

(No Model.)

J. B. PIERCE.  
STEAM RADIATOR.

No. 316,056.

Patented Apr. 21, 1885.

Fig. 1.

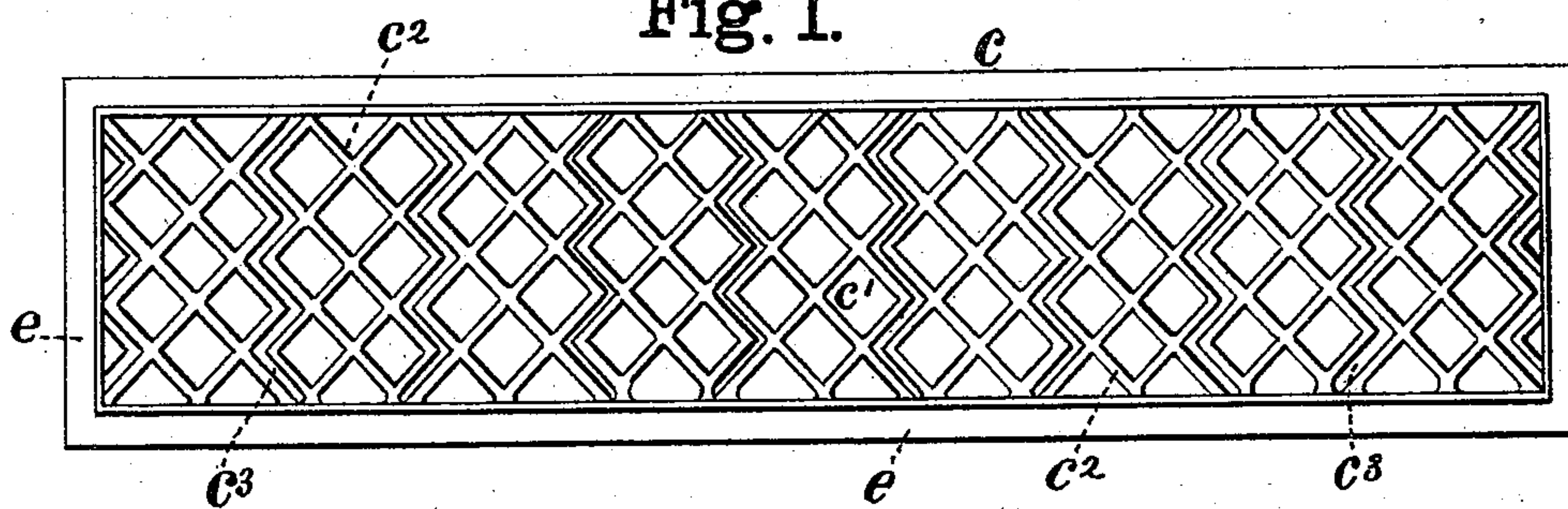


Fig. 2.

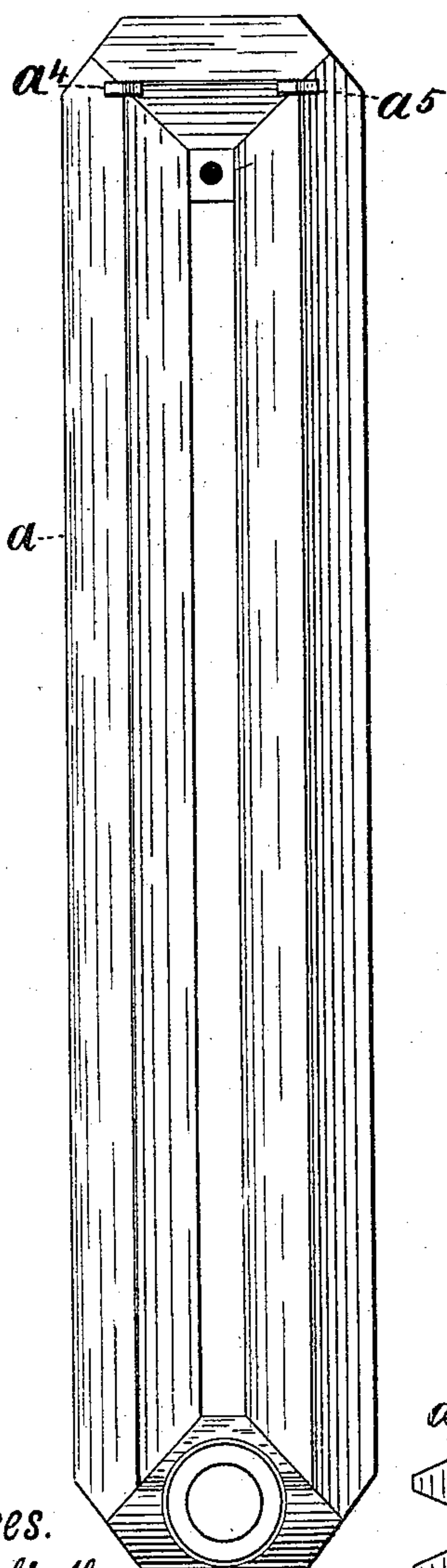


Fig. 3.

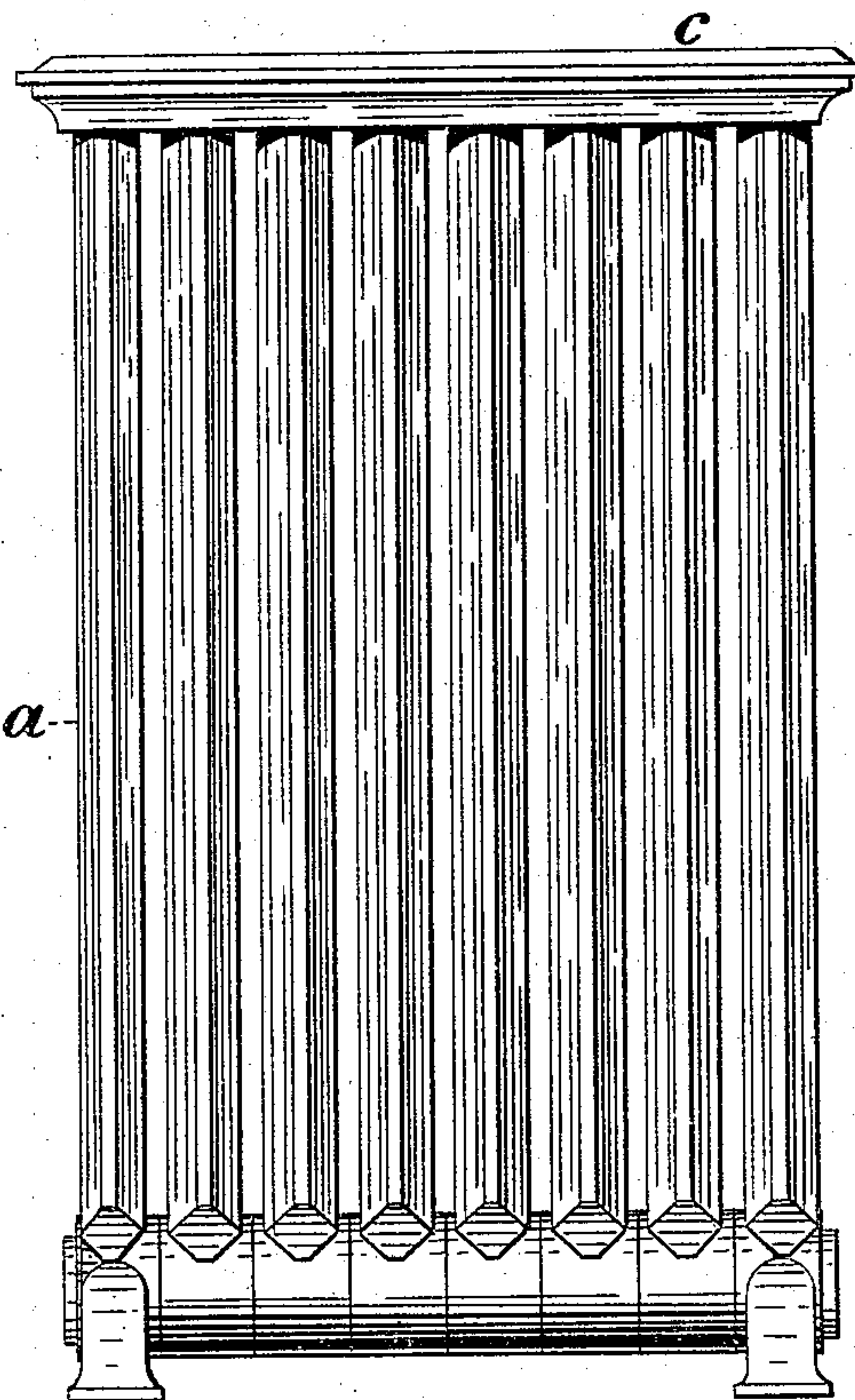
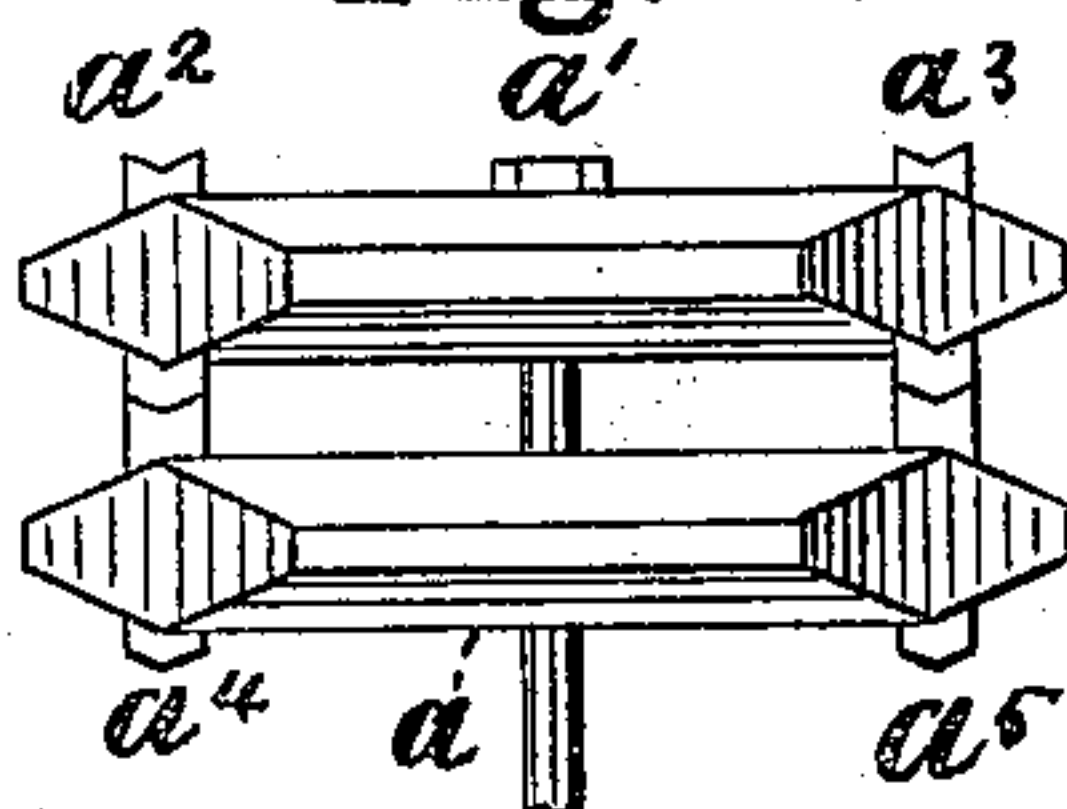


Fig. 4.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

JOHN B. PIERCE, OF BUFFALO, NEW YORK.

## STEAM-RADIATOR.

SPECIFICATION forming part of Letters Patent No. 316,056, dated April 21, 1885.

Application filed June 20, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN B. PIERCE, a citizen of the United States, residing in Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Steam-Radiators, of which the following is a specification.

The object of this invention is to provide the means whereby the radiator screen-top may be cast without warping or cracking, and without strain on the casting, and in certain other details of construction, all of which will be fully and clearly hereinafter shown and explained by reference to the accompanying drawings, in which—

Figure 1 is a top view, showing the screen-top of the radiator. Fig. 2 is an enlarged side elevation of one of the sections of the radiator. Fig. 3 represents a side elevation of a radiator complete, and Fig. 4 is a top view of two of the sections put together.

The radiator is made up of sections *a*, adapted to set vertically, and are put together at the lower ends by means of nipples made and secured in the usual way, the upper part being secured by a bolt, *a'*, and the nibs *a<sup>2</sup> a<sup>3</sup> a<sup>4</sup> a<sup>5</sup>*. Each section is provided with four of said nibs, two on each side, as shown in Fig. 4, which secure and hold the sections rigidly in place when the bolt *a'* is in position. This is a much stronger arrangement than when only one of said nibs is used on each side of the section, which has heretofore been used.

Heretofore the great difficulty in making the screen-tops *c* has been their liability to warp or strain or crack the casting, on account of the unequal contraction in cooling. The open-work portion *c'* of the top, being lighter or having less metal, cools first, and consequently shrinks quicker, and either springs or warps the whole casting, and often cracks it.

The object of my invention is to obviate this objection; and it consists in forming the open-work into separate sections *c<sup>2</sup>*, thereby leaving an opening, *c<sup>3</sup>*, between each section, which openings are continuous across the open-work, and are arranged across the top either at right angles to the length of the same or run diagonally across.

In the drawings I have shown a plain diagonal square open-work; but any ornamental open-work may be used provided it be in sections running transversely or diagonally across the screen-top, the object being to leave an opening at short intervals between each section, as before mentioned, so as to prevent the warping or cracking of the screen-top. The sides *e* are cast in one piece with the ornamental or open-work top, as will be seen.

I claim as my invention—

1. A radiator screen-top consisting of the sides or frame *e*, having the intermediate gratings or open-work, *c'*, divided into sections across the top by openings *c<sup>3</sup>*, substantially as and for the purposes described.

2. A radiator screen-top having a surrounding frame, *e*, in which the intermediate grating or open-work portion, *c'*, is divided into separate and distinct sections, as and for the purposes specified.

3. A steam-radiator section adapted to set vertically, and having the nibs *a<sup>2</sup> a<sup>3</sup> a<sup>4</sup> a<sup>5</sup>*, arranged two on each side of a section, in combination with a bolt for securing them together, substantially as described.

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