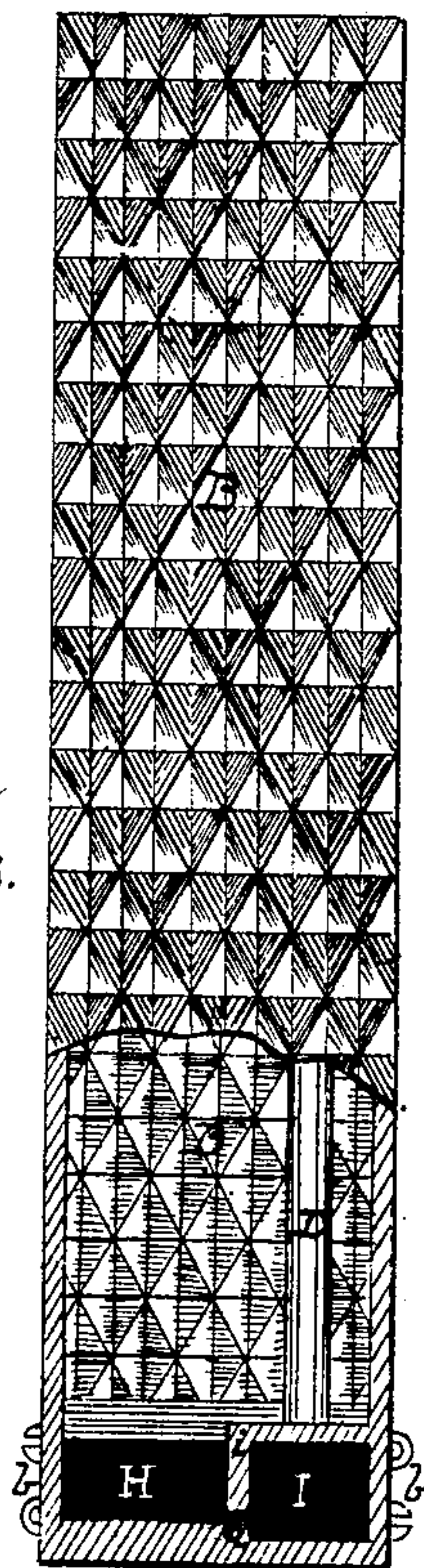
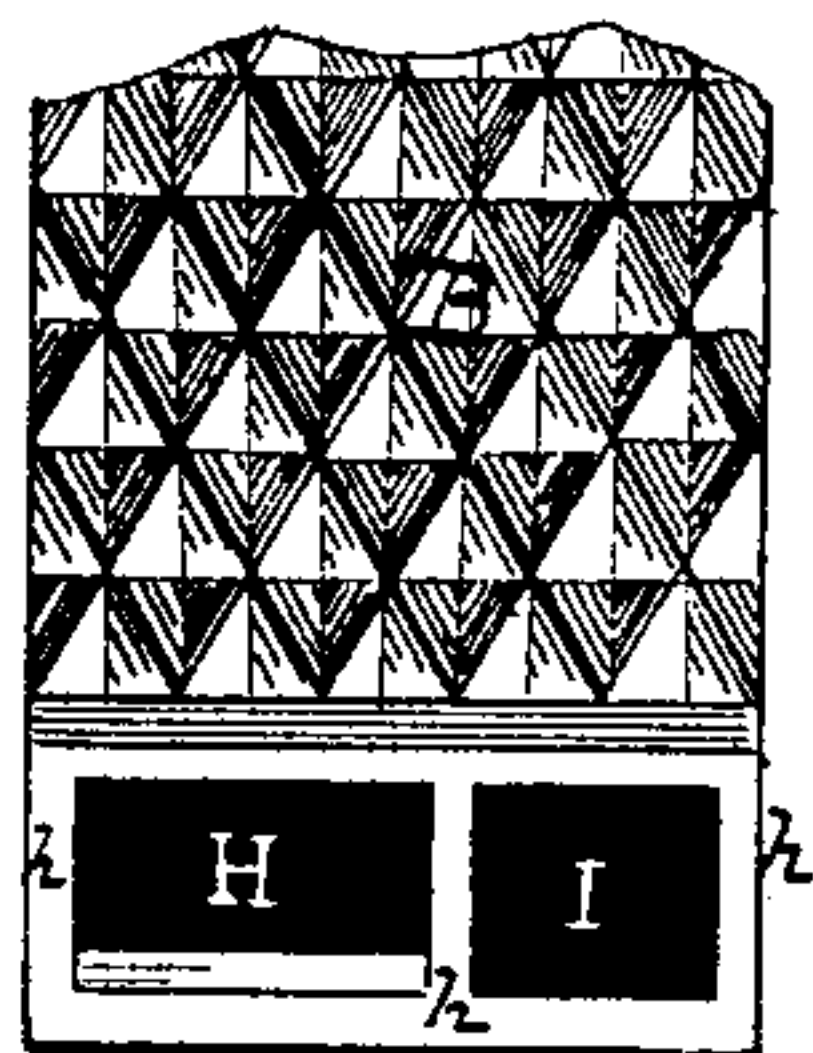
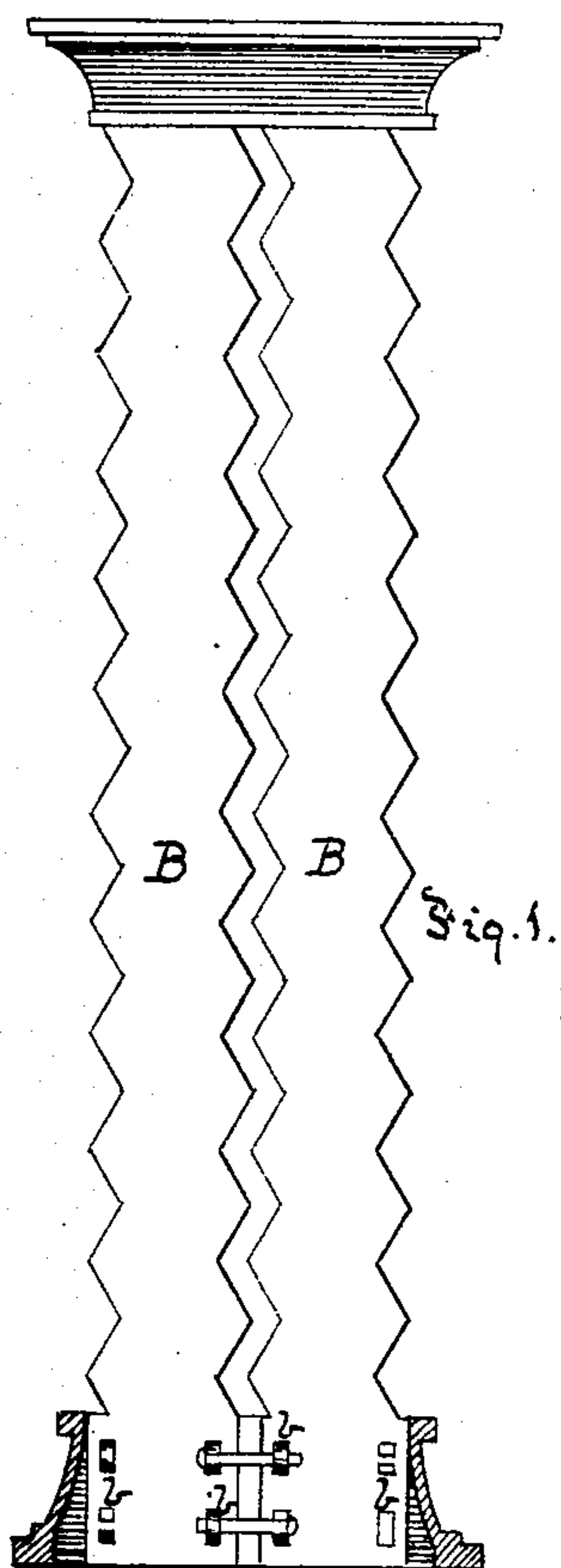


J. C. KILGORE.

Steam-Heaters.

No. 133,942.

Patented Dec. 17, 1872.



WITNESSES

R. C. Henderson.

James I. Kay.

INVENTOR

John C. Kilgore,  
by Bakewell, Christy & Kerr  
his Attys.



# UNITED STATES PATENT OFFICE.

JOHN C. KILGORE, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO THE  
ECLIPSE STEAM MANUFACTURING COMPANY, OF SAME PLACE.

## IMPROVEMENT IN STEAM-HEATERS.

Specification forming part of Letters Patent No. 133,942, dated December 17, 1872.

*To all whom it may concern:*

Be it known that I, JOHN C. KILGORE, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Steam-Heating Radiators; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1, by an edge view of two sections, illustrates the manner in which they are united together; Fig. 2 is a side view of the lower end of one of the sections; and Fig. 3, by an elevation partly in section, illustrates the internal structure.

Like letters of reference indicate like parts in each.

My improvement relates to the construction of a steam-heating radiator in detachable sections, with devices, substantially as hereinafter described and claimed, for securing its efficient operation.

To enable others skilled in the art to make and use my improvement, I will proceed to describe its construction and manner of use.

The radiator is made of hollow boxes, B, of such form that they may be set in close contiguity, in which position they are secured by bolts and lugs b. At or near the lower end of each section, and, preferably, in one corner, openings, H, are made, surrounded by a rim, h, on the outside, for convenience in securing a steam-tight joint. Inside these openings H open directly into the hollow section, as in Fig. 3; and when a series of such sections are secured together the openings H coincide, so

as to make a continuous steam-passage from the steam-pipe which is connected with the outer opening of the first section through the entire series. Steam is thus supplied from any suitable steam-generator to the inside of each section of the entire series. In the opposite lower corner, by means of a partition, i, a chamber, I, is made through the entire series. The chamber I of each section has a pipe, D, tapped into its partition i, which pipe D extends nearly to the top of its section. By means of this pipe the air is carried off as the steam enters till all the air is carried off, when the steam may be permitted to pass on to another heater, or be cut off by any suitable cock at the air-exit opening of the last section. The water of condensation flows off through the steam-trap a into the chamber I, whence it is drawn off at pleasure as it accumulates from time to time.

What I claim as my invention, and desire to secure by Letters Patent, is—

A series of sectional steam-heating radiators forming, by being brought face to face, a continuous open steam-passage, H, through the series; also, a separate but continuous air-escape chamber, I, in combination with a pipe, D, in each section, which extends from the chamber I to or nearly to the opposite end of the section, substantially as set forth.

In testimony whereof I, the said JOHN C. KILGORE, have hereunto set my hand.

JOHN C. KILGORE.

Witnesses:

W. N. PAXTON,  
THOS. B. KERR.