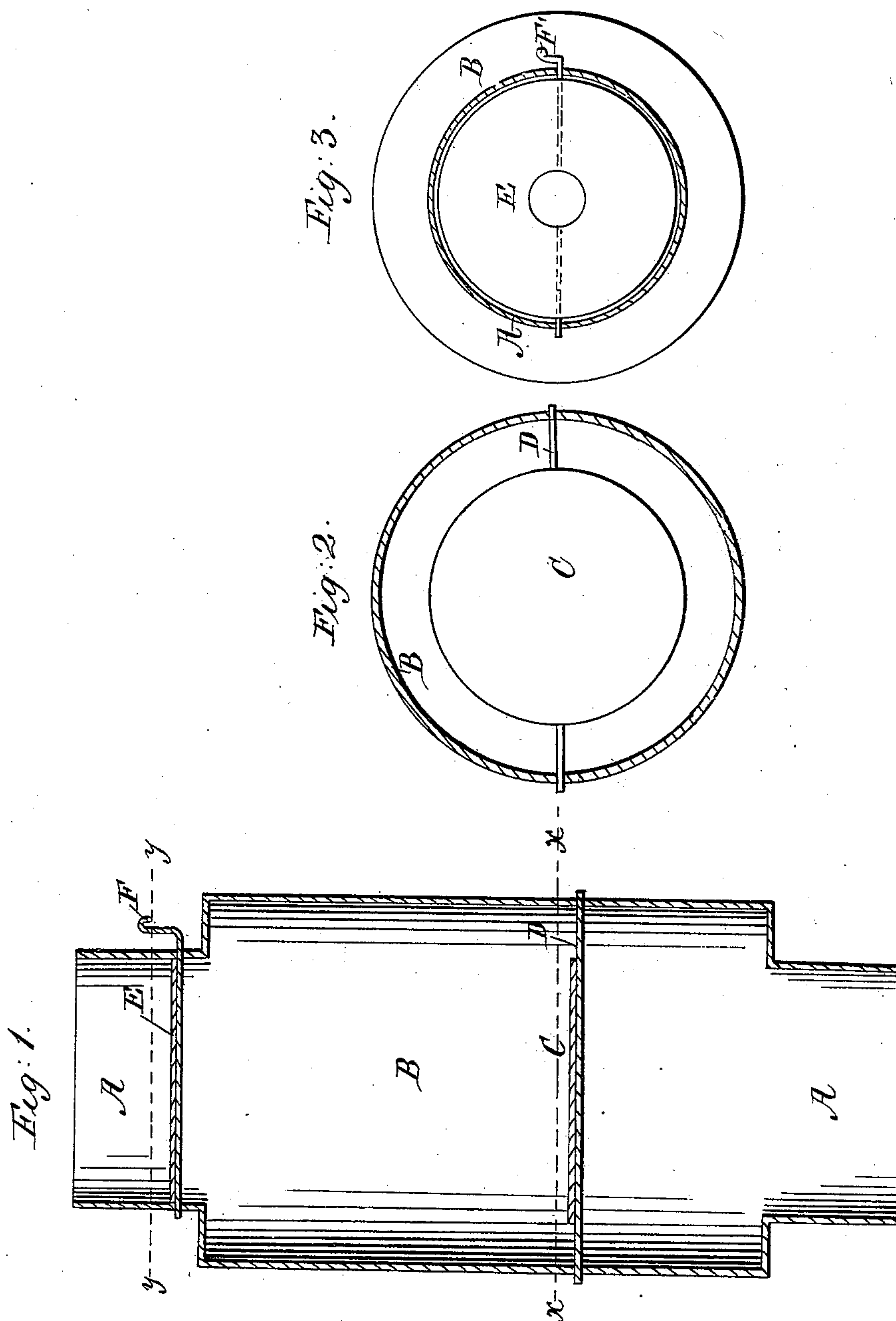


A. EDWARDS.
Radiating Heat Regulator.

No. 44,170.

Patented Sept. 13, 1864.



Witnesses.
L. L. Coburn
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Inventor
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UNITED STATES PATENT OFFICE.

ALFRED EDWARDS, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN RADIATING HEAT-REGULATORS.

Specification forming part of Letters Patent No. 44,170, dated September 13, 1864.

To all whom it may concern:

Be it known that I, ALFRED EDWARDS, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Radiating Heat-Regulators; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 represents a vertical central sectional view of my invention; Fig. 2, a transverse sectional view at the red line *x* in Fig. 1, and Fig. 3 a transverse sectional view at the red line *y*.

The nature of my invention consists in the use of a chamber containing a metallic plate, arranged as hereafter described, constructed in the stove-pipe for the purpose of regulating the heat of the stove.

To enable those skilled in the art to manufacture and use my invention, I will proceed to describe the same with particularity.

The same letters of reference refer to the corresponding parts in the different figures.

A represents the ordinary stove-pipe, and B the chamber, which is either constructed in the pipe or constructed separately and put into the pipe, forming a part of the pipe, as shown. In the said chamber B there is a plate, C, which is supported by the rod D. The plate C is arranged within the said chamber so as to be directly over the pipe A, and the annular space around said plate between it and the wall of the chamber is equal to the space in the pipe A. The plate C is arranged horizontally or at right angles to the walls of the chamber, and may be fixed rigidly, or it may be so arranged that it can be turned for the purpose of removing the soot and cinders that might lodge upon it. The chamber B may be constructed of any desired relative

size to the pipe A; but whatever its size is the size of the plate C is varied accordingly, so that the area of the annular space between the plate and the walls of the chamber shall be equal to the area of the space in the pipe A. By this arrangement the heat of the stove passing up the pipe A strikes the plate C and is radiated, and at the same time, on account of the annular space around the plate C being equal to the capacity of the pipe A, the draft of the stove is not checked.

E is a common damper put in the pipe A for the purpose of regulating the draft of the stove; and F is the handle by which the said damper is turned. The said damper E may be put into the pipe A either above or below the chamber B.

In all ordinary heat regulators whenever the heat is in any way checked or radiated, the draft of the stove is also checked, and the result is that the stove smokes and is apt to become clogged, and not unfrequently the regulators are thrown away as useless.

I do not confine myself to putting the plate C at any particular part of the chamber, neither do I limit myself to any particular form of chamber.

Having thus fully described the construction and operation of my invention, what I claim, and desire to secure by Letters Patent, is—

1. The chamber B, provided with the plate C, when arranged in the pipe A, substantially as and for the purposes set forth.

2. The combination and arrangement of the chamber B, the plate C, the pipe A, and damper E, constructed and operating substantially as and for the purposes herein described.

ALFRED EDWARDS.

Witnesses:

LEWIS L. COBURN,
W. E. MARRS.