R. S. BOSTWICK.

Stove.

No. 168,868. Patented Oct. 19, 1875.

Fig: 1.

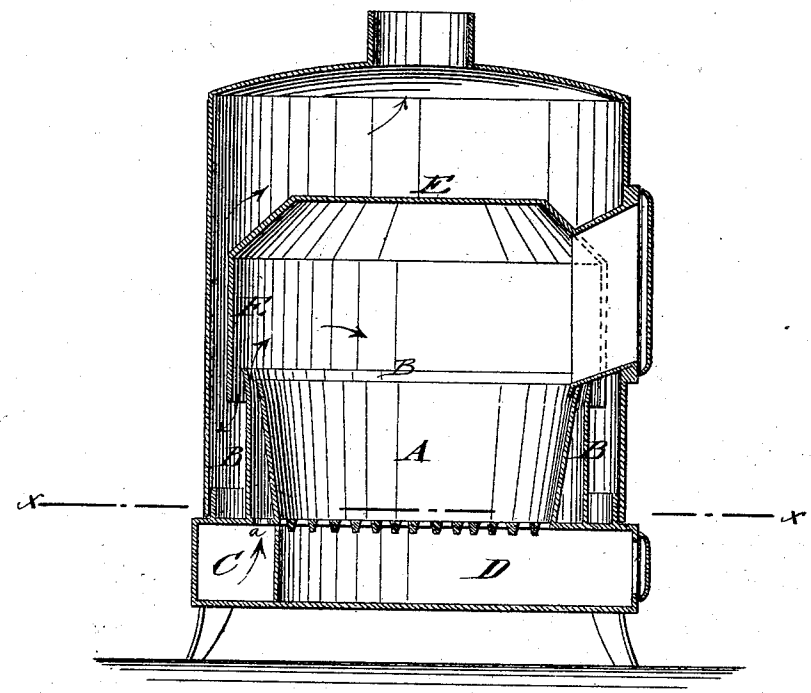
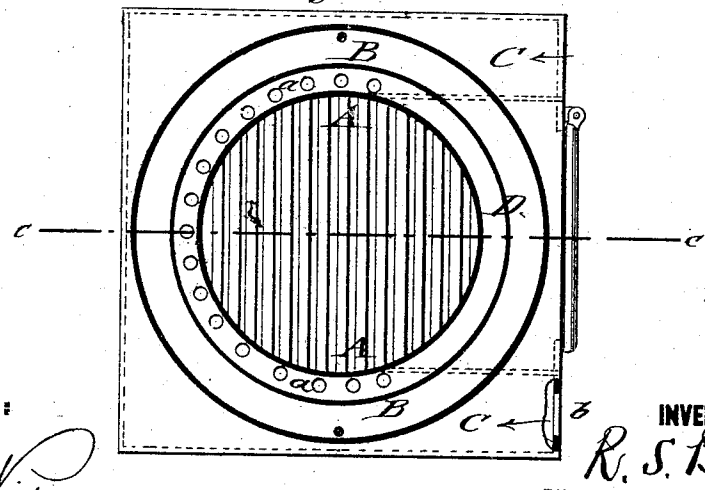


Fig: 2.



WITNESSES:

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INVENTOR:

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UNITED STATES PATENT OFFICE.

ROBERT S. BOSTWICK, OF JACKSON, MICHIGAN.

IMPROVEMENT IN STOVES.

Specification forming part of Letters Patent No. **168,868**, dated October 19, 1875; application filed July 31, 1875.

To all whom it may concern:

Be it known that I, ROBERT S. BOSTWICK, of Jackson, in the county of Jackson and State of Michigan, have invented a new and Improved Stove and Furnace, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical central section on the line *c c*, Fig. 2, of my improved stove or furnace; and Fig. 2 a horizontal section of the same on the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention will first be described in connection with drawing, and then pointed out in the claim.

In the drawing, A represents the interior and B the exterior fire-pot, that extends above the inner pot A, and forms therewith an air-space that diminishes in width toward the upper edge. A series of perforations, *a*, of the base-plate of the air-chamber communicates with air-supply channels C at both sides of the ash-pit D. The channels C take up the air through apertures *b* at the front part of the stove or furnace, the supply of air being regulated by registers, if desired. The air passes upward through holes *a* and between fire-pots A B, as indicated by arrows in Fig. 1, from the side channels C into the air-chamber, and then mixes with the smoke and fire-gases from fire-pot A. The sheet of air that is thus supplied to the top of the fire produces the more thorough combustion of the fuel and a higher degree of heat. This air-supply is thus made independent of that which passes through the ash-pit and up through the grate in the ordinary manner. A cap, E, is placed above the fire-pot, and made of somewhat larger diameter than the outer case of the same. The cap E is suitably supported on the fire-pot or on the outer wall of the stove or furnace, and extended to some distance below the upper rim of the fire-pot, so that the unconsumed smoke and gases of combustion are conducted downward to pass between cap and fire-pot, and then in upward direction to the chimney. The combustion is thus confined to a smaller space than that taken up by the outer part of the stove, and at the same time the remaining heat of the fire-gases utilized during their passage to the chimney.

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

The combination, with ash-pit having air-inlet, bottom-grated fire-pot and casing, of the vertical flange B and the channel C, having inlets *b* and outlets *a*, as and for the purpose specified.

ROBERT S. BOSTWICK.

Witnesses:

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