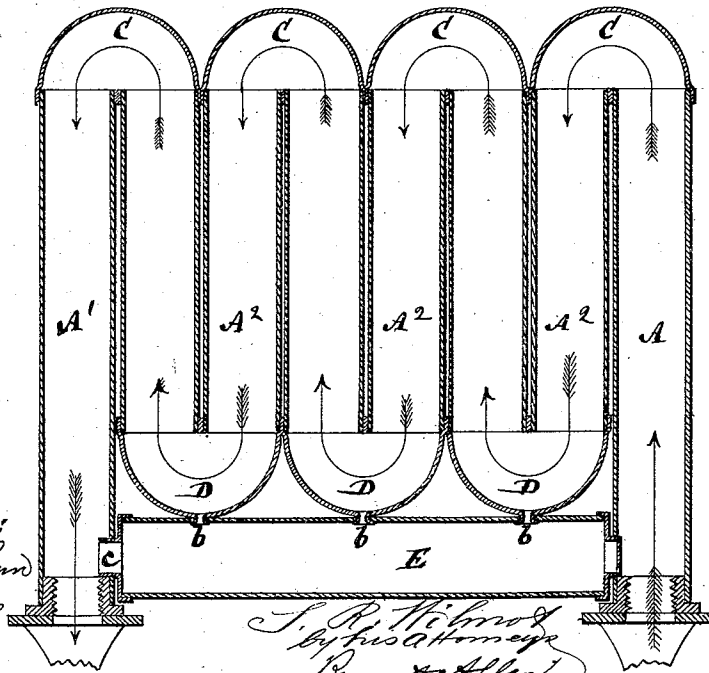


Fig:2



Witnesses:
Michael Brand
Fred. Weber

S. R. Wilmot
by his attorneys
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UNITED STATES PATENT OFFICE.

SAMUEL R. WILMOT, OF BRIDGEPORT, CONNECTICUT.

IMPROVEMENT IN STEAM-RADIATORS.

Specification forming part of Letters Patent No. **153,139**, dated July 14, 1874; application filed February 7, 1874.

CASE A.

To all whom it may concern:

Be it known that I, SAMUEL R. WILMOT, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented an Improvement in Steam-Radiators, of which the following is a specification:

This invention consists in a steam-radiator, composed of any number of vertical pipes, not only united at their upper ends by elbows, but also at their lower ends by like connections, in combination with drip-openings, establishing communication between the bottoms of said lower elbows, and a horizontal base-pipe, for escape of the water of condensation.

By this construction, a continuous circulation or flow is kept up through the vertical pipes, free from any interference by the water of condensation, which readily passes, as fast as formed, through the drip-openings of the lower elbows into the waste-pipe.

In the accompanying drawing, Figure 1 represents a longitudinal elevation of a steam-radiator constructed in accordance with my improvement, and Fig. 2 a longitudinal section of the same.

A A¹ are the end vertical pipes of my improved steam-radiator—which is here shown as of a single construction, but which may be double—that is composed of any number of such structures, arranged one behind the other, or which may be extended to any required length, regardless of the number of intermediate vertical tubes A². These latter tubes A² are connected alternately with each other at their tops and bottoms, and with the end pipes A A¹ at their tops; by upper and lower elbows C D, the lower return ones, D, communicating

at their bottoms, by drip-openings or connections *b*, with a horizontal base-pipe or conduit, E, extending between the receiving vertical pipe A of the radiator and the outlet vertical pipe A¹ for the steam. This base-pipe E is in free communication at its back end by an aperture, *c*, with the outlet vertical pipe A¹, but is closed at its opposite end, or only provided with a very contracted aperture, to provide for the escape into it of any water that might collect in the bottom of the steam-receiving pipe A.

In this way, or by this construction, it will be seen that a continuous circulation or flow of the steam from one end of the radiator to the other is kept up, free from any interference by water of condensation forming in the vertical pipes A², such water at once escaping by the drip-openings *b* into the horizontal base E, from whence it is passed or run outward, and which is not a steam-conduit, or, at least, not designedly such.

Instead of the end vertical pipes A A¹ for the admission and escape of the steam, various arrangements or dispositions of parts may be adopted for the passage or circulation of the steam through the radiator.

I claim—

The combination of the lower return-elbows D, having drip-openings *b*, with the lower horizontal base or pipe E for the water of condensation, the vertical pipes A², and the upper elbows C, substantially as specified.

SAMUEL R. WILMOT.

Witnesses:

HENRY T. BROWN,
MICHAEL RYAN.